Crowdmapping in the service of the fight corruption in ALGERIA TEKFI Saliha *

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Abstract:

This article aims to show how Algeria can benefit from Crowdmapping to fight against corruption. The study revealed by using the descriptive method, that the Algerian anti-corruption association "AACC", can play a very important role in the fight against corruption in Algeria, and this by the creation of a site of Crowdmapping which implicate the citizens in this operation, in reporting on an interactive map the corruption facts of which they were victims.

Moreover, the study showed that the creation of a Crowdmapping site of corruption should be accompanied by: raising awareness of the citizens about the presence of this site and how to use it, creating a feedback loop with citizens who generally seek advice, use of social media and building online leaders to effectively fight against corruption.

Keywords: Crowdmapping; Corruption; Algeria.

JEL Classification Codes: A1; A10.

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Introduction:

Corruption is a global disaster that creates poverty, hinders development and discourages investment. It also weakens the judicial and political systems that should serve the general interest. While corruption may be more visible in developing countries, it is not absent in developed countries. The cost of corruption is difficult to assess because it occurs between individuals in the greatest secrecy. However, according to the International Chamber of Commerce, "estimates show that the cost of corruption is equivalent to more than 5% of global GDP or \$2.6 trillion, with more than \$1 trillion paid in bribes each year" (Rémy, 2015, p:2).

As a result of its negative effects, several countries around the world are seeking to fight corruption, taking advantage of the evolution of information and communication technologies. In this context, several applications have been developed by NGOs fighting against this phenomenon. In this context, fits the Crowdmapping which represents a geolocation site, to involve citizens in the process of fighting corruption, by giving them the opportunity to denounce the corruption of which they have been victims.

The practice of Crowdmapping is now widespread throughout the world, as in India, which launched the first collaborative site of its kind in 2010. Since then, similar initiatives have been launched in Pakistan, Kenya, Greece, Switzerland and elsewhere. In Russia, for example, the "Bribr" site enables citizens to publish the location and value of a bribe, as well as the position held by the person they are talking to. The events reported are then displayed on an interactive map, shedding new light on corruption in Russia.

As far as Algeria is concerned, corruption is a growing phenomenon. According to a report by the NGO Transparency International (TI) published in 2021, Algeria is ranked 117th out of 180 countries, with a score of 3.3 out of 10 (Chih, 2022). Compared with neighboring countries such as Morocco and Tunisia, Algeria also ranks poorly in its fight against corruption.

In fact, by 2021, Algeria had achieved a score of 3.3 out of 10 and was ranked 117th. Morocco, on the other hand, is better placed at 87th with a score of 3.9 out of 10. The same is true of Tunisia, in 70th place with a score of 4.4 out of 10 (Getnews, 2022).

In this context, we pose the following research problem:

How can anti-corruption Crowdmapping be successfully applied in Algeria?

However, we propose the following two hypotheses:

-The creation of an anti-corruption platform is necessary for the application of Crowdmapping in Algeria;

-The success of an anti-corruption Crowdmapping site depends on raising citizen awareness, creating feedback loops, using social media and building online leaders.

The response to this problem will be based on the following three lines of research:

- -The first presents the definition and origins of Crowdmapping;
- -The second studies Crowdmapping practices around the world in the fight against corruption;

TEKFI Saliha

- The third, to show the contribution of Crowdmapping to the fight against corruption in Algeria.

1- Definition and origins of Crowdmapping:

Crowdmapping is the aggregation of crowd-generated inputs, such as SMS and social networks, with geographic data to provide real-time interactive information about events, such as wars, humanitarian crises, corruption, elections or natural disasters. (Partenkirchen, 2011).

Crowdmapping therefore refers to the creation of a digital map that is as up-to-date as possible, through the contribution of many people coming together on the Internet. The speed of the map is crucial, as it facilitates the rapidly changing location of victims during an earthquake, for example (Sutter, 2010).

From these definitions, it appears that Crowdmapping is used for several purposes such as (Djait, 2013) :

- *The fight against corruption as in Russia;
- *Campaigns against violence against women, as in Egypt;
- *Homeless alerts, as in Lebanon;
- * Disaster relief alerts like the earthquake in Haiti in 2010. In this context, Crowdmapping has been used to map over 3,584 events in near-real time, including fire outbreaks and people trapped under buildings (Nesta.org, 2019).

As a result, the main advantage of Crowdmapping is that it enables citizens to generate detailed data almost in real time on a specific problem (Nesta.org, 2019). In fact, Crowdmapping platforms like other web based environments establish a democratic space where everyone can express themselves. These platforms overcome the typical limitations of traditional public participation, which is often synchronous and location based, and encourage people who are not willing to directly express their opinions and ideas, face to face in a large band (Sabine, 2019).

In the context of the fight against corruption, Crowdmapping represents a geolocation site that enables citizens to represent on an interactive map the acts of corruption, of which they have been victims (Thibaut, 2012).

In other words, anti-corruption Crowdmapping is a tool for creating interactive maps, enabling simultaneous user interaction via a web interface, with the aim of sharing geographic information related to a corruption operation that has taken place in a specific location (Ayachi, 2013).

An anti-corruption Crowdmapping site offers several services to its users:

- The denunciation of corruption;
- Frequently asked questions for users;
- Access to anti-corruption information;
- Access to information on anti-corruption best practices;
- A forum for exchanges on corruption and bad practices (veenem, 2018).

In fact, it was the Ushahidi website that pioneered the use of Crowdmapping technology. Ushahidi, which means "testimony" in Swahili, was created in 2007 by the

TEKFI Saliha

non-governmental organization Ushahidi, in the context of violence incidents in the aftermath of the Kenyan presidential elections to give Kenyans the opportunity to report dangerous areas, due to the post-election violence in the country (Rotich, 2017).

After its launch in Kenya, Ushahidi has been replicated in many different contexts, from geolocation of victims after the Haitian earthquakes to coordination of demonstrations during the Arab Spring and reporting of violence committed in Syria.

Following its success, the Ushahidi platform has been deployed over 90.000 times since 2007, with 6.5 million "testimonies" in 160 countries (Rotich, 2017).

2- Crowdmapping practices around the world to fight corruption:

In this section, we will look at the examples of countries such as Russia, India, Indonesia, Morocco, Tunisia and Egypt, which have adopted Crowdmapping as a means of fighting corruption.

*Crowdmapping corruption in India:

In 2010, the "I paid a bribe" platform was created, by a non-governmental organization, Janaagraha, which works with citizens and government to improve the quality of life in Indian cities, in particular by engaging people voluntarily (Fondapol.org, 2011).

"I paid a bribe" collects information by city and calculates the sums of all bribes paid in India, and then visualizes them on a corruption map. Thanks to these figures and testimonies, the association promises witnesses to make their voices heard by the authorities for a better system. In other words, the site's main task is to put pressure on the government for systemic improvement. Therefore, it is not in charge of legal proceedings on behalf of citizens (Gonnet, 2012).

From 2013, I paid a bribe introduced an updated privacy policy, where by users can choose to remain anonymous or share their name when submitting a report. In addition, the site stopped removing the names of officials and departments from reports, with the aim of making the platform even more transparent and putting more pressure on public authorities to penalize corrupt actors (janaagraha.org, 2018)..

In autumn 2015, I Paid a Bribe counted nearly 49,000 reports drawn up in 645 Indian cities (Le Brech, 2015). In addition, the site has proved its worth: for example, the traffic commissioner of Bangalore (a city in southern India), found that his department had the highest number of bribes, which led him to introduce electronic sensor-based driver's license testing, to avoid any recourse to bribes to obtain it (Bordage, 2014). In addition to collecting information about bribes, the website also features a section where people write about their experiences in preventing bribes, and another section to give positive examples about honest public officials and good public service delivery (Ercas, 2018).

In 2017, I Paid a Bribe joined forces with 30 other countries such as: Greece, Kenya, Zimbabwe, Pakistan, Ukraine, etc., with the aim of creating I Paid a Bribe replica sites, and launching an international coalition against corruption (janaagraha.org, 2018).

*Crowdmapping corruption in Russia:

In 2011, Transparency International's Corruption Perceptions Index, shows Russia ranked 143rd out of 183 countries. Motivated by this situation, a team of young Russian entrepreneurs has developed an iPhone and iPad application that enables individuals to report bribery across the country.

The new tool, called "Bribr", was released in September 2012 and allows users to send reports anonymously. Each report indicates where the bribe took place, the amount paid, the institution to which it was paid and for what purpose. All the information provided is then compiled on a map showing the total amount paid in bribes and the most common locations and purposes (Ercas, 2010). However, most of the cases of corruption reported on the site concern institutes (universities, administrations, etc.), followed by companies and nurseries, etc. These bribes are mainly paid, according to Bribr, to obtain false diplomas, permits or authorizations to carry out professional activities (Seibt, 2012). Since its launch in 2012, the counter posted on the "Bribr" website indicates that 1,495,295 rubles (\$58.000), have been spent in Russia on buying bribes (KhoKhlova, 2012).

* Crowdmapping corruption in Indonesia:

Korupedia is a Crowdmapping site launched in 2012 by Transparency International's chapter in Indonesia, with the aim of displaying convicted corrupt officials. The database contains the name of the corrupter, how much money they embezzled and the final verdict of the trial. In addition, the site lists blocked cases to give users an overview of their progress. Thus, the site's main objective is to create a national memory of corruptors, to prevent them from regaining positions of power in the future (Lawlor, 2015). Just one week after its launch, the site recorded around 1.9 million visits (Libration.fr, 2012).

Korupedia also enables citizens to participate in the anti-corruption movement, by providing information on blocked cases, business reviews or writings on corruption. The Korupedia team will then verify all the information collected. (Transparency.org, 2012).

* Crowdmapping corruption in Morocco:

In February 2012, the Moroccan anti-corruption association "Transparency Morocco" launched the website "Mamdawrinch.com" (which means: we won't take bribes), dedicated to mapping corruption in Morocco. The aim of the site is to provide an anonymous whistleblowing tool to encourage people to speak out and discuss corruption in public. The site's creators are considering moving "Mamdawrinch's" mission beyond anonymous reporting, to enable interaction with legal advice centers and inform the public about empirical cases and practical tools for fighting corruption (Ushahidi Staff, 2013). Since its creation, "Mamdawrinch", has received 109 cases of corruption. The website also details the total amount of bribes in disclosed cases (Boujemi, 2012).

Each report is subject to verification by the site, to protect both witnesses and those who may be wrongly accused. However, only facts validated by Transparency Maroc, the Moroccan branch of Transparency International, are published on the site and social

TEKFI Saliha

networks, with a view to raising public awareness of inactive corruption (the acceptance of giving or taking bribes) (Urquiza, 2013).

* Crowdmapping corruption in Tunisia:

In 2013, the anti-corruption non-governmental organization "I Watch-Tunisia", launched the "Bill'Kamcha" website dedicated to denouncing and fighting corruption via a panoply of technological means: Android, iPhone, email, Tweeter or through a toll-free number. The site's aim is to use Google Maps to locate all types of government overruns and to reveal to the general public the various cases of corruption that are rife in the country, in order to encourage the authorities and citizens to reform the system (Sfaxi, 2013).

The platform is made up of several sections, each with a different objective (bribes, pistons, nepotism, denial of access to information, fraud, conflict of interest, tax evasion, theft or others). Billkamcha also provides a list of all abuses and acts of corruption detected and reported by citizens, by date, by region and with details referring to the location, the identity of the corrupt and the act of corruption (webdo.tn, 2013).

In 2019, the I Watch Organization launched the second version of the BILLkamcha.tn electronic site, which enables the whistleblower to communicate and interact with a virtual legal advisor, in order to provide real-time advice, analyze corruption-related cases globally and help the citizen report corruption more accurately and effectively. Between 2016 and 2018 nearly 700 corruption cases were reported (linitiative.ca, 2019).

* Crowdmapping corruption in Egypt:

In 2011, a group of young Egyptians launched the "Zabatak" website, a non-profit initiative aimed at fighting corruption in Egypt. Without any specific political orientation, "Zabatak" was created to collect information on criminal, corrupt or semi-legal activities that could be useful to citizens (Worldsummitawards.org, 2011).

The initiative was conceived in the wake of the 2011 revolution, to act as an intermediary between citizens and the Egyptian system. The site's founders aimed to empower people, by providing an online portal where they could report instances of crime and corruption. Once this was done, the information collected was then passed on to the relevant authorities who could do something about it.

Using the "Ushahidi" Crowdmapping platform, "users" of the Zabatak site submit testimonials of corruption or crime, which are plotted on a map of Cairo. This allows site visitors to see which types of crime and corruption are most common, and which areas of Cairo serve as hotspots for these activities. In addition, users can receive personalized email alerts on incidents that have occurred. In order to verify user reports and extract false ones, all reports received are reviewed by Zabatak's sole data analyst before being posted online (Pollonais, 2012).

In 2011, Zabatak received 44 reports of car theft, and by the end of the year, 11 people had recovered their cars thanks to the help of others met via Zabatak. More than

TEKFI Saliha

80,000 users visited the site during 2012 and over 1,500 incidents were reported (mashallahnews, 2012).

3-Methods and Materials:

In order to address our problem, we have opted for the descriptive method, by presenting the experience of a few countries that have adopted Crowdmapping as a means of fighting corruption. We have then shown how to successfully apply anti-corruption Crowdmapping in Algeria, based on the experiences cited in this study.

4-Results and discussion:

In this section, we will be looking at how Crowdmapping can be used in Algeria to effectively combat corruption.

In fact, corruption in Algeria is a growing phenomenon. According to the report published in 2021 by the NGO Transparency International (TI), Algeria is ranked 117th out of 180 countries, with a score of 3.3 out of 10, down from 104th place in 2020 with a score of 3.6 (Chih, 2022). Unlike neighboring Morocco and Tunisia, Algeria remains poorly ranked in its fight against corruption.

In fact, in 2021, Algeria obtained a score of 3.3 out of 10 and was ranked 117th. Morocco, on the other hand, is better placed at 87th with a score of 3.9 out of 10. The same is true of Tunisia, in 70th place with a score of 4.4 out of 10 (Getnews, 2022).

Even in the Arab world, Algeria is ranked 10th, while in Africa it is 18th (Abdi, 2019). According to the Algerian Anti-Corruption Association (AACC), Algeria is making no progress in this area, and this is essentially due to the following factors (Abdi, 2019):

- The definition of a very poor anti-corruption law (February 20, 2006), which is not applied, particularly in terms of declaring the assets of "public officials";
- Absence of a whistleblower protection policy;
- Failure to punish "public officials" who are involved in major corruption scandals;
- Failure to prosecute corruption cases published in the press.

However, going back to the experiences cited in this study, we note that the majority of anti-corruption Crowdmapping sites are created by associations specializing in the fight against corruption: Transparency International for "Korupedia" in Indonesia, Transparency Morocco for "Mamdawrinch.com" in Morocco, I Watch-Tunisia for "Bill'Kamcha" in Tunisia, Janaagraha for "I paid a bribe" in India.

The Algerian association AACC can also make a significant contribution to the fight against corruption in Algeria, through the creation of a Crowdmapping website that enables citizens to anonymously denounce acts of corruption of which they have been victims.

In this way, the various cases of corruption that govern the country are revealed to the general public, which will push the government to reform the system.

As for the creation of a corruption Crowdmapping site, this can be done using tools such as Crowdmap.com, which runs on the open source platform Ushahidi.com (Partenkirche, 2011). This is the case, for example, of the Tunisian site Zabatak, which was created using the Crowdmapping site "Ushahidi".

TEKFI Saliha

Nevertheless, to successfully create an anti-corruption Crowdmapping site, certain elements need to be taken into consideration, as follows:

- Raise citizens' awareness of the presence of this site and the advantages gained from using it, in terms of the fight against corruption. This awareness-raising can be done on the Facebook page of the Algerian association AACC, which is currently followed by 3382 people (Association algérienne AACC, 2019), as it can be done through the hosting of a few programs on TV and radio channels.
- Teach citizens how to use the site to report corruption, with the help of computer specialists to create videos on the You tube. For example, the sites Ushahidi, I paid a bribe, Zabatak, Bill'Kamcha, etc. all feature videos on the You tube that demonstrate how citizens can use them.
- Create a feedback loop with citizens who report cases of corruption, as they expect at least a reaction, if not a solution to their problem. In fact, in a corruption Crowdmapping site, it's not enough to publish citizens' reports and pin them on a map and share them on Facebook and Twitter. So the site needs to interact with users, who often ask for advice (Ushahidi Staff, 2013). By way of example, the I paid a bribe site presents its users with three sections, the first of which is designed to report corruption, the second to enable people to share their experiences in preventing corruption, and the third to give positive examples of honest public officials.
- Define clear indicators to measure the site's success, such as the number of corruption cases reported by citizens, the number of online visitors who interact on the subject of corruption, etc. For example, the number of visitors to the I paid a bribe site in 2019 is 15,443,366, while the total number of corruption reports collected is 181,267. These reports are then broken down further, according to corrupt cities in India (I paid a bribe.com, 2019).
- Use social media and build online leaders, i.e. people who believe in the cause and consciously encourage the fight. In Morocco, for example, social media users organized popular demonstrations against corruption in 2011 (Ushahidi Staff, 2013). The example of the I paid a bribe site fits into this framework, inviting its users to follow the site's news via the following social media: Facebook, Twitter, Google+ and Youtube.
- Enable citizens to report corruption by sending SMS messages by cell phone, which are then automatically uploaded online, to reach users who do not have Internet access or computer skills. This is the case with the Crowdmapping site Zabatak, which only reaches a small segment of Cairo's population. In response to this gap, Zabatak's founders are negotiating with telecoms companies to develop an SMS gateway enabling users to send messages in a specific format that will be automatically uploaded to the site. (Pollonais, 2012).

5- Conclusion:

From this study, we can see that the Algerian anti-corruption association "AACC" can play a very powerful role, not only in raising citizens' awareness, but also in getting them involved in anti-corruption operations, through the creation of a Crowdmapping site

TEKFI Saliha

that enables them to represent on an interactive map the acts of corruption of which they have been victims.

With this mapping, Algerian citizens will have a clearer vision of the most corrupt regions in Algeria, as well as the different types of corruption prevalent in the country. As a result, the site's main task is to put pressure on public authorities to improve the current system governed by corruption, which validates the first hypothesis.

However, to achieve this goal, the creation of a corruption Crowdmapping site is not enough, as we also need to focus on the following elements: raising citizens' awareness of the presence of this site and how to use it, creating a feedback loop with citizens who generally seek advice, using social media and building online leaders to effectively fight corruption, which validates the second hypothesis.

At the end of this study, it should be noted that the creation of a Crowdmapping site can only achieve its objective in terms of the fight against corruption, if the public authorities commit to a genuine anti-corruption policy. In other words, Crowdmapping is just one tool that can make an effective contribution to reducing corruption in Algeria, but it's up to the public authorities to define strict anti-corruption laws, and ensure that they are properly enforced.

In fact, this study was limited to determining the factors that the Algerian association "AACC" should take into account, in order to successfully create an anti-corruption Crowdmapping site. As a result, it would be interesting to carry out other studies showing why the Algerian association "AACC" has not yet adopted Crowdmapping as a means of fighting corruption in Algeria, despite the fact that this method is spreading rapidly in several countries around the world, and even in our neighboring countries (Morocco, Tunisia and Egypt).

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TEKFI Saliha

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