



HAL
open science

Factors Affecting Citizens' Use of e-Participation Platforms: A Case of GovChat Platform in Cape Town Municipality

Aiden Katzef, Nozibele Gcora Vumazonke, Wallace Chigona, Teofelus Tonateni Tuyeni, Chimwemwe Queen Mtegha

► To cite this version:

Aiden Katzef, Nozibele Gcora Vumazonke, Wallace Chigona, Teofelus Tonateni Tuyeni, Chimwemwe Queen Mtegha. Factors Affecting Citizens' Use of e-Participation Platforms: A Case of GovChat Platform in Cape Town Municipality. 17th International Conference on Social Implications of Computers in Developing Countries (ICT4D), May 2022, Lima, Peru. pp.69-88, 10.1007/978-3-031-19429-0_5 . hal-04601176

HAL Id: hal-04601176

<https://inria.hal.science/hal-04601176v1>

Submitted on 5 Jun 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution 4.0 International License



This document is the original author manuscript of a paper submitted to an IFIP conference proceedings or other IFIP publication by Springer Nature. As such, there may be some differences in the official published version of the paper. Such differences, if any, are usually due to reformatting during preparation for publication or minor corrections made by the author(s) during final proofreading of the publication manuscript.

Factors Affecting Citizens' Use of e-Participation Platforms: A Case of GovChat Platform in Cape Town Municipality

Aiden Katzev

University of Cape Town, Rondebosch, Cape Town, South Africa
ktzaid001@myuct.ac.za

Nozibele Gcora Vumazonke

University of Cape Town, Rondebosch, Cape Town, South Africa
gcrnoz001@myuct.ac.za
0000-0001-7074-074X

Wallace Chigona

University of Cape Town, Rondebosch, Cape Town, South Africa
wallace.chigona@uct.ac.za
0000-0002-1059-811X

Teofelus Tonateni Tuyeni

University of Cape Town, Rondebosch, Cape Town, South Africa
tnyteo002@myuct.ac.za
0000-0001-5775-1399

Chimwemwe Queen Mtegha

University of Cape Town, Rondebosch, Cape Town, South Africa
mtgchi003@myuct.ac.za
0000-0001-6051-1302

Abstract: Citizen participation is critical to a democratic government as it allows the public to be involved in the decision-making process. e-Participation platforms enable the citizens to participate and voice their concerns. However, there is generally a low usage of e-Participation platforms by the citizens. This paper examines the factors affecting citizens' use of e-Participation platforms in facilitating citizen participation. The study employed a case study approach using the GovChat platform in Cape Town municipality. The study used a qualitative research method and a deductive approach to theory. The Capability Approach theory was used to investigate the phenomenon of interest. We used the purposive sampling technique to select the 30 participants in the study. In addition, semi-structured interviews were used to collect data from the selected participants. Our results suggest that personal, environmental and social factors affect the effective use of the GovChat platform by citizens in Cape Town municipality.

Keywords: GovChat, Citizen Participation, e-Participation Platforms, Government, Municipality, Capability Approach

1. Introduction

Citizen participation is integral to the democratic decision-making process as it allows citizens to influence public decisions [1]. The primary goal of citizen participation is to ensure that citizens have a voice in public decisions. Citizen participation legitimises government decisions and ensures that the citizens' interests are reflected in the public choices [2]. Consequently, countries worldwide are implementing various measures to encourage citizen participation in critical public decisions. Participatory Budgeting (PB) is one of the standard measures of involving citizens in budget allocation decision-making. PB is widely considered worldwide as a novel approach to policymaking that permits ordinary citizens to have a say in public budgeting. However, citizen participation is still a challenge in developing countries due to a lack of awareness among decision-makers and officials on its benefits to community transformation [3].

South Africa experiences a high number of citizen protests due to poor service delivery by local governments and a lack of alignment between the vision and goals of the government and the wants and needs of the citizens [4,5]. Citizens complain that their voices are only heard leading up to and during the governmental elections when political parties have become notorious for making empty promises [6]. South Africa's history of apartheid continues to affect the nation. Although the country holds regular democratic elections, many citizens still believe that they have no voice [6]. The traditional way of participation is through local government structures, i.e., ward councillors. Ward councillors represent the public voice and ensure accountability in the government [7]. However, many South Africans do not know their respective local ward councillors [8].

Currently, South Africa is beginning to reassess its citizen engagement strategy by looking toward current and future technological trends to connect with the citizens [9]. In 2018, the government launched the GovChat platform to

facilitate citizen participation and improve transparency. Despite the launch of the GovChat, service delivery protests are at an all-time high in South Africa, and citizen participation is still low [10]. The GovChat has limited success, with only a fraction of the population adopting the GovChat platform [11].

Studies have shown several factors that impede the use of e-participation platforms. These factors relate to citizens' satisfaction with e-participation platforms and government responsiveness towards e-participation. These factors include the quality of participation, citizens' level of education, trust and responsiveness, perceived benefits, and the ability to interact with the government [12] actively. In addition, other factors such as citizens' community commitment, subjective norms, and strength of offline social ties influence citizens' e-participation [12].

This exploratory study describes factors affecting e-participation using a case of GovChat in Cape Town municipalities. The study provides new insights into the potential uses of GovChat for citizen participation. By asking questions about the application of the GovChat platform and assessing the phenomena in a new light. The study intends to achieve its primary goal of exploring the possible ways in which GovChat can facilitate citizen participation at a local municipal level in the city of Cape Town by answering the following research questions:

- *What factors affect the use of the GovChat platform in Cape Town municipality?*

This study employed the Capability Approach (CA) as the theoretical framework to assess the use of the GovChat platform for citizen participation. The study further adopted an interpretivism research paradigm and used semi-structured interviews as the primary source of data collection. Purposive sampling was employed to select appropriate participants, which constituted ordinary citizens and ward councillors. The study will inform government officials on improving citizen participation through ICT and developing e-participation platforms that the citizens can adopt.

2. Literature Review

2.1 Citizen Participation Process

Citizen participation is a process that allows individuals to influence public decisions and is an integral component of the democratic decision-making process [13]. The terms “citizen participation” and “citizen involvement” are used interchangeably to depict the same meaning. However, these terms are different. Citizen ‘involvement’ is likened to the top-down approach, while ‘participation’ is prompted by the citizens [14]. The fundamental question in participation that needs to be scrutinised is ‘who is entitled to participate?’ [15]. The entitlements to participation are categorised as follows: rights (citizens), spatial location (residents), knowledge (experts), share (owners), stake (beneficiaries/victims), interests (spokespersons) and status (representatives) [15]. The advantages of citizen participation include avoiding conflicts between citizens and government, trust and confidence between the citizens and the agency, and citizens feeling part of the community [16]. Despite the positive attributes of citizen participation, it is very costly and time-consuming [14].

There are distinct levels of citizen participation that can lead to different outcomes, and Arnstein [17] discussed the typology of citizen participation into eight rungs on the ladder. The ladder of citizen participation in Table 1 depicts the degrees of involvement and power struggle by more citizens trying to gain control in participation [17].

Table 1. Arnstein’s Ladder of Citizen Participation [18,19]

Ladder of Citizen Participation		
8	Citizen Control	Citizen Power
7	Delegated Power	
6	Partnership	
5	Placation	Tokenism
4	Consultation	
3	Information	
2	Therapy	Nonparticipation
1	Manipulation	

Manipulation and therapy are categorised as nonparticipation and are the lowest rank on the ladder to depict ‘no power’ [17]. The second category is tokenism which includes informing, consultation, and placation. Informing is distributed top-down from the powerholders to citizens, and there is no room for feedback or power negotiations. This information is spread using means of media news, posters etc. In the consultation stage, information flow is simultaneous; however, the information obtained through consultation is not considered. Lastly, placation citizens can advise, but decision making is left to the powerholders. Citizen power is comprised of partnership, delegated authority, and citizen control.

There are arrangements in which both citizens and powerholders can make decisions and delegate responsibilities. It enables citizens to feel accountable for their choices for the community's betterment.

The drawback of the ladder of participation is that it is regarded as 'goal-oriented', meaning citizen participation should attain the highest rank. If not achieved, it means failure in citizen participation [20]. Secondly, the roles and responsibilities change as you move in the ranking. However, this is not always the case because responsibilities might shift during the participatory process [17]. In light of citizen participation in most developing countries, citizens cannot fully participate in developmental discussions due to the economic, political, and social environment; as a result, many fall in the lower rank of the Arnstein ladder of citizen participation [21]. Nevertheless, my scholars have argued that citizens need to participate in the country's decisions [21,22].

2.1.1 Benefits and Challenges of citizen participation

Citizen participation plays a vital role in democracy and creates multiple other benefits for society. Citizen participation aids in informing and educating the public. Active citizens are more knowledgeable and have better access to government decisions [20]. It further helps build and strengthen democracy at the local level [13]. On top of this, government decision-making is maintained as the communities contribute to decision making.

Citizen participation is often bedevilled by several challenges, such as:

- Low citizen knowledge, citizen participation is futile if the public cannot make informed decisions;
- The public belief that their participation is not valued or wanted;
- Lack of public trust or legitimacy;
- Citizen apathy, as all citizens have an opinion about decisions concerning their community, but many lack the drive to participate actively;
- Time constraints restrict citizen participation most current avenues of public participation are time-consuming; and
- Fear that self-interest will conflict with the interests of society restricts citizen participation.

2.2 Citizen Participation in Africa

For democracy to be realised, ordinary citizens need to be involved in the country's decision-making processes. Many African countries are in a transitional phase of democracy, as most countries have had to undergo political transformation [23]. However, through technology platforms, many citizens in the African continent are voicing their concerns. Despite the myriad opportunities that technology provides for ordinary citizens to engage and discuss the decisions in the country, consequences have followed for many citizens [24]. The political landscape for many African nations does not provide the platforms where citizens can loudly and freely engage with the governments to harness democracy. Therefore, many citizens in the continent are not actively involved in decision-making processes [25,26]. However, some countries in the continent are now beginning to realise that for Africa to transform, and citizens need to be fully engaged.

Scholars have also questioned citizen participation, as many follow the "top-down" approach to development [27]. These approaches have limited both rural and urban development [27]. In addition, literature has also shown that the disadvantaged are usually not included in developmental discussions resulting in poor outcomes that do not serve the needs of the people, which has been a growing concern [25]. In addition, it has also resulted in a lack of trust and confidence in governance [28]. Entities, for instance, civil society organisations, have been able to participate to some extent [19]; however, as already mentioned, these entities' social and political environment has been a challenge to the African continent [29].

2.2.1 Citizen Participation in South Africa

On a national level, the ruling African National Congress (ANC) adopted a centralised technocratic approach to decision-making concerning public spending. Experts in specific fields are elected to decide public expenditures on behalf of the citizens [1]. Citizen participation, however, is best implemented at a local level as these programs are more effective when targeting the grassroots of individual communities [1]. Furthermore, South Africa's local municipalities are autonomous, governing themselves and controlling their affairs, making citizen participation feasible at a local level [1]. However, South Africa still lags in its citizen participation programs but has the potential for growth [30].

Section 214 of the South African Constitution states that South Africa's revenue is to be shared among national, provincial, and local levels of government in a process called fiscal decentralisation [30]. Accordingly, it is the responsibility of these spheres of government to allocate their provisioned cut of the budget to areas and projects they deem appropriate.

The apartheid era in South Africa resulted in the planning of cities and towns with racially divided business and residential areas, with poor areas having far less access to services and far higher population density than affluent areas. In addition, the structure of South Africa's poor areas makes service delivery a challenge, resulting in rural areas being underserved and underdeveloped. As a result, municipalities have adopted an Integrated Development Planning (IDP) method at a local level to plan future development in these disadvantaged communities [31].

IDP is a citizen participation program that aims to involve citizens within the municipality to find solutions for long-term development [32]. The municipal IDP Committee has community representatives within these municipalities known as wards. Community representation is crucial for the department of provincial and local government in South Africa, but the current representation does not reflect the community accurately. For example, representatives in these committee meetings are often members of a higher income bracket within the community and do not represent the lower-income groups [33].

Department of Provincial and Local Government [32] developed a 5-phase process to develop the IDP. Firstly, an analysis is conducted to collect information on the current conditions in the municipality. Problems faced by people in the municipality and the cause of these problems are identified and prioritised as well as identifying the allocated resources for solving these problems. Secondly, strategies are developed to find solutions to these problems by developing a vision, defining the objectives and identifying the best methods for achieving these objectives. Thirdly, municipalities design projects based on the methods obtained from the strategy phase. Finally, targets and Key Performance Indicators (KPIs) are established for each project to monitor its success. In the fourth phase, all projects and development plans are integrated as these projects cover a broad spectrum of issues from poverty alleviation to healthcare. Finally, the IDP needs to be approved by the council for adoption. The council can also publish a draft IDP for public comment, but the council does not commit to acting on the public's comments.

Although local municipalities have fiscal decentralisation, where different levels of the government have mobility from one another, the autonomy and financial freedom of local government are still limited [30]. This is especially true in poorer communities, as donors are more interested in investing in affluent areas, and the communities are too poor to collect their own revenue through taxes.

Current participatory processes are facilitated at the mayor's office, exposing the processes to possible political interference. Participatory processes can be structured to exclude certain people from actively engaging [34], and it poses a high risk in South Africa, where there are 11 official languages. The participatory processes can exclude people by hosting public deliberations in selected languages. Leduka [35] highlighted the risk that contracting companies might manipulate participatory processes to favour their business interests and disregard the actual needs of the communities.

South Africa's high level of inequality has resulted in many citizens lacking the education necessary to understand how they can engage with the government [36]. Access to this information is also limited, preventing the empowerment of citizens [30]. In addition to this, most of South Africa's ward councillors lack the knowledge and means to inform their citizens of citizen participation processes. According to ward councillors' statistics, South Africa has four hundred and sixty-seven ward councillors [37].

Citizen participation does not end once budgeting decisions have been made; municipal representatives oversee these projects or risk not meeting requirements. Unfortunately, municipal representatives often lack accountability and tend to disregard the oversight of community projects. Issues are only discovered once these projects have been implemented, leading to a waste of limited resources [30].

2.3 Challenges of Citizen Participation in South Africa

South Africa is no exception, and given its economic and political history, it has its challenges regarding citizen participation implementation [1]. Although local municipalities have fiscal decentralisation, the financial freedom of local governments is still limited. This is especially true in poorer communities, as donors are more interested in investing their money into affluent areas, and the communities are too poor to collect their revenue through taxes.

Current participatory processes are facilitated at the mayor's office, exposing the processes to possible political interference. Participatory processes can be structured to exclude certain people from actively engaging in them [34]. This poses a high risk in South Africa, where there are 11 official languages, and participatory processes can exclude a group of people by hosting public deliberations in select languages. Leduka [35] highlighted the risk that contracting companies might manipulate participatory processes to favour their business interests and disregard the actual needs of the communities.

South Africa's high level of inequality has resulted in many citizens lacking the education necessary to understand how they can engage with the government. Access to this information is also limited, preventing the empowerment of citizens [30]. In addition to this, most of South Africa's ward councillors lack the knowledge and means to inform their citizens of citizen participation processes.

Citizen participation does not end once budgeting decisions have been made; they require municipal representatives to oversee the implementation of these projects, or else they risk not meeting requirements. Unfortunately, municipal representatives often lack accountability and tend to disregard the oversight of community projects. As a result, issues are only discovered once these projects have been implemented, leading to a waste of limited resources [30].

2.4 e-Participation Platforms for Citizen participation

Digital or e-Platforms for citizen participation are recognised as essential tools that enable citizens to participate in decision-making processes [38]. About 51 e-participation platforms were in use in January 2020, and participatory budgeting is the most utilised in the e-platform [39]. These platforms allow citizens to have a voice in the service delivery and reach a wider audience, providing broader opportunities for engagement and collaboration [40,41]. There are distinct types and categories of e-participation platforms, formal and informal. The focus of the study is on the platforms developed by the government to engage with the citizens to influence policies at the national and local levels, referred to as formal e-participation platforms. Over the years, e-participation platforms have transformed how citizens interact with private and public organisations [42]. The GovChat platform is an example of a formal e-participation platform, an initiative of the government of South Africa. Although some of the e-participation platforms have been a success, others have failed. Some of the reasons for the failure of e-platforms include stakeholders’ dissatisfaction and lack of innovation and support [43].

e-Participation platforms for citizen participation can serve as both Citizen-to-Government (C2G) and Government-to-Citizen (G2C). C2G e-platforms aim to provide citizens with a platform to share, collaborate and disseminate information [44,45]. A C2G e-platform further allows citizens to engage with public administrators by sending direct messages and discussing public initiatives [43]. G2C e-platforms, on the other hand, offer the citizens diversity of information and services online and enhance the relationship between government and citizens. These services include payments of city utilities and applications for grants and facilities [43]. Table 2 shows some e-participation platforms for citizen participation and governance.

Table 2. List of some of the e-participation platforms, types, and the countries of origin [40,44,46]

Country	e-Participation Platform	Platform type
City of Reykjavík, Iceland	Better Reikjavik	C2G, G2C
UK	Fix My Street	C2G, G2C
France, Paris	Madame la Maire, J’ai un idée	C2G, G2C
USA, Boston	New Urban Mechanics	C2G, G2C
Kenya	Ushahidi	C2G
South Africa	GovChat	C2G, G2C
Indonesia, Jakarta city	Qlue MyCity	C2G, G2C

The city of Jakarta, for instance, uses the Olue MyCity to identify issues and problems the city is facing. This mobile application allows citizens to report, among other things, clogged drains, waste disposal issues, damaged streetlights and roads and floods. The government then responds to the problems reported [40]. City-as-a-Platform (CaaP) is considered an emerging form of open governance for urban areas that facilitate collaboration between different actors in society [45]. They proposed four main categories of CaaP, 1) Low G2C–low C2G, where the government’s role is limited to providing and making information available to the citizen online. 2) Average G2C–average C2G. In this category, the platform serves to consult and aid the government in decision-making. There is a high level of interaction in this category. 3) Medium G2C–high C2G; these platforms have a high level of interaction and allow for the organisation of virtual events such as workshops. 4) High G2C—high C2G allows high-level interaction and software applications with Application Programming Interface [45].

2.5 GovChat Platform

The GovChat is a Citizen-Government engagement platform to improve governance, transparency, and accountability by providing a platform for citizens to assess service levels. The platform was launched in October 2018. The primary focus of the GovChat is on local government engagement [47]. The platform empowers South Africans to participate in the betterment of the lives of all citizens. The platform allows citizens to rate and report government facilities and services [48]. Citizens can also apply for social grants and log a service delivery request using the GovChat, allowing responsible ward councillors to get involved quickly.

Citizens can use WhatsApp, Messenger, or desktop applications to select services or rate services experienced and facilities. The location functionality on the platform allows citizens to choose the address where the issue to be addressed is located. However, the platform requires users to have the basic computer knowledge to navigate through. For Citizens to use the platform, they need to have access to the internet. Citizens with feature phones can submit service requests through an Unstructured Supplementary Service Data (USSD) code. Currently, the GovChat platform offers three features for the users: Rating and reporting facilities, submitting service requests, and making donations to the community [46]. These features are still relatively limited but appear to be the start of what GovChat has planned for the citizens of South Africa [46]. The GovChat has the potential to play a vital intermediary between the municipality and the citizens and mitigate challenges to citizen participation. In addition, it has the potential to increase citizens' knowledge of current information in the municipality. Furthermore, it also has the potential to increase public trust through the transparency of information. Figure 1 shows a sample of the GovChat application.



Figure 1. The GovChat Platform [46]

3. Theoretical Framework

The limited use of e-Participation platforms provides the basis for the study. Subsequently, we employed the Capability Approach (CA) to investigate the phenomenon. The CA was developed by an economist Amartya Sen in the 1980s. The theory is prominently used in developmental studies, political science, and philosophy and has gained popularity in Information Systems and Information and Communication Technology for Development (ICT4D) studies [49,50]. CA is a normative framework that is used to conceptualise notions of inequality, poverty, and well-being. The theory focuses on what people are capable of (capability) and can be (freedom) based on the resources available [50]. The central concept of the framework is its ability to determine what people are effectively able to do and be, taking into account the goods and resources they have access to achieve the life they value. According to the approach, having goods or resources is not enough to imply well-being; rather, it is how people effectively use the goods and resources to achieve the life they value. In our study, the GovChat platform is said to improve citizen participation to enhance their capability by engaging with the government authorities to lead the life they value through means of development and improved service delivery. The theory allows us to understand the factors that affect the use of the commodity; in this case, we imply the commodity as a GovChat platform.

3.1 Capabilities and Functionings

Capabilities and functionings are at the center of the CA. Although the two concepts are related, they have different meanings. An individual's capability can be compared to opportunities open to an individual [52]. The Capability set is made up of potential functionings and opportunity freedom. Functionings, in contrast, refer to potential or attainment [52,53] and are associated with various aspects of lifestyle. Functionings consist of "beings and doings" and can be considered a group of interconnected functionings. These can include people's well-being, happiness, a decent job, self-respect, safety, and being calm.

3.2 Well-being and Agency

Well-being evaluates an individual's 'wellness', which is a person's state of being [54]. The achievements of well-being are measured in functionings, while the well-being of freedom is shown in the person's capability set. On the other hand, an agency is the ability for a person to act on the things they value. Personal values and circumstances play a vital role in choosing from their available opportunities. Whether or not an individual can choose from the opportunities presented to improve their value is usually tied down to their circumstances and their values.

3.3 Conversion Factors

Goods and resources are referred to as a commodity. In this study, the GovChat is the commodity that enables citizen participation to achieve the landscape they desire. Freedom is defined as opportunities that people have to live a life of value to them [55,56]. Freedoms are the actual possibilities for citizens who utilise the GovChat to participate in decision making. However, conversion factors influence individuals in generating the capabilities of the commodities. The conversion factors refer to factors that affect individuals expanding their capability [49]. The conversion factors can be categorised as personal, social, and environmental. Personal factors (such as gender and age) can influence whether and how an individual utilises the commodity to achieve functionings. For example, the level of education may affect how an individual uses a mobile phone to engage with the government. The social factors may include:

- Social institutions (power relations, public policies, institutions). For instance, social arrangements within developing countries of having more citizens in the urban area owning more mobile phones than in rural areas create consequences for e-participation in a democratic setting [57].
- Social norms (rules, behaviours and values). South Africa has a history of apartheid which may still be embedded in their values and norms; for instance, participation in government decisions may not be actively participated due to the apartheid era [58,59].

Environmental factors such as technical support, infrastructures, electricity, telecommunications, and resources can also influence converting commodities into functionings. For instance, network coverage or electricity supply [60] may pose a challenge for citizens to use e-participation platforms in developing countries.

3.4 Operationalising Capability Approach in the study

Table 3 depicts the Capability Approach concepts and their relationship in the use of GovChat to influence citizen participation.

Table 3. Capability Approach Concepts

Concept	Description
Commodity	GovChat and its relevance to Citizen Participation
Conversion Factors	Personal factors e.g., Information and Communication Technology (ICT) literacy and skills affordability Environmental factors e.g., Affordability of ICT and ICT infrastructure Social factors e.g., social institutions, social norms, and public policies
Agents	Citizens
Capabilities	Citizens' capabilities to use the GovChat are influenced by their well-being, such as training and skills, technology, etc.

4. Research Methodology

This study adopted an interpretivism research philosophy that has integrated human interest in the study [61]. The study required user experiences and sought to understand the fundamental meanings that underlie the social world by analysing the data obtained through interviews and observations. Interpretivism research philosophy requires data to be collected through a naturalistic approach where interviews and observations are the primary sources of data [61]. This has led to meanings and themes emerging from the study towards the end of the data analysis process. A qualitative research approach was employed for this study because it provides a deeper understanding of the phenomenon. The purpose of the study is exploratory in nature, as the aim of this study is to not just describe and portray GovChat's current role in municipal government but rather seek factors affecting the use of the GovChat platform for citizen participation. The approach to theory in this study was deductive.

The study focused on service delivery in the context of Cape Town, South Africa, through citizen participation at the local municipal level. The city of Cape Town was selected because it is the first city in South Africa to launch the GovChat. For this reason, the target population was Cape Town citizens. There are 30 local councils in the Western Cape, including Cape Town. The city of Cape Town constitutes a hundred and sixteen ward councillors [37]. We drew a sample of 30 respondents consisting of five ward councillors representing the municipality and 25 ordinary citizens. The ordinary citizens were coded as 'Citizen Participant X' and 'Ward X', representing ward councillors. The ordinary citizens were youth aged 16 to 35. This age group are more inclined to use a mobile device for citizen participation than the older generation [62] and mobile applications such as Whatsapp and messenger. The sample was limited to those who spoke either English or Afrikaans. The reasons for limiting the selection to English and Afrikaans speaking groups is because it is the most spoken language by the selected age group.

Furthermore, the researcher also considered the convenience of conducting the interviews since the researcher was fluent in these two languages. The citizens selected for the investigation are those currently active and those not active in the decision-making processes at Cape Town municipality. The study commenced on March 28, 2019 and ended on September 20, 2019. Table 4 summarises the criterion we used to select the participants in the study.

Table 4. Summary of the criterion used to select the participants

Criteria	Description
Citizens	Ordinary citizens that reside in Cape Town municipality
Ward Councillors	Local councillors in Western Cape
Age	Ordinary citizens aged 16 to 35
Gender	Male and Female
Language	Those fluent in English or Afrikaans
Digital Skills	None required

The case study on the GovChat platform for citizens draws on primary data collected through semi-structured interviews and document analysis. We conducted semi-structured interviews with ward councillors and ordinary citizens. A range of documents and literature on e-platforms for citizen participation and the GovChat website were reviewed to understand the platforms better. The data collected was then analysed using thematic analysis, where themes from the data were identified, analysed and documented. We highlighted differences and similarities across the data and gained insights into the phenomenon. The first approach was to identify themes. We followed D’Andrade’s technique of highlighting repeated words which was achieved by running NVivo’s built-in word frequency query. We also applied the constant comparison method, where a line-by-line analysis was conducted to understand each line of the transcribed interviews within the context of the study and compare each line to other lines in the data.

Participation was voluntary, and all participants’ identities were kept confidential. Interviews were voice recorded after gaining verbal consent from participants. The recordings are stored in a safe location for transcription purposes. Ethical clearance and approval to conduct the study was granted by the University of Cape Town’s Ethics Committee to ensure that the research complies with the code of ethics prescribed by the university.

5. Analysis and Findings

The citizens were aware of the GovChat platform on its benefits to facilitate citizen participation. However, despite the citizens using the GovChat platform, it has contributed to low uptake due to inadequate service delivery. In addition, the analysis conducted showed that several factors also contribute to the low usage of the GovChat platform, and these factors have been grouped into personal, environmental, and social factors. Despite several factors affecting the use of the GovChat platform, the platform also provided capabilities that the citizens could achieve participation, which has been categorised in the capabilities and the functionings section. Table 5 summarises the conversation factors affecting the use of the GovChat platform and its related capabilities and functionings.

Table 5. Conversion Factors and Capabilities of the GovChat Platform

Commodity	Agent	Conversion Factor	Capabilities and Functionings
GovChat Platform	Citizens	<u>Personal Factors</u>	<ul style="list-style-type: none"> - Provides citizens access to essential information. - Allows citizens to access social grant services, municipality services, gender-based violence services, corruption services, etc. - Accessible at the citizens’ convenience
		<ul style="list-style-type: none"> - Limited technical skills from the citizens. - Limited to citizens with reading and writing skills. - Social inequalities 	
		<u>Environmental Factors</u>	
		<ul style="list-style-type: none"> - Affordability of ICT e.g., Mobile phones, connectivity and personal computers. - Electricity supply 	
		<u>Social Factors</u>	

		<ul style="list-style-type: none"> - Mobile victimisation when using the platform. - Preference to verbal communication. 	
--	--	--	--

5.1 Capabilities and Functionings

Our analysis identified the capabilities and functionings the GovChat platform provided for the citizens. First, the GovChat provides essential information to the citizens on services offered by the government, such as social grants, municipality, gender-based violence, school and corruption, which would have been far-fetched to access by ordinary citizens. The platform was convenient as the citizens would voice their concerns at any place and time using either their mobile phones or computers since they do not have to travel long distances to access these services but only had to log into the platform and participate. However, connectivity remains expensive for many citizens in Cape Town due to the high unemployment rate. The affordability of mobile connectivity in South Africa was 51.72% as of January 2021, according to the Digital 2021 report for South Africa. An indication that many South African can hardly afford the connectivity devices and services necessary to use the GovChat platform.

GovChat creates an effortless way for citizens to interact, as you can use it whenever and wherever you want, being that it's on a mobile device. Less effort is required to access the GovChat platform. Therefore, we as citizens should be able to contribute to the development of our communities. Before the GovChat platform was created, we never felt as though we mattered, but now we feel like part of our community. [Citizen Participant 7]

The second factor was the potential for the citizens to voice their concerns. This finding is on par with Danielle and Masilela [48] as they stated that the platform allowed the government to obtain citizen feedback on problems, alternatives, and decisions. Citizens can track their reported requests and rate government facilities. Citizens can log requests for municipal services and report corruption activities, gender-based violence and bullying in schools. This provides the city of Cape Town with critical information on the needs and services required by the citizens. At the same time, the GovChat platform empowers and improves the lives of the citizens of Cape Town [48]. One of the citizens also highlighted that they feel their voice is being heard and their grievances attended to.

This GovChat platform works perfectly. That seems to be the purpose of GovChat; you log a problem, and you get your concerns resolved without having to stand in long queues. Now I can even book my medical assessment using the GovChat. [Ward 2]

In as much as the GovChat platform provided citizens with the voice to air out their concerns, 12 out of 25 ordinary citizens interviewed highlighted a lack of trust in the information they provided to the platform. They cited that some of the information is sensitive and could end up in the wrong hands. For instance, personal data and information on corruption activities, e.g., the contact details of the citizen requesting a service, are shared with the municipal department. As such, many citizens withheld their concerns.

It's great to have a platform where people can ask for assistance, seek services, and vent. But what happens with this information? For instance, if I am to report on corruption in my area, I do not know whether the information that I have provided will also implicate me. [Citizen Participant 14]

In addition, another participant also stated that:

Since we are voicing our concerns to government officials, some may take it personally, and consequences may follow. Therefore, we are constrained on what to share because we are unsure how these officials will react, especially when the GovChat gets your details from WhatsApp or Facebook platform when using the tool. [Citizen Participant 17]

5.2 Personal Factors

Statistics have shown growth in the Mobile uptake in Cape Town and the entire country. It is estimated that 25.5 million internet users in South Africa use smartphones. However, this is less than half of the population [63]. Statista [63] projected that the number of smartphone users in South Africa will reach 26.3 million by 2023. This means that users of the GovChat platform will increase, but at the same time, it will widen the digital divide gap.

The use of the GovChat requires citizens to have some basic technical skills in software applications. These would allow them to download the application on their mobile devices and update it when needed. Also, to be able to navigate and actively participate, e.g., logging a service delivery request and completing a report form. However, a portion of the

total population of Cape Town that lacks basic computer skills will be unable to utilise the GovChat platform fully. This contributes to the digital divide and a lack of inclusivity among those with no technical skills or computer literacy.

Not everyone has the technical skills to navigate the platform. Especially for the elderly who might have problems navigating through the GovChat platform and need assistance in navigating through the platform compared to the youths but there is support available [Ward 5]

While technical skill is essential for citizens to use the GovChat platform, many participants felt that the GovChat platform was mainly for those who knew how to read and write English. The majority of the citizens in South Africa speaks indigenous languages. isiXhosa, Afrikaans and Setswana are the most spoken languages in the Eastern, Northern and Western Cape. In the Western Cape, 49.7% speak Afrikaans, 24.7% isiXhosa, and 20.3% speak English, respectively [64]. The developers assumed that all citizens were fluent in English when creating the platform. Therefore, it limited the participation of all citizens from all classes of society.

It was easier for me to navigate the platform and read all the information, but it was challenging for someone who did not read and write. They need to create a platform that includes all languages; otherwise, only a few of us will participate. [Citizen Participant 22]

5.3 Environmental Factors

Like in many developing countries, affordability of ICT such as mobile phones, personal computers and connectivity is still a challenge. Many citizens cannot afford to own a mobile phone, personal computer and internet. The finding is on par with Bisimwa, Brown and Johnson's [65] study that found that the cost of purchase of mobile phones, airtime, internet bandwidth, and repair hindered the use of mobile phones in South Africa.

An economic barrier would be the fact that you need to have a cellphone to use GovChat and would require data to use WhatsApp. The challenge is that not everyone in Cape Town can afford to buy a mobile phone to use the platform. As for me, I can afford to buy a mobile phone, and I also use my personal laptop. The concern is that not every citizen in Cape Town municipality has the same economic standing, making it challenging to harness the platform. [Ward 3]

South Africa has been experiencing loadsheddings or power cuts over the past years. The city of Cape Town was no exception. This has contributed to the disruption of economic activities, leaving many citizens frustrated. The power cuts are attributed to the increasing demand and dilapidated infrastructure which often needs repair. This has negatively affected the use of electronic devices and the use of e-participation platforms such as the GovChat due to the frequent power outage.

Loadshedding is a huge concern in Cape Town and the entire South Africa. It has affected how, and when to use our gadgets. When there is power outage, we use our mobile phones sparingly and avoid using applications that consume a lot of power on our phones. During that time, there is limitation on the activities performed on our phone such as sending a request or reporting a problem on the GovChat platform. [Citizen Participant 25]

5.4 Social Factors

GovChat platform creates room for victimisation, whereby councillors and colleagues can easily identify and victimise citizens that frequently complain about poor service delivery. Additionally, citizens have a negative attitude towards the use of GovChat as they feel that their complaints, contributions and requests are often not attended to or taken into consideration. Thus, they perceive the platform as of less value to them.

I have a concern that our requests are not being taken into account. You don't know where your information is going. There is a grey area between making a service request and seeing the results of this request. [Citizen Participant 4]

Most citizens prefer verbal communication as they feel their concerns are being heard rather than communicating on a platform where they are unsure whether the officials read their request. In addition, the citizens uphold their cultural norms and values as they are accustomed to dialogue. Although the citizens preferred verbal communication, they felt that the platform allowed them to speak out without fear of being criticised by the officials.

Through the lens of Hofstede's cultural dimensions, South Africa, as a collectivist society, requires a platform and instruments to express their opinions, feelings, and concerns using online platforms [66]. Also, to offer them opportunities to interact. Therefore, the GovChat lacks interactive functionalities and does not optimally fulfil a collectivist society's needs.

6. Conclusion

More studies are examining how ICTs can facilitate citizen participation to respond to citizens' demands through e-participation platforms. Our study contributes to e-Participation platforms' literature by seeking to understand factors affecting the use of e-participation platforms by the citizen. The context of the study is the use of the GovChat platform by citizens of Cape Town. Although existing literature discusses the importance of citizen participation, there is paucity of literature that focuses on e-Platforms for citizen participation, specifically in developing countries. e-Participation platforms lay a significant role in the decision-making process at all levels of the government, national and local. Thereby enhancing the living standards of the citizens through better service delivery.

The study contributes to theory by utilising the Capability Approach framework to understand the factors that affect the citizens in using the e-participation platforms. The theory showed that personal, social, and environmental factors affect the citizens of Cape Town municipality use of the GovChat platform. Our study demonstrated that personal factors such as basic technical skills, language and support negatively affect citizens' use of the e-participation platforms. Availability of support to citizens during the use of the GovChat platforms can help encourage citizens to continue using the platform. Additionally, including a functionality that allows users to translate or change to other widely spoken local languages promotes inclusivity.

The study also points to environmental factors such as affordability of ICT devices such as mobile phones and personal computers and connectivity. These devices are enablers of e-participation and until most of the citizens can afford them, they will not be able to participate in decision-making processes. South Africa is one of the countries with high unemployment rates in the world. This means that fewer people can afford communication devices such as mobile phones, personal computers and internet to use the GovChat platform.

On social factors, the study observed that e-participation platforms such as the GovChat may lead to victimisation of the users. The GovChat requires the contact number of the user when logging in and the address or location when reporting cyberbullying or corruption activities. This information is shared with the municipal department and as such, the user can be easily identified which can put the life of the user at risk. The lack of anonymity of the users can adversely affect the use of the GovChat platform because of trust and confidentiality issues. Furthermore, although citizens can track their reported requests, they do not receive feedback from the municipality. This discourages the use of the GovChat platform as citizens feel that their grievances are not attended to. Designing the GovChat in such a way that it is interactive would instill users' confidence.

This study contributes to practice by understanding how and what affects the use of e-platforms for citizen participation. Knowledge and understanding on the use of e-participation platforms would aid developers to develop better e-platforms that are inclusive and that encourage citizens participation.

Lastly, we acknowledged that the study has limitations as the sample was drawn from the population of the city of Cape Town which may have influenced the findings. We suggest that future studies be conducted using a sample from another city or municipality and compare the findings.

7. References

- [1] Bassett, C. (2016). An alternative to democratic exclusion? The case for participatory local budgeting in South Africa. *Journal of Contemporary African Studies*, 34(2), 282–299.
- [2] Gordon, V., Osgood Jr, JL & Boden, D. (2017). The role of citizen participation and the use of social media platforms in the participatory budgeting process. *International Journal of Public Administration*, 40(1), 65–76.
- [3] Denhardt, J., Terry, L., Delacruz, E. R., & Andonoska, L. (2009) Barriers to citizen engagement in developing countries. *Intl Journal of Public Administration*, 32(14), 1268–1288.
- [4] Mathekga, R., & Buccus, I. (2006). The challenge of local government structures in South Africa: securing community participation. *Crit Dialogue Public Participation Rev*, 2(1), 11–7.
- [5] Plessing, J. (2017). Challenging elite understandings of citizen participation in South Africa. *Politikon*, 44(1), 73–91.
- [6] Cornwall, A., & Coelho, V. S. (Eds). (2007). *Spaces for change?: the politics of citizen participation in new democratic arenas*. (Vol. 4). Zed Books.
- [7] Piper, L., & Deacon, R. (2009) Too dependent to participate: Ward committees and local democratisation in South Africa. *Local Government Studies* 35(4), 415–433.
- [8] Cherry, J., Jones, K., & Seekings, J. (2000). Democratization and politics in South African townships. *International Journal of Urban and Regional Research* 24(4), 889–905.
- [9] Moloi, E. N. (2018). *Assessing of community involvement in strengthening road safety strategies within Umhlathuze Municipality*. (Doctoral dissertation)
- [10] Stoffels, M., & Du Plessis, A. (2019). Piloting a legal perspective on community protests and the pursuit of safe (r) cities in South Africa. *Southern African Public Law*, 34(2), 26-pages.
- [11] Seekings, J. (2020). Bold promises, constrained capacity, stumbling delivery: The expansion of social protection in response to the Covid-19 lockdown in South Africa. *CSSR Working Paper*, 456.
- [12] Choi, J.C, & Song, C. (2020). Factors explaining why some citizens engage in E-participation, while others do not. *Government Information Quarterly*, 37(4), 101524.
- [13] Cuthill, M., & Fien, J. (2005). Capacity building: Facilitating citizen participation in local governance. *Australian Journal of Public Administration*, 64(4):63–80.
- [14] Molokwane, T. (2018). Citizen involvement in the formulation of public policy. International Conference on Public Administration and Development Alternatives (IPADA).
- [15] Pellizzoni, L. (2003). Uncertainty and participatory democracy. *Environmental Values*, 12(2), 195–224. <https://doi.org/10.3197/096327103129341298>.
- [16] Michels, A., & De Graaf, L. (2010). Examining citizen participation: Local participatory policy making and democracy. *Local Government Studies*, 36(4), 477–491. <https://doi.org/10.1080/03003930.2010.494101>.
- [17] Collins, K., & Ison, R. (2006). Dare we jump off Arnstein’s ladder ? Social learning as a new policy paradigm.
- [18] Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35(4), 216–224.
- [19] Corrigan, T. (2017). South African Institute of International Affairs Democratic Devolution: Structuring Citizen Participation in Sub-National Governance.
- [20] Carpentier, N. (2016). Beyond the ladder of participation: An analytical toolkit for the critical analysis of participatory media processes. *Javnost-The Public*, 23(1), 70–88. <https://doi.org/10.1080/13183222.2016.1149760>.
- [21] Gaber, J. (2019). Building “A Ladder of Citizen Participation”: Sherry Arnstein, Citizen Participation, and Model Cities. *Journal of the American Planning Association*, 85(3), 188–201. <https://doi.org/10.1080/01944363.2019.1612267>.

- [22] Jang, S. G., Gim, T. H. T. (2022). Considerations for Encouraging Citizen Participation by Information-Disadvantaged Groups in Smart Cities. *Sustainable Cities and Society*, 76. 103437 <https://doi.org/10.1016/j.scs.2021.103437>.
- [23] Neupert-Wentz, C., Kromrey, D., & Bayer, A. (2022). The democraticness of traditional political systems in Africa. *Democratization*, 29(2), 296–319. <https://doi.org/10.1080/13510347.2021.1953476>.
- [24] Oginni, S. O., & Moitui, J. N. (2015). Social Media and Public Policy Process in Africa: Enhanced Policy Process in Digital Age. *Consilience*, (14), 158-172.
- [25] Kravchenko, S. (2009). The Myth of Public Participation in a World of Poverty. *Tul. Envtl. LJ*, 23, 33.
- [26] Nkohkwo, Q. N. A., & Islam M. S. (2001). Challenges to the Successful Implementation of e-Government Initiatives in Sub-Saharan Africa: A Literature Review. *Electronic Journal of e-Government*, 11(1), 252-266.
- [27] Mpolokeng, P. G. (2003). People’s Participation in Rural Development: The Examples From Mafikeng. *African journal of political science*, 8(2), 55-86.
- [28] Arkorful, V. E, Lugu, B. K, Hammond, A., & Basiru, I. (2021). Decentralization and Citizens’ Participation in Local Governance: Does Trust and Transparency Matter?—An Empirical Study. *Forum for Development Studies*, 48(2), 199–223. <https://doi.org/10.1080/08039410.2021.1872698>.
- [29] Plessing, J. (2017). Challenging Elite Understandings of Citizen Participation in South Africa. *Politikon*, 44(1), 73–91. <https://doi.org/10.1080/02589346.2017.1276010>.
- [30] Matsiliza, N. S. (2012). Participatory budgeting for sustainable local governance in South Africa. *Journal of Public Administration*, 47(2), 443–52.
- [31] Gueli, R., Liebenberg, S., & Van Huyssteen, E. (2007). Integrated development planning in South Africa: lessons for international peacebuilding? *African Journal on Conflict Resolution* 7(1), 89–112.
- [32] Binns, T., & Nel, E. (2002). Devolving development: integrated development planning and developmental local government in post-apartheid South Africa. *Regional Studies*, 36(8), 921–932.
- [33] Nabatchi, T. (2010). The (re) discovery of the public in public administration. *Public Administration Review*, 70, S309–S311.
- [34] Shah, A. (2007). Participatory budgeting. World Bank Publications.
- [35] Leduka M. (2009). *Participatory budgeting in the South African local government context: The case of the Mantsopa local municipality, Free State province*. (Doctoral dissertation, Stellenbosch: University of Stellenbosch)
- [36] David, A., Guilbert, N., Hamaguchi, N., Higashi, Y., Hino, H., & Leibbrandt, M. (2018). Spatial poverty and inequality in South Africa: A municipality level analysis.
- [37] Electoral Commission of South Africa. (2022). *Ward councillors statistics*. Retrieved January 22, 2022, from <https://www.elections.org.za/pw/StatsData/List-Of-Current-Ward-Councillors>
- [38] Secinaro, S., Brescia, V., Iannaci, D., & Jonathan, G. M. (2021). Does Citizen Involvement Feed on Digital Platforms? *International Journal of Public Administration*, 1-18. <https://doi.org/10.1080/01900692.2021.1887216>.
- [39] Royo, S., Pina, V., Garcia-Rayado, J. (2020). Decide Madrid: A critical analysis of an award-winning e-participation initiative. *Sustainability*, 12(4), 1674. <https://doi.org/10.3390/su12041674>
- [40] Allen, B., Tamindael, L. E, Bickerton, S. H, & Cho W. (2020). Does citizen coproduction lead to better urban services in smart cities projects? An empirical study on e-participation in a mobile big data platform. *Government Information Quarterly*, 37(1), 101412. <https://doi.org/10.1016/j.giq.2019.101412>.
- [41] Coelho, T. R, Pozzebon, M., & Cunha, M.A. (2022). Citizens influencing public policy-making: Resourcing as source of relational power in e-participation platforms. *Information Systems Journal*, 32(2), 344–76. <https://doi.org/10.1111/isj.12359>.
- [42] Sharma, G., & Kharel, P. (2015). E-Participation Concept and Web 2.0 in E-government. *General Scientific Researches*, 3(1), 1-4.

- [43] Toots, M. (2019). Why E-participation systems fail: The case of Estonia's Osale.ee. *Government Information Quarterly*, 36(6), 546–59. <https://doi.org/10.1016/j.giq.2019.02.002>.
- [44] Gil, O., Cortés-Cediel, M. E., & Cantador, I. (2019). Citizen participation and the rise of digital media platforms in smart governance and smart cities. *International Journal of E-Planning Research*, 8(1), 19-34. <https://doi.org/10.4018/IJEPR.2019010102>.
- [45] Repette, P., Sabatini-Marques, J., Yigitcanlar, T., Sell, D., & Costa, E. (2021). The evolution of city-as-a-platform: Smart urban development governance with collective knowledge-based platform urbanism. *Land* 10(1), 33. <https://doi.org/10.3390/land10010033>.
- [46] GovChat. (2021). *One platform connecting citizens and government*. Retrieved January 22, 2022, from <https://www.govchat.org/>.
- [47] Plantinga, P., Adams, R., & Parker, S. (2019). AI technologies for responsive local government in South Africa.
- [48] Danielle, N. E. L., & Masilela, L. (2020). Open Governance For Improved Service Delivery Innovation In South Africa. *International Journal of EBusiness and eGovernment Studies*, 12(1), 33-47.
- [49] Zheng, Y., & Walsham, G. (2008). Inequality of what? Social exclusion in the e-society as capability deprivation. *Information Technology & People*.
- [50] Morris, C. (2009). Measuring participation in childhood disability: how does the capability approach improve our understanding? *Developmental Medicine and Child Neurology*, 51(2), 92.
- [51] Chigona A., & Chigona W. (2010). An investigation of factors affecting the use of ICT for teaching in the Western Cape schools.
- [52] Robeyns, I. (2005). The Capability Approach: a theoretical survey. *Journal of Human Development*, 6(1), 93-.117. <https://doi.org/10.1080/146498805200034266>.
- [53] Burger, R., McAravey, C., & Van der Berg, S. (2017). The Capability Threshold: Re-examining the definition of the middle class in an unequal developing country. *Journal of Human Development and Capabilities*, 18(1), 89–106.
- [54] Gasper, D. (2002). Is Sen's capability approach an adequate basis for considering human development? *Review of Political Economy*, 14(4), 435–61.
- [55] Chrysostome, E. (2019). *Capacity building in developing and emerging countries: From mindset transformation to promoting entrepreneurship and diaspora involvement*. Springer.
- [56] Bass, J. M., Nicholson, B., & Subhranian, E. (2013). A Framework Using Institutional Analysis and the Capability Approach in ICT4D. *Information Technologies & International Development*, 9(1), pp-19.
- [57] Dalvit, L., Kromberg, S., & Miya, M. (2014). The data divide in a South African rural community: A survey of mobile phone use in Keiskammahoek. In *Proceedings of the e-Skills for knowledge production and innovation conference*, pp. 87–100.
- [58] Enslin P. (2003). Citizenship education in post-apartheid South Africa. *Cambridge Journal of Education*, 33(1), 73-83.
- [59] Mattes, R. (2012). The 'Born Frees': The prospects for generational change in post-apartheid South Africa. *Australian Journal of Political Science*, 47(1), 133–153.
- [60] Jamasb, T., Thakur, T., Bag, B. (2018). Smart electricity distribution networks, business models, and application for developing countries. *Energy Policy*, 114, 22–9.
- [61] Myers, M. D. (2017). Coming of age: interpretive research in information systems. *The Routledge companion to management information systems*, (pp. 83–93). Routledge.
- [62] Ochara, N. M., & Mawela, T. (2015). Enabling social sustainability of e-participation through mobile technology. *Information Technology for Development*, 21(2), 205-228.
- [63] Statista. (2020). *Number of smartphone users in South Africa from 2014 to 2023*. Retrieved January 22, 2022, from <https://www.statista.com/statistics/488376/forecast-of-smartphone-users-in-south-africa/>

- [64] South Africa Gateway. (2018). *What languages are spoken in South Africa's provinces?*. Retrieved January 22, 2022, from <https://southafrica-info.com/infographics/animation-languages-south-africas-provinces/>
- [65] Bisimwa, K., Brown, I., & Johnston, K. (2018). Mobile phones use by urban refugees in South Africa: Opportunities and challenges.
- [66] Vollero, A., Siano, A., Palazzo, M., & Amabile, S. (2020). Hofstede's cultural dimensions and corporate social responsibility in online communication: Are they independent constructs? *Corporate Social Responsibility and Environmental Management*, 27(1), 53–64.