







PROMOTING PARTICIPATORY PLANNING USING SOCIAL MEDIA: EMPOWERING EGYPTIAN CITIZENS تعزيز التخطيط التشاركي باستخدام وسائل التواصل الاجتماعي: تمكين المواطنين المصريين

Sara El Bayar¹, **Hebatalla Abouelfadl**² Architecture Department, Faculty of Fine Arts, Alexandria University, Egypt ^(1,2)

> سارة البيار¹، هبة الله أبو الفضل² قسم العمارة- كلية الفنون الجميلة – جامعة اسكندرية، مصر^{((ر۲)}

sara.elbayar@hotmail.com¹, heba.abouelfadl@alexu.edu.eg²

ABSTRACT

Social media is being used in different fields other than its original purpose, social networking. In the last decade, social media platforms like Facebook and Twitter ignited uprisings and revolutions in Tunisia, Egypt, and Libya. Community engagement and empowerment became the new buzz word. It is inevitable that digital technology is important and therefore, the Egyptian government aims to build Digital Egypt. In an approach to change the top-down bureaucratic system, the Egyptian government promotes interaction between citizen and the state by utilizing online and digital services. The question is how can social media be used to involve citizens in planning as an approach to empower Egyptians. The paper investigates if social media can be used in participatory planning. The paper aims to evaluate the use of social media as a tool for participatory planning by conducting an online survey about transforming Gleem's parking in Alexandria to a multi-use park.

KEYWORDS

Participatory planning; social media; empowerment

الملخص

يتم استخدام وسائل التواصل الاجتماعي في مجالات مختلفة غير الغرض الأصلي منها وهو التواصل الاجتماعي. أشعلت منصات التواصل الاجتماعي مثل Facebook وTwitter في اخر عشر سنوات ثورات واحتجاجات في تونس ومصر وليبيا. أصبحت مشاركة المجتمع وتمكينه مواضيع مهمة. من المحتم أن التكنولوجيا الرقمية مهمة، ولذلك فإن الحكومة المصرية تهدف إلى بناء مصر الرقمية. في نهج لتغيير النظام البيروقر اطي، تعمل الحكومة المصرية على تعزيز التفاعل بين المواطن والدولة من خلال الاستفادة من الخدمات الإلكترونية والرقمية. السؤال هو كيف يمكن استخدام وسائل التواصل الاجتماعي لإشراك المواطن والدولة من خلال الاستفادة من الخدمات المصريين. يحلل البحث إمكانية استخدام وسائل التواصل الاجتماعي لإشراك المواطنين في التخطيط كنهج لتمكين الاجتماعي كأداة للتخطيط التشاركي من خلال إجراء استطلاع رأي عبر الإنترنت حول تحويل موقف سيارات جليم في اسكندرية إلى حديقة متعددة الاستخدامات.

الكلمات المفتاحية

التخطيط التشاركي؛ وسائل التواصل الاجتماعي؛ التمكين









1. INTRODUCTION

Advancement in ICT has had a great impact on Egypt and other countries in the Middle East in the past ten years. In January 25, 2011 a revolution in Egypt was sparked by young individuals on social media platforms such as Facebook and Twitter (Twitchen & Adams, 2011). Not only did the social media play a big role in the Egyptian Revolution, but it ignited uprisings and protests in Tunisia and Libya. Social media gives the opportunity to people to express their opinion freely anywhere and at any time. People nowadays express their opinions on forums, chat rooms, blogs, and other social networks (Beer & Burrows, 2007). The transformation of ICT to web 2.0 allows dynamic and user generated content rather than static web pages. Based on this, ICT technologies such as discussion forums and information sharing platforms are used to engage the public in the decision-making and governance (Dawes, 2008). After the Egyptian revolution, topics like community engagement, participation, and empowerment became the new buzz word.

Transparency between governmental entities that are responsible of taking decisions and the public is an important factor (Minnery, Cameron, Brown, & Newman, 1994). As mentioned by Newman and Jennings, in order to empower marginalized groups minorities such as the poor, disabled, women, etc. should have a say in decisions affecting them. By giving the opportunity and facilitating participation during the decision-making process, diverse people will come up with a variety of solutions to challenges and changes according to their needs and opinions. As a consequence, this will lead to developing projects with less resistance from the local community. Not only that, but it will promote people to appreciate and build a sense of ownership toward the outcome of the decisions taken (Ramos & Panagopoulos, November 3-5, 2010).

Since the Egyptian Revolution shed light on the power of social media, the question is why not use it to help rebuild cities that involve and empower Egyptian citizens. Therefore, this research aims to facilitate social media to promote participatory planning by investigating what is participatory planning, levels of participation as well as the latest state of the art ICT tools used to attract more participants. The paper will evaluate the effectiveness of using social media for participatory planning by testing it on a case study of transforming a parking lot to a multi-use park in Alexandria, Egypt.

2. EMERGENCE OF PARTICIPATORY PLANNING

One of the definitions of participatory planning is, "a social, ethical, and political practice in which individuals or groups, assisted by a set of tools, take part in varying degrees at the overlapping phases of the planning and decision-making cycle that may bring forth outcomes congruent with the Participants' needs and interests" (Horelli, 2002). Another definition of by the UN Habitat states that, "Participatory planning is a process usually designed to address a specific issue, opportunity or problem with the intent of resolving or exploiting it successfully through the collaborative efforts of the crucial stakeholders. This means getting very specific about what is done, to what extent, by whom, for what purpose" (UN Habitat, 2001). Nonetheless, another detailed definition states that participatory planning is a process that allow stakeholders to be involved in problem identification, analysis, choosing different solutions or proposals, planning, implementation, monitoring and evaluation of their plans. During the analysis and planning phase, the local community is consulted and they discuss development issues. It is considered a people-centered action oriented (Haule, 2011).

282



Sara El Bayar¹, Hebatalla Abouelfadl² – DTAA21 – December 2020

It could be said, that participation first emerged in ancient Greek, which meant back then "voting, holding office, attending public meetings, paying taxes, and defending the state" (Cohen & Uphoff, 1980). The idea of planning itself, dates back to the late nineteenth century as a solution to overcome social and public health issues brought by the industrial revolution (Booth, 1996), (Cullingworth, 1993), (Platt, 2004), (Hall & Tewdwr-Jones, 2010), (Hirt, 2014). Plans were to be prepared by professional planners to present solutions and proposals for the common good. It was thought to improve the health, amenities, and efficiency of modern cities, promote social justice, accessible quality housing, transport and other services (Thorpe, 2017).

However, the terms participation and participatory development first appeared in the 1950s initiated by social workers and field activists who opposed top-down approaches to development (Botchway, 2000). During the 1960s, the general public opposed modernist planner's ideas of slum clearance. The public protested in UK for slum clearance and rent strikes, they called for public participation in planning. Meanwhile, in France and the US, the public protested against undemocratic approaches of planners (Make:Good, 2017). In 1961, the Foreign Assistance Act, attempted to disconnect U.S. development assistance from the nation's military, political, and economic interests. In addition, the Act promoted, "maximum participation in the task of economic development on the part of people in developing countries..." (William A. Lovett, 2004). During the same period in Latin America, some scholars and minority of social scientists in developed countries promoted bottom-up development and to involve women (Nelson & Wright, 1995). Skeffington Committee in Britain was organized by the government to include public consultation and engagement in the planning process in order to quiet down the anger of the local people. In 1969, the new Planning Act aimed to increase consultation of local planning agencies (Make:Good, 2017). In 1973, Planning Aid services initiated in the US, it provided partial funding from the government to engage people in the planning process.

In 2004, Planning and Compulsory Purchase Act was established that included the Statements of Community Involvement by local authorities. The statements explained how the public will be involved in the preparation of local development documents. It was taken into consideration that the public is involved at the earliest stages of development. However, this could mean people are informed of public plans through long exhibitions but not actually engaging them. Later in 2011, the Localism Act was established and required that the preparation of neighborhood plans to be inclusive and open, a minimum group of 21 people, and receive 51% approval from the local people that voted. This leaves out a lot of people from being engaged in the development process. In 2012, the National Planning Policy Framework stated that local people engagement is essential (Make:Good, 2017).

3. PUBLIC PARTICIPATION LADDER

Sherry Arnstein, a consultant in the US Department for Housing, published an article in 1969 called "A Ladder of Citizen Participation". In this article, she categorizes citizens into two categories, the "haves" and the "have nots". The "haves" are those who already have an influence on public policy and decision making. They are often people with economic leverage or politically powerful and can influence public opinion. On the other hand, the "have nots" are people who may not have any influence on public policy and decision making without any citizen participation program. By engaging these citizens, the decision-making process is democratized and the process becomes more inclusive (Arnstein, 1969).



Sara El Bayar¹, Hebatalla Abouelfadl² – DTAA21 – December 2020

Sherry Arnstein described citizen participation as a term that indicates citizen power. It is the redistribution of power so that the "have nots" can reform social, economic, and political issues in their own society. In addition, Arnstein explained that the different types of participation and non-participation in a ladder pattern shown in Figure 1.



Figure 1 Arnstein's Ladder (1969) Degrees of Citizen Participation. Source: (Arnstein, 1969)

The bottom two rungs describe non participation as manipulation and therapy. In this level, genuine participation is replaced by "manipulation" and "therapy" by allowing powerholders to "educate" and "cure" participants. Arnstein stated that illusionary participation became popular in urban renewal when the socially elite were invited by the City Housing officials to attend Citizen Advisory Committees (CAC). Other subcommittees in the CAC were responsible for the minorities in the group, they were supposedly responsible of protecting the rights of the Negroes in the renewal program. However, like the other committees within CAC, it was only a show. It was mostly the officials that educated and persuaded the public not the other way around. Arnstein also noted that some of the decisions taken were for personal interest of the "haves" rather than for the actually benefitting the public. Similarly, the therapy rung describes how psychiatrists and social workers associated mental illness with powerlessness and as a result, experts' subject citizens to clinical group therapy hypothetically speaking as an approach to involving them in planning. This form of participation engages citizens in wide-ranging activities that focuses on curing them of their "pathology" rather than changing the main cause of racism and victimization.

Rungs 3 and 4 are described as tokensim which is the practice of doing something only to prevent criticism and give the appearance that people are treated fairly. This level includes consultation and informing which allows citizens to hear and be heard. In this level, not all actions are fulfilled to the end. In rung 3, citizens are informed of their rights, responsibilities, and options. However, it is always one-way communication from the decision makers to the citizens. Citizens are not given the chance to give feedback or negotiate. Given this situation, citizens chances of influencing decisions designed "for their benefit" are very slim, particularly when information is provided at a late stage in planning. Tools that are used frequently for one-way communication are the news media, pamphlets, posters, and responses to inquiries. Nonetheless, in meetings superficial information are provided, discouraging questions are brought up, and irrelevant answers are given. In the consultation level, citizens are asked

284



Sara El Bayar¹, Hebatalla Abouelfadl² – DTAA21 – December 2020

for their opinion, but it offers no assurance that their concerns and ideas will be taken into account in the decision making. Some of the methods used for consultation are attitude surveys, neighborhood meetings, and public hearings.

In rungs 5, Arnstein calls it "placation" which just describes a higher level of tokenism. In this level, the "have-nots" have the right to advise but it's the power holders are the ones who actually decide at the end. An example of this, would be placing some of the "have-nots" on the boards of community agencies, or the public bodies of like board of education, police commission, or housing authority. However, their voices of the "have-nots" may be outnumbered by the "haves" because they have the majority of seats. Another example of placation, is allowing citizens to advise or plan but the final say is taken by the powerholders who judge the feasibility and legitimacy of these decisions.

The highest level of citizen power is illustrated in rungs 6,7, and 8 where the "have-nots" can have partnerships in rungs 6 with the powerholders to negotiate and engage. In the partnership levels, power is divided between the "haves" and the "have nots" by sharing planning and decision-making responsibilities through joint policy boards, planning committees and mechanisms for resolving problems. In this level, citizens have the power to hire or fire community's technicians, lawyers, and organizers. Arnstein stated that in most cases, partnerships were obtained by citizens (angry ones who refused to be deceived) rather than granted by the city. The "have-nots" in rungs 7 and 8 have the upper hand in decision-making or full managerial level.

In rung 7, delegated power, citizens are assigned the majority of the seats and specified power. Arnstein gave examples such as corporations (with majority of the seats are citizens) with delegated power to hire its own planning staff and consultants. Another example, is granting citizens the veto power if differences in opinions cannot be settled through negotiation. Rung 8, symbolizes citizen control which guarantees that citizens have control over such things as institutions, policy and managerial aspects and negotiate the conditions set by "outsiders". Some of the examples, included funding minorities such as the Black society in the board. (Arnstein, 1969).

4. PARTICIPATION IN DIFFERENT LEVELS OF PLANNING

According to the United Nations, public participation has different approaches in different levels of planning. they claim that public participation is more suitable at micro/local levels of planning and described two broad types of involving stakeholders in the participation process (UNITED NATIONS, 2003):

- Basic types: involve lower levels of participation through indirect and consultative forms of participation. e.g., collection of information through questionnaire surveys, round table discussions, public meetings, etc. These types are more appropriate at higher levels of organization such as the city or other higher spatial levels.
- Advanced types: higher levels of participation and apply functional and interactive forms of participation. e.g., cooperation between the authorities and the public. These types are suitable



Sara El Bayar¹, Hebatalla Abouelfadl² – DTAA21 – December 2020

at lower organizational or spatial levels where a face-to-face working environment is possible, such as at the community level.

Therefore, this research aims to study the impact of social media on participatory planning on a local level case study, Gleem's Parking Lot, where higher levels of participation and interactive forms of participation is proven to be more suitable.

5. IMPORTANCE OF PARTICIPATORY PLANNING

Public participation plays an important role in urban planning. It involves diverse people regardless of their age, gender, race, and social income in decision-making. Thus, public participation ensures decisions taken to be the most suitable to different citizens within the community. Not only that, public participation enhances positive aspects within a community such as sense of empowerment. It also strengthens accountability of politicians and decision makers (Jamei, Mortimer, Seyedmahmoudian, Horan, & Stojcevski, 2017). Therefore, it is suggested that governmental entities and planners should re-evaluate the methods and policies in order to transform the advancements in ICT from a threat to an opportunity to promote public participation.

Participatory planning has proved, if done properly, to promote sense of ownership for the outcome of the process (World Bank; Environmentally Sustainable Development, 1996) (Rietbergen-McCracken, 2004) (Community Tool Box, n.d.). Nonetheless, participatory planning ensures that the process represents the common values and preferences in proportion to local community (Sexton, 2013), and ensure credibility as results represent the different segments of the community (Community Tool Box, n.d.). By engaging the community in defining and solving problems they're facing and involving them in decision-making, they become empowered (Mitchell, 2005). Empowerment requires changes in social, political, economic and legal dimensions to involve marginalized and minorities in shaping their community (Ragot, 2017). Therefore, it can be said that if participation is done properly, then empowerment is a guaranteed outcome of the process (Pettit J., 2012). Moreover, some of the potential outcomes of participatory planning is to increase levels of interest in and knowledge of public issues, support future public involvement, enhance social bonding, and increase trust of fellow citizens (National Research Council, 2008).

Other research proved that public participation in development projects decreased public resistance and more likely to accept decisions (National Research Council, 2008). For example, an experimental survey by Arvai about public participation in the deployment of nuclear generator in space exploration shows that people are more likely to accept the decision. According to Delli Carpini, Cook and Jacobs, public deliberation allows citizens in the community to have higher tolerance for opposing opinions (Carpini, Cook, & Jacobs, 2004). They also debated that citizen become more engaged in civic affairs and they have better understanding and ability to express their preferences and opinions. Public deliberation also builds trust between the community and government officials, believing in the democratic process (Carpini, Cook, & Jacobs, 2004). They also stated that public deliberation (Pelzer & Geertman, 2014) and participatory planning (Community Tool Box, n.d.) offers ideas and insights from different people in the community. With this being said, it is important to study how does Egypt implement participatory planning and how it could be enhanced.

6. EGYPT'S CENTRALIZED SYSTEM

After the 2011 Egyptian revolution, the General Organization of Physical Planning (GOPP) with the support of UN-Habitat planned to rebuild the trust with Egyptian citizens, and increase public participation in the planning process. (Source: Interview with Dr. Bassem Fahmy (GCR Project Manager at UN-Habitat) TADAMUN). The GOPP in collaboration with the United Nations Program



Sara El Bayar¹, Hebatalla Abouelfadl² – DTAA21 – December 2020

for the urban settlements in Egypt (UN-Habitat) introduced an initiative to prepare strategic plans for the Egyptian cities and villages as an approach to overcome urban problems. These problems included but are not limited to centralization in decision-making. The initiative pursued to promote participation of stakeholders as a national strategic plan.

From 5000 years ago till today, Egypt is considered a centralized country. For administrative purposes, Egypt is divided into 29 governorates categorized into fully urban governorates and mix of rural-urban governorates (State Information Service, 2016). Governorates are assigned by the President of Egypt. As shown in Figure 2, the rural-urban governorates are then divided into regions called "markaz" (district), while urban governorates are not divided into regions and some are made of one city such as Cairo and Alexandria. One city governorates are then divided into districts (State Information Service, 2016). The markaz includes a capital city, other cities, and villages if they do exist. The districts in urban governorates are divided into "sheyakha". The village is the smallest local unit in rural communities.



Figure 2 Local administrative system in Egypt`

Throughout the years, there were many attempts to decentralize Egypt legally and the public sector has undergone significant reform since 1991. However, the state control over the public sector's finances remains highly centralized and concentrated. In addition, the national budget structure is divided between central administration and local administration, further emphasizing the centralized system of Egypt. Local administration suggests spending and revenues that take place at the Governorate level and below, taking into consideration any requirements or expenditures identified at the lowest level of administration must be passed from the village to the district to the Governorate level, before it can be included in a budget request prepared by one of the 11 directorates at the Governorate level. Nonetheless, budget ceilings and requests from Governorate directorates are determined—together with budget requests from central ministries and other central administration units—by the Ministry of Finance and approved by the Cabinet and Parliament as part of the annual budget process (Boex, 2011).

Nonetheless, Article 176 in Egypt's 2014 Constitution states that the government is to support the application of financial, administrative, and economic decentralization. In addition, "Egypt Vision 2030" launched in 2015 promoted participatory planning approach (Egyptian Government, 2016). There are several legislative actions happening to reform planning mechanisms in Egypt focused on unifying planning laws, decentralization, and local administration laws. With this being said, the role of local administration in planning is significantly changing as well as the level of involvement and types of participants in the planning process (Moghaieb, 2019).



6.1 PARTICIPATORY PLANNING IN EGYPT

It can be said that participation in planning was brought to Egypt by foreign organizations such as the United Nations (UN), German Technical Cooperation (GIZ) and the German Financial Cooperation developing bank (KFW). During the 1970s, funds from initiatives in cooperation with the government were given to promote democratization. These initiatives worked on projects such as the National Program for Integrated Rural Development-Shorouk Program by U.S. Agency for International Development (USAID), Municipal Initiative for Strategic Recovery (MISR) by United Nations Development Programme (UNDP), the Egyptian Decentralization Initiative (EDI), by U.S. Agency for International Development (USAID), and the UNDP in cooperation with the Ministry of Local Development (MoLD) assisted local governments to work on local administration system development through political administrative and economic decentralization (Hag, 2015). During the 1990's it was a common perception that governments of developing countries were corrupted. Therefore, foreign fundraisers cooperated with non-governmental organizations (NGOS). "Participation" became a catch word to attract funds from international organizations (Shehayeb & Abdelhalim, 2012).

As an approach to finding sustainable solution for informal development, the Egyptian government reached out to the German government to launch the Participatory Development Programme in Urban Areas (PDP). The PDP was in collaboration with the Egyptian Ministry of Housing, Utilities & Urban Communities, the German Technical Cooperation (GIZ) and the German Financial Cooperation developing bank (KFW), in addition to the Egyptian Ministry of Local Development, NGOs, and the three governorates of Cairo, Giza, and Alexandria. The programme was launched during 2004 and ended in 2014. Aiming to promote the cooperation between public administration and the local community to determine the needs of urban poor citizens, they worked on initial pilot projects in Boulaq El Dakrour in the Giza governorate and of Manshiet Nasser in the Cairo governorate. Later on, other pilot studies were implemented in the district of Helwan in Cairo and then three areas from the Alexandria governorate in 2006 (Participatory Development Programme in Urban Areas, 2017).

Moreover, the PDP aims to derive a holistic methodology to promote the implementation of participatory methods for upgrading informal areas. The methods are carried out in different scales (Participatory Development Programme in Urban Areas, 2017):

- local level: such as municipalities and NGOs; problems at the local level are addressed through supporting local initiatives and building trust between local people and local administration.
- national level: such as ministers; where advice on how to integrate participatory development policies is provided to ministers,
- regional level: such as governorates; a number of participatory methods are presented to the municipalities and implemented on pilot areas.

Unfortunately, when citizens from Mansheat Naser have been interviewed, they mentioned that they do not feel empowered after 13 years of this programme and they still can't trust the government (Participatory Development Programme in Urban Areas, 2017).

Nonetheless, Egypt's Vision 2030 launched in 2015 aimed for participatory design approaches. The sustainable development agenda was updated in 2018 to include participation of all stakeholders from development partners. Sustainable Development Strategy (SDS) is based on a participatory strategic planning approach including a number of civil society representatives, national and international development partners and government agencies to set the pillars and sectors of the country. There were several workshops held including experts, academics, private sector representative, civil society, government officials, and international development institutions. There were representatives from youth, women, and disabled. The SDS team shared periodically the results of each stage of the SDS



Sara El Bayar¹, Hebatalla Abouelfadl² – DTAA21 – December 2020

preparation plan with the media, and published on the MoP website and social media pages. Moreover, an electronic portal and social media pages were set up to present the strategy. Local and international discussion forums and seminars presented the strategy for community dialogue. The outcomes have been revised by all ministries and agencies and the final document presented all comments and feedback (Egyptian Government, 2016).

According to Heba Moghaeib (Estimating local administrators' participation in planning: case of "Egypt vision 2030", 2019), although "Egypt Vision 2030" deployed "workshop" approach including representatives from a variety of groups, local community and local administration were neglected in drafting and social dialogue stages. In addition, Moghaieb also questioned the reflection of the social dialogue's feedbacks on drafting the final version of the "Egypt Vision 2030". Moghaeib also claims that participation does not exceed the nonparticipation level (including manipulation and therapy rungs) in the participation ladder by Sherry Arnstein. Moghaieb finally declared that the practice of national planning in Egypt is still a centralized top-down approach. She also mentioned that the workshop approach is not effective on its own and suggested other methods such as citizen's juries, citizens' panels, focus groups, consensus building exercises, surveys, public hearings, open houses, citizens advisory committee, community planning, planning cells, consensus conference, visioning, notification, distribution and solicitation of comments, referenda, and structured value referenda. Moghaieb also stated that the results of participation in social dialogue meetings was not clearly reflected on the plan.

7. DISADVANTAGES OF TRADITIONAL PARTICIPATORY PLANNING METHODS

There are different traditional methods of public participation that include but are not limited to: mass media, publications, surveys and questionnaires, workshops, public hearings and meetings. However, each of these methods has disadvantages. When it comes to mass media methods such as TV or newspaper, although it is viewed by hundreds of people, it is not interactive. It does not allow citizens to give feedback, express their opinion, or illustrate their ideas; same goes with publications.

As for workshops, public hearings and meetings, they are all limited in geographical location and certain time of the day which can hinder citizens from participating. Most of the times, these meetings occur in the morning which may not be suitable for a wide variety of citizens to attend. In addition, it may be difficult for the elderly and disabled citizens to physically attend these meetings (Sameh, 2011). Another disadvantage of these methods of participation is that it requires confrontation with other citizens. This maybe uncomfortable for some, to express their ideas and thoughts in public. Thus, such methods can be dominated by individuals with extreme views which may not represent the majority of the local citizens. Other workshops or meetings in public streets or square may discourage people to attend due to the weather conditions.

8. SHIFT TOWARDS TECHNOLOGY IN PARTICIPATORY PLANNING

Technology has been significantly shaping the lives of people in different ways. There are rapid changes occurring in the field of information and communication technology, and many researchers, planners, and decision makers have been utilizing technology in the field of participatory planning. this section introduces the shift towards utilizing ICT in participatory planning.

There are several participatory tools and applications applying the latest state of the art technologies to facilitate and enhance the process of participation for the local community. Desouza & Bhagwatwar describe ICT-based participatory design tools as technology-enabled forums created to retrieve, analyze, visualize and share information, expertise and solutions that advance social causes and or



Sara El Bayar¹, Hebatalla Abouelfadl² – DTAA21 – December 2020

resolve social and policy problems (Desouza & Bhagwatwar, 2014).

Numerous researches have been conducted on participation tools utilizing ICT that includes but not limited to visualization and 3d modelling, virtual, augmented, and mixed reality, web 2.0, gaming applications, and public participation GIS. This paper will focus on the web 2.0 features especially social media.

9. DIGITAL TRANSFORMATION IN EGYPT

The Egyptian government in cooperation with the Ministry of Communications and Information Technology (MCIT), aims to build Digital Egypt which is a strategy to digitally transform existing government services. The strategy seeks to provide digital services for the government sector, citizens, and businesses. and faster. In an approach to change the top-down bureaucratic system, the Egyptian government cooperated with MCIT to promote interaction between citizen and the state by utilizing online and digital services (Ministry of Communications and Information Technology, 2020). Digital Egypt launched five outlets which are Digital Egypt platform, mobile applications, call centers, post offices, and service centers.

9.1 ICT Status in Egypt

Egypt has pursued many strategies to increase access to the internet. Access to the internet in Egypt increased dramatically in the last 20 years as shown in Figure 3. Internet was available to the public since 1995 and it increased in 2002 when the government introduced a "Free Internet" initiative which allows anyone to access the internet if they have a telephone line and a computer for the price of a local call (Freedom House, 2011). Nonetheless, the number of internet mobile subscriptions reached 52.4 million in 2020 in Egypt as shown in Figure 4. In addition, 32.5% of Egyptian government agencies established web sites in 2008 which offered their services and 25.8% offered online forms (Ministry of Communications and Information Technology, 2015).

According to Simon Kemp in his report Digital 2021: Egypt, that 47.4% (49 million) of the population are active social media users. In addition, the report shows that there is an annual growth of internet users equal to 8.1%, 2.9% annual increase of mobile connections, 16.7% increase of active social media users, compared to 2020 (Kemp, 2021).



Figure 3 Internet Mobile Subscriptions Year 2013-2020. Source: (Arab Republic of Egypt: Ministry of Communications and Information Technology, 2017)

290



Sara El Bayar ¹, Hebatalla Abouelfadl ² – DTAA21 – December 2020



Nonetheless, most of the time (3 hours and 6 minutes) spent online for internet users aged 16 to 64 is spent streaming and broadcasting television, and using social media. The most used platform for internet users aged 16 to 64 is youtube with a close tie to Facebook (Kemp, 2021).

According to the above statistics, the annual growth and the high number of internet users in Egypt 2021, indicate the power of social media. Since social media is one of the highest activity online in Egypt, it is essential to promote participatory planning on social media.

9.2 WORLD WIDE WEB, WEB 2.0

Since the invention of the World Wide Web (www) by Sir Tim Berners-Lee in 1989, the way people communicate and exchange information has been drastically transformed (Ragot, 2017). The first version of the world wide web was called Web 1.0 and lasted from 1989 till 2005. It provided limited interactions, where users can exchange static data and information but they cannot interact with the website or with one another (Choudhury, 2014). Users could only search and read data in browsers. Web 1.0 did not allow users commenting and interacting with one another.

In 2004, the second and current generation developed was called Web 2.0 by Dale Dougherty. It allows formal and informal participation, collaboration, and distribution of practices. In other words, it includes participatory media, social digital technology which facilitates users to read, write, and interact with one another (Choudhury, 2014).

The third generation, Web 3.0, was developed is yet to come and is known as 'Executable Web' or 'Semantic Web'. The main goal is to create more autonomous, intelligent, connected websites. It will process information with near human-like interactions using artificial intelligence (Vermaak, 2021).

The current world wide web, allows people to easily connect regardless of their location around the world (Hansen & Prosperi, 2005) (Peng, 2001). The internet provides opportunities for interaction between different people and exchanging data (Ragot, 2017). Until recently, the web has been used for the provision of information rather than actual public participation (Al-Kodmany, 1999) (Pundt & Brinkkotter-Runde, 2000) (Smith, Evans, & Batty, 2005) (Pettit, Raymond, Bryan, & Lewis, 2011).

Moreover, the internet allows governmental entities to involve local citizens in planning and decision making (Karakaya, 2003) (Hansen & Prosperi, 2005). Nonetheless, the web can be used to build, visualize, interact with, and spread dynamic 3D content using Virtual Reality Modelling Language (VRML) (Huang & Claramount, 2004) (Pundt & Brinkkotter-Runde, 2000).

Karakaya (2003) argue that technology can be used by local authorities to increase their internal efficiency, have better communication with their partner organizations as well as join up their



Sara El Bayar¹, Hebatalla Abouelfadl² – DTAA21 – December 2020

services with them. According to Peng (2001), the internet can become a forum around which community-based issues, information, alternative perspectives, and decisions evolve. Hansen & Prosperi (2005) affirm that the internet has the potential of being a strong medium for involving the citizens in decision-making. The web enables collective intelligence and collaborative content creation and linking bythe user who contributes towards common knowledge (Porwol, Ojo, & Breslin, 2014) (Ragot, 2017). It can be concluded, that the web does not ensure more public participation, but it provides easier way of communication not limited to a certain time or location and exchange of data, thus enhancing the process.

10. CASE STUDY: FROM PARKING TO PARK

In order to test the effectiveness of social media in participatory planning, a case study was chosen to be redesigned to accommodate different users. The project is a parking lot in Gleem neighborhood along Alexandria's waterfront in Egypt. The parking lot is bounded by different restaurants and cafes which attract many visitors. According to several site visits, throughout the week and on different time of the day, the following observations were noted:

• On Friday mornings and weekends, the parking lot remains free of cars till 10 am. Thus, many citizens visit the open space to warm up and cool down before and after their morning jog, skaters to roll around, friends to sit along the waterfront, and others to learn to cycle. This spot is considered a meeting point as shown in Figure 5 and 6 for many groups including Alex Runners, a group of people from different age groups that aim to promote running as a sport to support a healthy lifestyle and spread positive energy using a Facebook page (Alex Runners, 2021).



Figure 5 Alex Runners warming up in Gleem's Parking lot on Friday morning. Source: (Alex Runners, 2021)



Figure 5 Skaters and Cyclists in Gleem's Parking Lot Source: (Alex Skate House, 2021)

• On weekdays and weekends after 10 am, the space is occupied by cars parked by users visiting surrounding cafes and restaurants. Some people remain sitting along the waterfront enjoying the view of the sea.

This space is considered an important node along the waterfront of Alexandria because of the scarcity of open spaces available on the waterfront that can allow group of people to meet and perform different sports activities. Therefore, this research aims to use Gleem's Parking Lot as the case study to test the effectiveness of using the social media to promote participatory planning. The testing process consisted of surveys conducted in two phases:



- Phase 1: local citizens were invited to participate in an online survey using social media platforms (Facebook and Whatsapp). The survey included an introduction of the project, demographic and general questions such as age, gender, neighborhood they live in, and level of education. The survey then questioned:
 - Were you involved in any past participatory planning projects?
 - How often do you visit Gleem's Parking Lot?
 - What are the different activities you perform when they visit the parking lot?
 - Do you visit the parking lot on weekdays or weekends and at what time?
 - Do you want facilities for cycling, skating, and green pavement materials?
 - Would you like to add any additional facilities?
 - How did you reach this survey: using social media, word of mouth, or other ways?
 - Would you like to participate in future projects using online platforms?
 - Do you have any ideas to improve the participatory planning process?
 - Is social media a helpful tool for participatory planning?
 - How likely would you share this survey on social media?
- Phase 2: a second survey was conducted using social media platforms (Facebook and Whatsapp) to reach users of Gleem's Parking lot. The survey included 3d and 360 degrees renders of the proposed design and a written explanation of the main aims of the new design. The survey then questioned:
 - Did you participate in the survey part 1?
 - How satisfied are you with the new proposed design of Gleem's parking lot?
 - Do you want to participate in future planning projects using social media?
 - Would you rather participate online, on site participatory workshop, or both?
 - Are you willing to volunteer to transform the design to real life?
 - Are you willing to donate money to transform the design to real life?
 - Would you like to share any comments?

The first survey was sent using Whatsapp, Facebook messenger, and shared on a Facebook page (o2ol Ra2yak, Say your Opinion, $\underline{\mathfrak{s}}_{\underline{\mathfrak{b}}} \cup \underline{\mathfrak{o}}_{\underline{\mathfrak{c}}} \cup \underline{\mathfrak{o}}} \cup \underline{\mathfrak{o}}_{\underline{\mathfrak{c}}} \cup \underline{\mathfrak{o}}_{\underline{\mathfrak{c}}} \cup \underline{\mathfrak{o}}_{\underline{\mathfrak{c}}} \cup \underline{\mathfrak{o}}_{\underline{\mathfrak{c}}} \cup \underline{\mathfrak{o}}} \cup \underline{\mathfrak{o}}$ were from the age group 25 to 34 years old and 60.2% were females. In addition, 1.02% of the people who participated were under 18, 13.27\% were from 18 to 24 years old, 15.31\% were from 35 to 44 years old, 3.06\% were from 45-54 and only 1.02\% were above 65 years old. Moreover, 59.38\% of the participants held a bachelor's degree, 25\% held master's degree, 13.54\% finished high school, and 2.08\% were PhD holders. In addition, answers to the survey indicate that the parking is not only used by citizens within walking distance, actually the majority of the participants using the parking come from neighborhoods that are further than 500 meters. Nonetheless, 91.67\% of the people who answered the survey did not participate in any participatory planning project previously.}



Sara El Bayar¹, Hebatalla Abouelfadl² – DTAA21 – December 2020

Results of the second part of the survey is shown in Figure 7 and 8. Most participants visit the parking lot few times during the month. However, those who visit the parking lot in order to perform sports activities visit it at least once on weekends from 6 am till 9 am. The results indicate that most people who visit the parking lot for reasons other than a parking, use it for jogging or exercising. Most importantly, 90.6% of the participants chose that the parking lot needs to be redesigned to accommodate different activities. Specifically, 55% of the participants stated that it is unnecessary to add a skating bowl in the parking lot while 95.8% thought it is necessary to add a cycling lane. Many of the participants also added that they need a public toilet in the parking lot and shaded seating areas.



Figure 6 Phase 1 survey summary results regarding design of the park



Sara El Bayar¹, Hebatalla Abouelfadl² – DTAA21 – December 2020



Figure 7 Phase 1 survey summary results regarding the design of the park (continued).

After the questions regarding the park, the participants were asked about the process itself, 96.8% of the participants stated that they would want to participate in similar future participatory projects using social media as shown in Figure 9. When asked the participants for their opinion on how to improve the participation process, one stated that:

"If people feel the effectiveness of participating, more people will participate. The best way, in my opinion, is to publish the results of the survey before starting the actual construction process, with an explanation that implementation is based on this result."

This participant emphasized the importance of transparency and actually carrying out the project till the end and sharing results with the public in order for more people to gain trust and believe their voices are actually heard. Another participant stated that the process could be improved by setting up public talks and events, television shows, and physically surveying people in the site and questioning visitors of the parking lot to include diversity of people. A couple of participants stated the need for voting on different design proposals using social media. Nonetheless, one participant declared the need for promoting such projects in schools and spread awareness of the importance of urban development and allow students to participate in building such projects. More than 50% of participants found that Facebook and Whatsapp are extremely helpful as a participatory tool in planning development projects and 39.6% found it very helpful. Moreover, 43.75% of the participants stated that it is very likely for them to reshare this survey on social media.



Sara El Bayar¹, Hebatalla Abouelfadl² – DTAA21 – December 2020



Figure 8 Phase 1 survey results regarding the participatory process (continued).

Based on these results, decisions were taken to propose a redesign of the parking lot. The design proposes the use of the open space as a parking lot all weekdays all the time. On weekends, the space will be dedicated for people to enjoy sports activities without any cars occupying the space from 6 till 10 am, since it's very rare for cars to park in the open space in the early morning of weekends. The design includes green parking lots with permeable pavement to add a positive impression to the user's experience illustrated in Figure 10. Surrounding the parking lot, there is a cycling lane and skating track. Nonetheless, a public toilet is added to the administrative building and outdoor benches that can be used by the visitors of the open space. Figure 11 shows how the open space will be used as a parking lot after 10 am on weekends and the whole day on weekdays. Figure 12 shows the different activities proposed in the open space.







Sara El Bayar ¹, Hebatalla Abouelfadl ² – DTAA21 – December 2020



Figure 11 Diagrams showing the different sports activities that can be held in the open space on weekends from 6 till 10 am.

Another online survey was conducted promoted on Facebook and Whatsapp, 44.94% of the participants were 35-34 years old, 19.10% were 35-44 years old, 16.85% were 18-24 years old, 11.24% were under 18 years old, 6.74% were 45-54 years old, and 1.12% were above 65 years old. Nonetheless, 52.81% of the participants were female and more than 50% of the participants do not live within walking distance of Gleem's Parking lot.

Results of the second survey shown in Figure 13 and 14 indicate that 50.57% of the participants participated in the survey in phase 1. After checking the 3d and 360 degrees renders posted on a Facebook Page) O2ol Ra2yak, say your opinion, فول ر أيك) created especially for this case study, 50.57% of the participants are very satisfied with the redesign proposal while 39.08% are satisfied. Nonetheless, 65.2% of the participants strongly agree to participate in future participatory planning projects using social media and above 60% strongly agree or agree that they prefer participating online rather than attending workshops physically. More than 70% voted for likely and very likely to volunteer in building this project and more than 60% are likely and very likely to donate money. Nonetheless, the majority of the people voted that they want to participate and express their opinions and ideas via online participatory tools and physical on-site workshops. In the comments section, many stated that they preferred to have more than one design alternative so they could vote which they preferred best. Others added comments regarding the design. While many, stated they really wished that they could share their opinion freely in future projects like this one.



Figure 12 Phase 2 survey results about the online participatory process.





Figure 13 Phase 2 survey results about the online participatory process. (Continued)

299



11. CONCLUSION

Needless to say, it is important to build trust between local citizens and decision makers and governmental officials by providing transparency facilitated by participatory planning. It is inevitable that ICT and especially social media plays a big role in our communities and offer new opportunities to the participatory planning process. Participation using social media platforms overcomes the limitation of time and geographical boundaries. Citizens participated anywhere and at any time based on their preference. As shown in the case study, social media attracted participants from the age group 25 to 34 to get involved in the participatory planning process because they are more familiar with social media platforms and more technological savvy. Not only that, due to the anonymity of the process, survey results show that more females participated as opposed to traditional participatory planning workshops or public hearings, as they were comfortable to get involved in the online participatory planning process using social media platforms. In addition, people were willing to volunteer and donate money to implement the redesign of Gleem's parking lot because they felt like their needs and aspirations were taken into consideration. Results of the surveys show that people are interested to participate again in future projects using online social media platforms.

However, the digital divide maybe a challenge and act as a barrier to those not familiar with such platforms. Therefore, it is essential to set up on-site workshops parallel to the online participatory platforms to attract a variety of people from different age groups and educational level. Although social media platforms could be considered as a tool to reach more people and hunt targeted groups, other online tools can be used that allow people more participation facilities. Some participants wanted a discussion forum so they would be able to discuss ideas with the officials and with one another. In addition, they stated that they wanted a voting poll for different design alternatives. Others wanted to be able to have a say and share in the design process. Therefore, it is recommended to create an online participatory tool that allows citizens to be involved in the project during the early stages where it requires brainstorming and gathering ideas in addition to the design stage where a tool can be created that is easy to use and to help people translate their ideas into a 3d model, and during the building stage where people can either be involved or able to audit the work being done. Thus, official pages of the government can be used to involve people rather than just informing them. This online participatory tool can be promoted on social media pages of governmental entities to gain citizen's trust. All in all, social media definitely has a positive impact on participatory planning on the local scale projects if used parallel to traditional methods.

12. ACKNOWLEDGEMENTS

This work would not have been possible without the constant support of my family. I would like to thank them for believing in me and always pushing me forward. I am especially grateful for Dr. Hebatalla Abouelfadl for her guidance and for granting me her time to work on this research. In addition, I would like to thank Dr. Ahmed Abu El Wafa, as my mentor, who have been supportive of my academic and non-academic career goals. I would also like to thank all the people who helped in the completion of this project especially those who were involved in the case study.

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Sara El Bayar¹, Hebatalla Abouelfadl² – DTAA21 – December 2020

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