

# An Analysis on Critical Determination Factors of E-Participation for Digital Society: The Case of Malaysian Local Government

Halimah Abdul Manaf<sup>1,\*</sup>, Mohamad Nur Salam Man<sup>2</sup>,  
 Dyah Mutiarin<sup>3</sup>, Ridho Al-Hamdi<sup>4</sup>

<sup>1,2</sup> School of Government, Universiti Utara Malaysia, Kedah, Malaysia

<sup>3</sup> Master of Government Affairs and Administration, Universitas Muhammadiyah Yogyakarta, Yogyakarta, Indonesia

<sup>4</sup> Department of Government Affairs and Administration, Universitas Muhammadiyah Yogyakarta, Yogyakarta, Indonesia

\*Corresponding author. Email: [imah@uum.edu.my](mailto:imah@uum.edu.my)

## ABSTRACT

Society and technology nowadays is relatively not a dichotomy. In parallel, every single government also will utilise technology as a medium to bridge the two-way relations between the government and the people. To properly understand the current society's needs, the context of this study will be focussing on the local government level which has been well-known as the closest public authority to the local community. Besides, this organisation can be an utmost prominent role in empowering the digitalisation of local society from the grassroots level. Electronic participation (e-participation) can be a felicitous virtual e-democracy platform for local government to gather any effective input, suggestions, and ideas from each of the people in formulating and implementing any public legal policy relevant to the jurisdiction of local government councils. However, before designing and implementing a comprehensive and effective e-participation platform, local governments as well as the public need to understand clearly in advance concerning some of the critical determining factors that contribute to the successful implementation of a user-oriented, fast, secured, and effective e-participation system. Therefore, this paper is generally designed to give the reader an understanding of some relevant literary works and findings as well as to fill the research gaps related to e-participation studies especially in the context of local government in Malaysia. This paper discusses some briefly concerning the initial introduction, the research methodology, some relevant literary works and findings and last but not least the discussion and conclusion.

**Keywords:** *E-Participation, Critical Determination Factors, Digital Society, Malaysia, Local Government.*

## 1. INTRODUCTION

Principle 22 from the Local Agenda 21 (LA21) of Rio de Janeiro, 1992, which is mentioned 'States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development' can be significantly translated as a requirement of a single local community of society both citizens and government to jointly play an important role in environmental management and development. The government must recognize appropriately to enable the effective involvement of various parties in achieving sustainable

development. Therefore, from the local government level, non-governmental organizations (NGOs), several interest groups, private sector stakeholders, and the key people play a role in balancing the infrastructure, human and environmental development. The basic approach of LA21 is a 'bottom-up' approach that is from the grassroots level. This means that the locals themselves will need to be involved in determining their future action plans. For example, the locals are directly involved in discussions, workshops or activities related to local issues with the local government institution via public participation [1].

In this recent advanced technological era, electronic

participation (e-participation) is one of the well-known e-government initiatives for the intention for enhancing the efficiency and effectiveness of the government public service delivery and be as a prominent role for e-democracy empowerment which gathers the public participation opinion and thought via the use of information and communication technologies tools [2]. For the government, the e-participation platform today can be beneficial for activating the people participation for figuring out some numerous issues virtually in regards with the public along with the state affairs[3].

Recently, the increase in globalization along with the recent COVID-19 pandemic crisis has resulted in the disruption of the whole operation of every organization either the public or the private sector. The public sector suffered from its public service delivery operational dysfunction, while the private sector is impacted with the major shrinkage on their revenue and profit. Nonetheless, this paper will be more focused on the public sector field which will be discussing the utilization of electronic participation mechanism, especially within the local government council organization, particularly in Malaysia.

E-participation is not an easy digital platform to be initiate and requires a different complexity for its task maintenance. According to studies by [4], [5], the complexity in the field of e-participation has undoubtedly occurred which require more special intervention from the service providers to appropriately maintain those e-participation systems that are created periodically, always constantly updated, informative, and simple user interface (UI) which can likely encourage the e-participation activities periodically. The complexity within this platform is no doubt existed; however, this platform can be beneficial for gathering the public views, ideas and thoughts more importantly especially within the recent COVID-19 pandemic time for the new norm's compliance.

In the context of Malaysia, according to the studies by [1], [6]– [8], the rate level of public participation involvement especially within the shared consultation in the local government level of the decision-making process, the collective arrangement and the making of local public policies and plans for some of the local councils in Malaysia is remaining at the insufficient and minimum level of involvement. This scenario occurred due to the people lacked acknowledgement towards public participation and what type of process of participation can be made [9], [10]. The low rate of public participation affects the local government effectiveness in decision making and execution of their responsibilities. With all this important information related to the e-participation mechanism is unlikely can be unfavorable if the implementation of this platform

can meet failure. There can be likely the e-participation systems can be a failure if there is a lack of systematic detailed research, planning and proper identification of important critical determination factors that can lead to the succession of e-participation implementation[11]. Again, on the case study of e-participation implementation failure in Estonia's Osale.ee. She identifies that despite the fast booming of e-participation initiatives from all levels of government [12], such initiatives are generally regarded as having failed to meet the expected outcomes [13], [14], unable to prepare comprehensively for the targeted user which caused user unreadiness issue [15] and somehow unfulfilled the wish to attracting the targeted members of society towards more digitalize society. Those failures much likely can be brought along with the high non-relevant expenditures such as wasted on government resources, missed opportunities, unrealized benefits and loss of trust from public people [11].

Mostly had known that everything now is about digital and the local government which serves as the local community public authority and more understanding to the local community needs to be aware of the recent phenomenon and immediately ought to take special actions to meet along with the aspirations from the upper level of governments such as federal and state level for the digitalization implementation of the public sector from the grassroots level through the level of digitalization from local government. Therefore, this literary research paper seeks to examine several critical determination factors of e-participation initiatives for the digitalization of society from the perspective of the local government of Malaysia.

## **2. METHOD**

This paper is constructed from the secondary-based data collection methods which mostly relies on the literary content analysis from various sources including journal articles, books, online resources, government website and official reports. The review is started by highlighting some of the key definitions which could support a brief understanding to the readers and able to significantly contribute to a more comprehensive explanation on the context of the study which is examining the critical determining factors of the e-participation mechanism for digitalization of the society from the local government in Malaysia. Afterwards, readers will be brief an overview of the context of local government in Malaysia which will be highlighted some of the requirements and intent of the establishment of the local government in Malaysia. The next sub-chapter readers will be revisited some of the key elements in the e-participation framework as according to the United Nations (2016). Afterwards, the readers will be exploring several of the key critical determining factors in the e-

participation implementation and the example case of the Malaysia local government practices of e-participation. The authors will be highlighted with six important key determining factors for an effective e-participation practice within the public sector with several examples of the current issues and literary works related to the e-participation. The authors also will be displayed the example of the relevant programs and initiatives that had been made by the local government in Malaysia about the e-participation. Last but not least, some of the relevant discussion and conclusion at the end of this research paper will be in place to finalized an understanding of this research context to the readers.

### **3. LITERARY RELATED WORKS**

#### ***3.1. E-Participation***

The initial term on e-participation has been coined from the study by Macintosh (2004) which has been extensively defines e-participation as the use of web technology to offer information and to assist “top-down” engagement, or to foster “ground-up” efforts in empowering citizens to growth their support. While termed e-participation are a technology-mediated interaction between the civil society sphere and the formal politics sphere, and between the civil society sphere and the administration sphere[16]. Referred to e-participation as to citizens’ use of information and communication technology (ICT) to interact in public affairs and gratifying democratic approaches [17]. In accordance with the European Commission (2015) had defined e-participation as some additional supports for public people engaging in national politics, policy-making along with making the decision-making processes plain sailing to be acknowledge via the ICT tools. United Nations (2016) extensively, defining e-participation as the method of enticing citizens via ICTs in policy, selection-making, and provider design and delivery to make it participatory, inclusive, and deliberative especially in the context of public administration[18]. In addition, e-participation is believed to be the utilization of ICT especially with the use of internet that allows public to participate in the government planning and decision-making process to attain the transparency in the government. However, according to European Union (2016) on definition is still in ‘uncomprehensive understanding’ as they argued on the term ‘e-participation’ still suffers from an absence of an all-inclusivity definition, as it comprises a wide range of initiatives and methods.

#### ***3.2. Digital Society***

The concept of the digital society is a multi-disciplinary research field and a kind of progressive

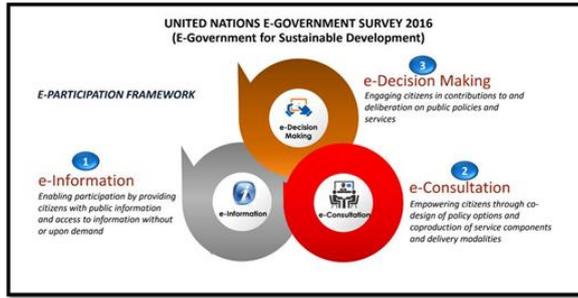
society that has been formed as a result of the application of the integration of modern technologies into the society and culture dimensions[19]. Digital society specifically offers people various distinctively advanced telecommunications and wireless connectivity technologies. Digital society in specific also relies upon on virtual economic system which is a translation to the idea of financial development with proper guidance from virtual equipment & technology and relies upon on information expertise & virtual products [20]–[22]. The concept of the digital society is often presenting the new revolutionizing institutional relationships and the way society operates, empowering people, and their capability to each participate in and make a contribution to the decision-making process[7]. For example, starting from the usage of social media in spawning democratic actions, the pooling of sources regarding housing and transportation, public participation in decision-making in the local government budgetary spending and also proposing the relevant laws to the public via ICT tools.

#### ***3.3. Overview of Malaysia Local Government***

Malaysia is a federalist-type country where the local government is within the tertiary level of government in Malaysia which is behind the federal and state government levels. Based on the Federal Constitution in 1957, the local governments are under the jurisdiction of the state government and also the federal government. Besides, under this respective Constitution also, local government is one in each of the matters reserved for the state government, and Clause 76 (4) of the Constitution highlighted that the federal government has the authority to form laws to attain equality in policy and law [23]. This suggests that any policies and aims decided by the federal government and also the state should be accepted and implemented by all the local governments, apart from the Federal territory subject to the minister responsible for the affairs of the Ministry of Housing and Local Government [23].

#### ***3.4. E-Participation Framework***

E-participation is all about strengthening public and government relations by comprehensively both to participate actively in an open discussion with the assistance of modern technologies. To properly understanding what e-participation is all about, Figure 1 briefly shows some of the aspects that need to be considered under the framework of the modern e-participation platform.



Source: United Nations (2016)

Figure 1 E-Participation Framework

### 3.5. Key Critical Determination Factors of E-Participation In Case of The Malaysia Local Government

In the context of e-government initiative via e-participation adoption, the digital divide factor is some of the critical determination to the sustainability of e-participation adoption and can significantly impact the state of democracy process especially at the level of local government (municipalities) [24]. This is due to the local government has been a key prominent frontier in adopting the e-participation platforms from the grass-root level of the local community and society. Besides, the absence of low level and inadequacy of digital literacy can result in confusions and misunderstanding of this e-participation platform in an attempt to apply the use of digital tools in the daily affairs of the locals, especially for the rural population and far from basic amenities such as utility facilities. As we have known that in possessing a good utilization of digital device, they need some sufficient time and knowledge of those technologies.

In addition to the literary studies of the digital divide, several studies conducted by Pérez-Morote et al. (2020) had found that there is a significant positive relationship is existing between the digital divide factor and citizens' use of e-government via the e-participation in their case study on some of the European countries[25]. The studies on the digital divide have existed from the hypothesis that created that inter-linkage with other four sub-hypothesis which comprises of income, education, ageing, and rurality. Despite the testing results from the study of the sub-hypothesis on ageing and rurality context is still not conclusively; yet, they still need to give a high emphasis on the digital divide factor that can be a critical determinant to the succession of e-government implementation via e-participation. They added, there is a need for every single government agency is paying attention to the issue of the digital divide which can contribute to the determination succession of e-participation program.

The issue of the digital divide or digital gap is somehow undeniable exists in developing countries such as Malaysia. According to Gong (2020), since the outbreaks of the COVID-19 crisis, every government levels and agencies in Malaysia particularly is currently in pursuits of adapting the digitalization platform in both receiving and delivering the services to the public. In short everything in government, the operation is getting digitalized[26]. Nonetheless, this digitalization process is getting fast rapidly changing and the adaptation of these new norms is varied and quite challenging since not everyone had the same equal opportunities to digital access in this pandemic time. As the need to be there, the local government played a very significant role in empowering the digital capacities of the local communities to be fast adapting to the digitalization process particularly in the e-participation process.

For this aspect, some of the Malaysian local government institutions have carried out several empowerment program that can significantly be empowering and tighten the issue of the digital divide aspect within the field of e-participation empowerment.

### 3.6. City Council of Ipoh (MBI) – MBIFreeWiFi Program

City Council of Ipoh (MBI) in the state of Perak recently has been launched a wireless internet free access for open public usage. The main intention of the program is to increase internet usage for the local community to empowering their digitalization process specifically to help students 'from home teaching and learning' (PdPR) process during the current COVID-19 pandemic crisis, in addition to helping digital entrepreneurs to develop new markets for their products through the internet as their income was affected during the 'Movement Control Order' (MCO) implemented in most locations in Malaysia recently. This initiative from MBI indirectly increases the literacy of the public towards the digitalization of society in line with the Malaysia government's aspirations towards the digitalization of Malaysia. Since the implementation of the MCO in Malaysia, especially in the city of Ipoh, the MBI is still committed to continuing to provide its services to the public and at the same time the MBI also still needs input and thoughtful suggestions from the public through e-participation via this 'MBIFreeWiFi' initiative to improve performance providing the best service and facilitating the public to interact with the MBI during this MCO period. Besides, this initiative indirectly able to reducing the gap on digital divide issue in every local vicinity within the MBI local supervision area that affected with the absence of the digital and online access. This program is expectedly to be enlarge within more places in the MBI local supervision area to make more inclusivity of the

people voices into the MBI decision-making process.

### **3.7. Factor of Trust To E-Participation and Government Agencies**

Another determining factor that can contribute to the successful implementation of e-participation is the trust towards the e-participation and government agencies. This e-participation determination factor is supported by Le Blanc (2020) arguments in his working paper via the United Nations Department of Economic and Social Affairs (UNDESA) as he mentioned that “citizen take-up and sustained use of e-participation depends in a large part on their trust in government institution”[7]. The public people trust towards the public administration has slightly diminished in some of the countries due to current adverse scenarios such as the recent economic recession situation, several government corruption allegation cases along with the hidden of important classified data and information. For example, several European citizens gaining significant skepticism towards their current government involvement to the European Union organizations [27]. The distrust and skepticism of the government are diminishing the accountability of the public administration as they are the main organization to serve the public service responsibility. In addition, the taxpayer’s money revenue might reduce to an uncertain level due of people are not confident in the government in managing their tax resources inappropriate way.

Therefore, the deployment of e-government services has taken on the additional dimension of trust in government online services more seriously to gain the trust again from the citizens [28]. Some several studies have shown some important results to the use of e-participation tools insignificantly affects the trust and confidence of the government. According to the study by Sternstein (2010), the citizens much likely trusting to use the e-government tools if the tools provided are significantly transparent and accountable to the public[21]. Besides, the current public user of e-participation projects is expecting more on the government or management support for making this tool more transparent by presenting some important data and information of the e-participation discussion results to the public people at the highest priority. In the case of local government, e-participation application can be useful and significantly can increase the trust of it by the public use if the result of positive experiences regarding the government responsiveness to the public needs and those e-participation service qualities [29]. In other words, e-participation tools can be beneficial for public usage if the service provided is seemingly fast, efficient and responsive.

In the context of e-participation in the Malaysia local

government, the local governments in the state of Selangor and Kuala Lumpur City Hall (DBKL) argued that the online or e-government service component that provided by the respective local governments is still at a moderate level and the overall results show from the 13 efficiency components that had been studied, the online platform is ranked at the lowest overall[30]. The results show that the slight moderate level of local public people in using the e-participation platform still needs more trust and confidence for the use it. In addition, according to the Sinar Harian (2018), in the state of Melaka, there is an estimation approximately about 5585 complaints that have been received related to the local governments involving various issues received by the Corporate Communications Division of the Chief Minister's Department of Melaka through the complaints system of the Public Complaints Management System in the period from January to October 2018. From this issue, how can the local public people deliberately to joint discussion and collaboration with the local authorities since there is still a distrust issue on the local government agency in the first place? The distrust issue on the local government agencies along with their e-participation implementation need to be reconsidered once more by looking back at the important demands and needs of the local citizens via the appropriate utilization of civic participation via the technologies.

### **3.8. Different Stakeholders’ Involvement**

All e-participation stakeholders can be in the form of internal (for example politicians, public managers and civil servants), or external (for example citizens, interest groups, or firms) [31] and their goals are often poorly can be understood. In the serious case is the creation of disputes of interest between those stakeholders which can likely appear [32], the e-participation projects could be unfavorable for some stakeholders, and some stakeholders could lack authority to influence the projects [31]. For example, the politicians’ involvement on the e-participation platforms is much likely for their electoral interest, while the public administrator is more prone to provide the best e-participation online service, gathering the inputs from the public, maintaining the tools and other bureaucratic-related tasks. At the same time, the citizens along with the interest groups are demanding their interests from the government. In addition to this, as cited by Le Blanc (2020), e-participation projects in broadly speaking involved many different actors[7]. Central actors are citizens (or citizen’s groups), politicians, and public administration [17] also have their additional stakeholders [33].

Within this factor, there is a need for a fundamental understanding of the different stakeholders’ involvement in making the e-participation implementation is successful to be implemented as each of the stakeholders

have their interest. For a better systematic understanding of the stakeholders' role and involvement in the e-participation, Table 1 shows the detailed-on e-government stakeholders' entities within the implementation of e- participation [17].

Table 1: E-Government Entities Within the Implementation of E-Participation

Basic entity	Sub-categories	Description	Interest
Government (G)	Politician (GP)	Publicly elected decision and policy maker (e.g. mayor, councilor, parliament member).	Develop and implement own policies. Ensure re-election.
	Administrator (GA)	Middle and higher level salaried career employees executing politicians' policies (city manager, health department head).	Ensure policy implementation effectively and efficiently.
	Service provider (GS)	Lower level salaried career employees carrying out day to day government jobs directly or indirectly interacting with citizens (e.g., case officers in school department, advisors, and information providers in taxation office).	Ensure meaningful and secure work situation. Provide good quality service.
Citizen (C)	Consumer (CCon)	Uses services offered by the government.	Easy access to information and services.
	Activist (CAct)	Citizens involved in efforts to effect specific government policies and decisions through civil action often individually or in groups (e.g., Amnesty International).	Impact policy development and public decision making processes.
Business (B)	Vendor	Companies mostly private who provide systems (software, hardware, infrastructure) and/or consulting services in e-Government projects.	Apart from commercial interest, they attempt to influence government policies in such areas as procurement, standards and even strategy.

Source: Source: [17]

### 3.9. The Example Case of Malaysia Local Government: Smart City RAP 2020



Source: [34]

Figure 2 Promotional Poster of Smart City RAP 2020

In line with the development of the Malaysia Smart City Framework launched in September 2019, the Ministry of Housing and Local Government (KPKT) Malaysia has organized a fully virtual 'Smart City RAP 2020' program for two days on 18 and 19 November 2020 for initiation of the program. This e-participation program also involves joint effort with several local governments / local authorities (PBT) as well as smart city industry stakeholders such as The Malaysian

Industry-Government Group for High Technology (MIGHT), Perbadanan Putrajaya (PPJ), Cyberview Sdn. Bhd., Petaling Jaya City Council (MBPJ), Esri Malaysia, TMOne, Boost, Sena Traffic, local citizens and others.

The program aims to be a new platform for sharing ideas, expertise and experience between different stakeholders, especially the Malaysian local government's agencies that involved in the development of smart cities planning in Malaysia. The objectives of this program are to:

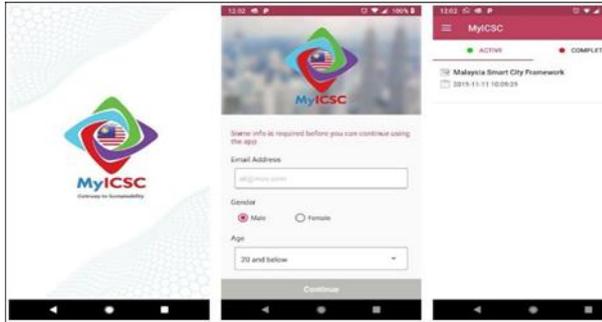
- Promote the implementation of smart cities in Malaysia through the sharing of expertise and experience related to smart cities;
- Increase awareness of the capabilities of smart city solutions and services in urban management and development, and
- Creating opportunities for cooperation and a joint venture between the government and the industry in the implementation of smart cities.

Participants of this program consist of representatives from several Malaysian local governments, state governments, federal departments/agencies, expertise, intellectuals as well as key players in the national smart city industry. It involved 10 partnership sessions from 15 government agencies at various levels as well as industry players. among the topics of the partnership sessions included accelerating smart cities through strategic partnerships; smart governance and smart communities; towards cashless society; improving traffic management through smart mobility and others. The implementation of this program as well as the country's smart city agenda as a whole supports the effort towards achieving Goal 11 Sustainable Development Goals (SDGs) which are 'Sustainable Cities and Communities'

The Smart City RAP 2020 program was held via the Webex platform with the participation of 586 participants while the broadcast is via Facebook live streaming from KPKT, PLANMalaysia, MIGHT, PPJ and Cyberview which received a total of 182,000 views during the two days session. The high amount of participation from different various stakeholders indicates that the smart city agenda is gaining serious attention and becoming the direction for urban planning, development and management today.

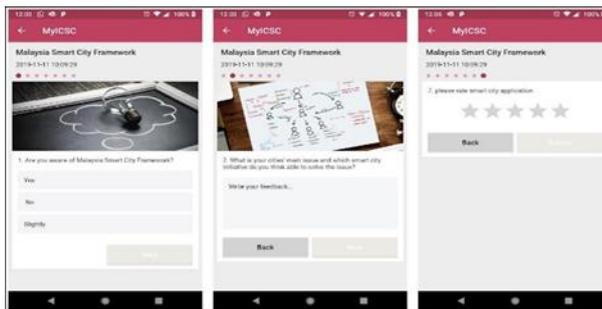
In addition, this program has also opened wider opportunities for cooperation and collaboration between the government and the key industry stakeholders for the implementation of smart city initiatives through a matching process based on questionnaires and program evaluations that currently have been implemented. For the continuity of this program, up until now, the program is still on the run for gathering more and more general

public opinions, ideas, and thoughts that can be useful for the program to be implemented in the long run. The public people can reach out and access this e-participation platform via the official website organizers, Malaysia International Centre for Sustainable Cities (MyICSC) official website or can simply participate via the mobile application of MyICSC – Smart City Survey as the example shown in Figure 3 and Figure 4 respectively.



Source: Google Play Store (n.d.a)

**Figure 3** A screenshot interface of ‘MyICSC’ mobile application



Source: Google Play Store (n.d.a)

**Figure 4** A screenshot interface of ‘MyICSC’ mobile application

Privacy and security factor also determining factors of e-participation. Recently, this factor has been stressed by the local communities and could have become more eye-catching in the present days of the digitalization process. This factor is being stimulated by several examples of online security breaches or hacking on the user private databases and social media platforms, reported examples of government espionage of citizens through their social media accounts, and other privacy-related problems [7]. Furthermore, the present-days have revealed the increased of user-citizens awareness related to the potential utilization of social media for dissemination of false data and information, and to polarize the public discussion. This factor has been taken very significant from the democratic governments, as revealed, for instance, by the calls for proposals under the Governance chapter of the Horizon 2020 program in Europe [14]

Again, when we talk about e-participation of course it is an expression of voluntary ideas, views and opinions of an individual towards an organisation that seeks public opinion for making those organisations could meet an expectation from people that being served especially in public sector agencies. Those people can participate and share a lot of their personal information on these platforms without any apprehension for what the organisation behind these platforms will get to do with their data, which likely could causing in a massive risk to the user personal privacy [35], [36].

According to Jaseena & David (2014), they're always likely at risk of incident related to the privacy infringements from anonymous, unofficial access or wrong access by some of the confidential users for data manipulation in attaining their self-interest[7]. For this problem, the organizations need for imposing strict and undisclosed user information while at the same time maintaining the top priority for organizations in increase security aspects from getting breaches. However, when it comes to increasing security and data user protection level, this could likely result in to decrease in the amount level of e-participation due to the user need to set up and log in the sophisticated and complex procedurals of security authorization and access log in to those restricted e-participation platforms. In the recent case of Malaysia public sector cyber-security protection planning, the government of Malaysia via the joint venture between the MIMOS Berhad, Chief Government Security Office, The Malaysian Administrative Modernization and Management Planning Unit (MAMPU), and CyberSecurity Malaysia has agreed to prepare a plan for the 'Public Sector Cyber Security Framework' (RAKKSSA) established in 2016. This cybersecurity framework is a basic guide and security component that ministries and other public sector agencies need to take into account to protect the information in their cyberspace.

**Table 2** Eight Components and Objectives in RAKKSSA

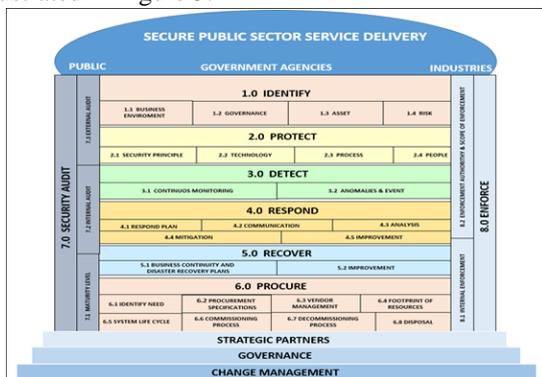
Components	Objectives
Identify	Identify the functional environment of the Department, governance policies and structures as well as the assets that need to be protected, associated risks and risk management.
Protect	Determine the safety principles, human competencies, processes and technologies required to mitigate the risks that have been identified. Human competence is a determining factor in the proper use of technology and adherence to processes.
Detect	Detect the threat of malicious attacks by emphasizing to anomalies in network usage and traffic patterns. This including continuous monitoring and determination of basic information.

Respond	Respond to current malicious attacks and after the incident. This includes channelling information to stakeholders and alerts to the public.
Recover	Perform remedial action against the damage caused by malicious attacks and system failures to ensure data availability.
Procure	Ensure safety requirements and measures are implemented at every stage of the system life cycle. These include procurement specifications, supplier company management, resource footprint, system development life cycle, commissioning process and commissioning stripping up to the disposal system. System procurement can be externally developed or internally developed.
Security Audit	Outline the scope of the audit and the audit authorities.
Enforce	Outline the scope of enforcement and authority enforcement.

Source: [26], [37]

RAKKSSA has created a version ‘RAKKSSA 1.0’ which is a document that describes the cybersecurity framework that must be used by ministries and other public sector agencies in planning the protection required for their respective cyberspace. In addition, the auditing agency can also use this document to ensure that the Information Security Management Plan for the implementation of the ICT platform system is complete and determines the level of security and maturity of the system.

This framework also clarifies the procedures for handling Official Confidential Information and the need to refer to the Office of the Chief Government Security Officer (CGSO) for matters relating to the creation, classification, managing, storage, premise and disposal of information. An important aspect of this framework is to ensure that appropriate safety principles are met based on the required risk assessment and risk treatment. RAKKSSA consists of eight (8) main components as illustrated in Figure 5.



Source: MyGovernment Portal (n.d.)

**Figure 5** Public Sector Cyber Security Framework (RAKKSSA)

Mostly, overall, the local governments in Malaysia always practicing the fundamental guidelines for the public to join participate in the e-participation platform online services. The guidelines provided can be called the ‘e-participation policy guidelines’ which provide information to public users on the procedures for using the e-participation platform to ensure that they can comply with all guidelines and further attention regarding the cybersecurity and rules specific to current cyber threats before, during and after using the e-participation platform. The e-participation policy guidelines consist such as the example (Kajang Municipal Council, n.d):

Users are not allowed to do the following while answering the Survey / Poll and Questionnaire available in the Official Portal of Kajang Municipal Council:

1. Upload, email, or send information that contains the following:
  - i. Unlawful, dangerous, threatening, abusive, harassing, defamatory, obscene, obscene, infringing on personal rights, hateful, racist, religious, ethnic, or otherwise in an unpleasant, untrue, irrelevant to the questionnaire or survey provided by the Official Portal of Kajang Municipal Council.
  - ii. Contains any unsolicited or unauthorized advertising and promotional materials, commercial or otherwise, including links to websites / portals containing such material.
  - iii. Contains software viruses or any other computer code, files or programs designed to damage, destroy or limit the functionality of any computer software, hardware, or telecommunications equipment.
2. Using or creating a false identification (including using a pseudonym, impersonation by another person or entity, or stating something false).
3. Threaten, spy on or embarrass any other user.
4. Restrict or prevent any other user from using this portal;
5. Interfere with, paralyze, overload, affect the work, appearance of the portal, servers or networks connected to the portal.

### 3.10. Level of Democracy and Nature of Participation

Le Blanc (2020) argued the determination of the local citizens to deliberately participate might likely decrease on some occasion of time when they feel that their voluntary contributions are not recognized and ignored by the government. In addition, the local citizens might sense

of disregard when the decision-making process is more 'top-down' based and at the same time, they felt powerless when it comes to decision-making. Furthermore, the level of user readiness for digital participation in Malaysia is still relatively low (below 40%) even-though citizen's interest in joining e-participation is very high (above than 90%) and citizen perception about the importance of digital participation is also highly positive (above than 99%)[15]. These findings indicate that the local citizens are always acknowledged the importance of and benefits of e-participation platform for channeling their voices and opinions to the authorities. However, they sometimes felt that those effortlessly when most of their opinions are not acknowledged by the government.

In the most cases in European Union countries in between the year 2014 until 2019, the nature of public participation via e-participation remains unstable[7]. For example, from the overall population, approximately only around ten per cent of the population are found to have engaged in e-consultation or electronic voting over the past three months in several European Union countries especially at the level of national and sub-national (local government). Despite the most advanced and highest e-government via e- participation in the utilization countries such as Estonia are experienced with failures in e- participation initiatives based on the Osale.ee [11].

In the context of Malaysia, according to The Economist Intelligence Unit (EIU) (2020), the Democracy Index for Malaysia is slightly increase in recent years. For example, below Table 3 shows a score ranking for Malaysia's Democracy Index performance in recent years.

**Table 3** EIU Democracy Index for Malaysia

Country	0	0	0	0	0	0	0	0	0	0	Worldwide Ranking (2020)
Malaysia	1	1	1	1	1	1	1	1	1	2	3
Score	.19	.41	.49	.49	.43	.54	.54	.88	.16	.19	/167

Source: The Economist Intelligence Unit (EIU) (2020)

In the perspective of e-participation performance in Malaysia, based on Figure 6 shows that despite the E-Participation Index for Malaysia is experiencing slightly improvement within recent years, however, this is not a final determination guarantee that the e-participation within the e-government initiative performance in

Malaysia can be proud with. If we take a look at the after the year 2010, the rank is unbalanced. The recent slight improvement in the year 2020 is still far from the expected performance targeted if compared with the closest country such as Singapore and the rest of more developed countries in terms of public participation via digital technologies.



Source: United Nations (2021)

**Figure 6** E-Participation Index for Malaysia

From the nature of participation in local government, the performance level of e- participation in Malaysia can be seen from the statistics via the 'i-Tegur' mobile application.

**Table 4.** Number of registered users until 22nd March 2019

Year	Total
2015	1174
2016	1331
2017	3348
2018	8138
2019	2751
Total	16742

Source: MyGovernment Portal (2019)

Table 4, Table 5 and Table 6 respectively show a user statistic from 2015 until 2019 in using the mobile application of i-Tegur for the local government in Malaysia.

**Table 5** Number of complaints received until 22nd March 2019

Year	Total
2015	498
2016	1261
2017	1557
2018	3231
2019	1721
Total	8268

Source: MyGovernment Portal (2019)

The i-Tegur is a mobile application that is innovative

and developed by the Ministry of Housing and Local Government of Malaysia (KPKT) to provide a simplistic e-complaint facility for the public people to make any complaints to the local governments.

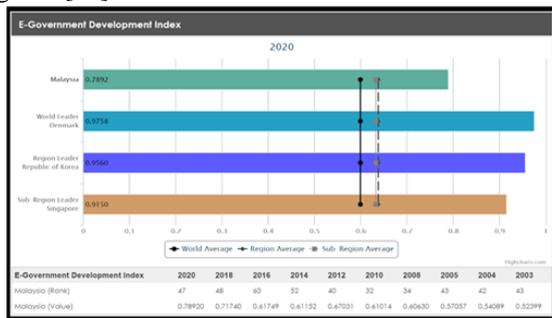
**Table 6.** Status of Complaints until 22nd March 2019

Status of Complaints	Total
New	2743 (33%)
In the Process	1142 (14%)
Settled / Resolved	2130 (26%)
Closed	1805 (22%)
Others	448 (5%)
Total	8268

Source: MyGovernment Portal (2019)

### 3.11. State of Technological Development

E-participation is all about the utilization of digital ICT tools. Hence, the provision of public services in adapting the ICT tools in fostering the e-participation mechanism is important for them in identifying the current state of technological development. ICT tools make the current existing participatory systems easier to implement and provides a different option, economical methods of giving rise to e-participation[7]. In specifically, the pioneering of the new Web 2.0 tools has introduced new opportunities for the new ways of civic participation via e-participation. In particular, this method can lower the expenditure of utilization, contributing the relevant data and information digitally; unlocked a new mechanism for doing so, and its operations can permit for digital communication that no needed in physically limited to one place or remotely especially during the recent COVID-19 pandemic outbreaks today. In the context of Malaysia, currently, the state of technological development for e-participation is at a moderate level as mentioned in the studies by United Nations (2021) via E-Government Development Index. The state of technological public sector performance in Malaysia can be seen in the Figure 7[18].

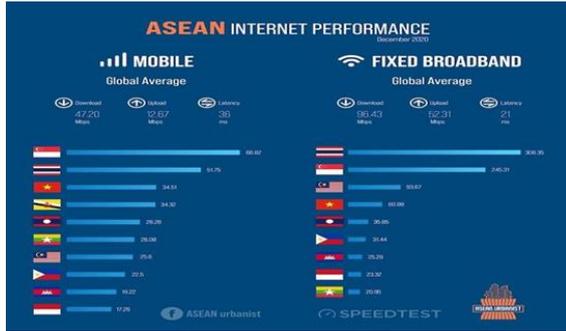


Source: [18]

**Figure 7** E-Government Development Index

Based on the performance index in Figure 7 shows that despite the vigorous efforts in empowering the current state of e-government initiatives, Malaysia is still experiencing unstable performance in the current state of public sector digitalization. For instance, from the year 2010 until 2016, the index showed a slight dropped in terms of rank and value. This result shows that despite the e-government empowerment in Malaysia is embraced since the introduction of the Multimedia Super Corridor (MSC) back in 1996 [34], [38].

In the present-days, the utilization of e-participation in Malaysia is experiencing a mobile shifting from static web-based browsing to the method of mobile simplistic Web 2.0 platforms. For instance, instead of using telephone, television, or static web-based platforms; people now recently include using instrumentation consisting of social networking sites, video sharing sites, personal blogs and others such as the utilization of modern social media platform that is often derived from the Facebook, Twitter, YouTube, LinkedIn, Instagram, WhatsApp and others for a better and seamless two-way communication between the people and the government and vice versa [39]. Integration of the conventional methods of communication, collaboration, and public participation with the utilization of modern Web 2.0 technologies can support empowering local planning processes and, it has been claimed, that this inclusion will eventually empowering the role of citizens and in actively engage in e-participation and improve their digitalization usage [40]. In addition, when related to the utilization of online technologies, smooth, seamless, and wider internet coverage is a must for a better two-way e-participation communication platform session. Even if people have an access to the internet, the main barrier in the use of the internet for e-participation usage is the disruption of slow internet access speeds. the mobile internet broadband in Malaysia in terms of the ASEAN region is still struggling behind another six ASEAN countries which are Singapore, Thailand, Vietnam, Brunei, Laos and Myanmar. While the fixed broadband, Malaysia is still lagged behind Thailand and Singapore. Figure 8 shows the illustration of mobile and fixed broadband internet performance among the ASEAN countries. What made this difficult is the e-participation via Web 2.0 is using mobile broadband. Web 2.0 is all about shifting from fixed to mobile systems. When the public is accessing the local government e- participation process from a remote place, what they need for both parties which are local government and public people is strong internet connection coverage. This matter is important towards encouraging both parties to increase the current state of the technological development process particularly to complies with the new norms in today COVID-19 pandemic crises



Source: Wong (2021)

**Figure 8** Mobile and fixed broadband internet performance among ASEAN countries

According to Le Blanc (2020), the state of technological development for e-participation is important to be implemented and most of the e-government innovation can be effective from the local government level. There are numerous explanations for this. To start with, it is simpler to arrange when all people who participate in civic participation are lived in a similar spot, and has been found simpler to invigorate e-participation innovation development when it is identified with local communities' demands, making local problems gives a prolific ground for support and real sharing for the effective decision-making process (participatory planning) and plan to set (e-petitions). Second, the huge number of local governments and the varieties in the needs they provide for connecting with residents has converted into a wide assortment of tests for an effective and active e-participation platform. Next reason, at the local level, the utilisation of a few innovations tools for e-participation (as an instance, Geographic Information System (GIS) combined with web 2.0 or mobile communication mediums, as well gamification) and for co-creation (as an example, participatory metropolitan planning, systematic participatory guides for managing outbreaks or catastrophe). The multi-function local government for e-participation platforms are becoming standard. In the case of Malaysia for instance:

1) City Council of Seberang Perai (MBSP) Mobile Application

City Council of Seberang Perai (MBSP) in the state of Penang has developed a smart application with one-touch public access participation application which is so called 'MyMBSP' apps to empowering the public e-participation, e-interaction with the local government officials, e-payment, e-tender and e-report on some issues in regards with the problems within the local communities. MyMBSP is another initiative by the City Council of Seberang Perai to increase the number of channels for complaints through a mobile device to enable the public to make fast, convenient and effective

complaints, appreciation, suggestion and enquiries directly to the City Council along with allowing the local community to access some current information that had been released by the respective local government. The Figure 9 shows an interface example of MyMBSP app.



**Figure 9.** A screenshot interface of 'MyMBSP' mobile application

Source: Google Play Store (n.d.b)

2) Kemaman Municipal Council (MPK) Mobile Application.

Kemaman Municipal Council in the state of Terengganu equally had launched the smart digital public participation application which is namely 'ADU MPK' for bridging the joint participation and local affairs discussion between both the local community and the MPK local council. The Kemaman Municipal Council complaints application is a simple platform for the local community to channel any relevant complaints to the Kemaman Municipal Council's online service operating department quickly and effectively. If there is a new user, the user just needs to register as a user with just a few simple steps. Meanwhile, if the user has registered as a user in the Kemaman Municipal Council e-Complaint System before, the user only needs to use the same ID and password to participate in those e-participation channel platforms. Figure 10 shows an interface example of the ADU MPK app.



Source: Google Play Store (n.d.c)

**Figure 10.** A screenshot interface of 'ADU MPK' mobile application

### 3) Communities Online (COOL)

COOL is a mobile application that allows the local people in the state of Selangor to share personal ideas and views on community development programs with the state government. It is somehow is an ideal platform to encourage more active e-participation and involvement of the local people of Selangor in planning and developing community development programs. In addition, the app also comprises e-information about the current public affairs in the state of Selangor which can help the local community in gaining more useful and aware relevant salient information news in the state of Selangor. COOL also facilitates cooperation and collaboration between the local people of Selangor and the State Government through the involvement of Selangor State Assemblymen as well all the involved Selangor's state local government institutions. It is hoped that this program will further invigorate the involvement of local government authorities in the state of Selangor to jointly realize initiatives that have a significantly high impact on the state's local economic development, ensure the people well-being, and enhance the integration and inclusivity of the people voices from anywhere they lived via the support from the COOL e-participation platform. Figure 11 shows an interface example of the COOL app.



Source: Google Play Store (n.d.d)

**Figure 11** A screenshot interface of ‘COOL’ mobile application

## 4. DISCUSSION

This paper discusses and provides the relevant literary understanding of the determining factors that can be important for the e-participation implementation especially in the implementation from the local government level in Malaysia. E-participation is an important digital two-way communication platform for empowering the voices of the public people to the authority's acknowledgement which can be called ‘e-democracy’. The world and society are moving to the phase of the digitalization process and so be it with the

digitalization of the public sector. E-participation can be beneficial; however, it is not an easy task for any of the public agencies to seamlessly implement those systems as they need to acknowledge several determination factors that can contribute to the effectiveness of the e-participation implementation. As mentioned, one of the first e-participation determination factors can be viewed from the factor of the digital divide. The digital divide is a primary obstacle to the lack of comprehensive social inclusion towards the digitalization of society and e-participation failure. The notable of this study can be seen from [25], which they had found that there is a significant positive relationship between the digital divide factor and the citizens' use of e-government for the e-participation in their case study on some of the European countries. While in Malaysia the current COVID-19 pandemic crisis had revealed a clear picture of the digital divide issue in Malaysia as in compliance with the new norms, digital tools and mediums is a must[26].

The next determinant factor of e-participation can be based on the factor of trust in using the e-participation platform. Public people trusting issue with the government always had been in any countries worldwide. The distrust and misbelief issue to the government slightly could be lowering the accountability and effectiveness of the public administration as they are the prominent public organization to serve the public service responsibility. In addition, the taxpayer's money revenue might reduce to an uncertain level due to people are not confident for government in managing their tax resources inappropriate way especially at the local government level. The local communities can see what the local authority is doing with their tax money closer rather than from the level of state or federal government. For this issue, the local government should ensure the e-participation audit and the budgetary process is transparent and approved by the legal external auditors or the public participants. In addition, the responsiveness and effectiveness of the local government agency in managing the e-participation should be enhanced for gaining the public trust in using their online services.

What's more? When managing an online e-participation system, the local government agency should bear in mind that multiple actors or stakeholders can be affecting the succession of e-participation. In common, e-participation stakeholders can be in the form of internal (for example politicians, public managers and civil servants), or external (for example citizens, interest groups, or firms) [31] and their goals or interest for each stakeholder is varied. In avoiding conflicts, the central role of local government should be able to make a comprehensive understanding between all the stakeholders involved and be able to provide systematic their own-self roles for making an effective e-participation platform. For example, ‘Smart City RAP

2020' is an example of good collaboration practices among the different stakeholders in making the e-participation for the provision of local government is manageable and effective.

Besides, one of the prominent priorities for the determination success of e-participation in local government is the privacy or security aspect. Public people would not dare to utilize the systems with a high potential of privacy and security threat issues. It is always a likely risk of e-participation platforms incident which related to the privacy infringements from anonymous, unofficial access or unwanted access by some of the confidential users for data manipulation in attaining their self-interest [7]. Hence, the reinforcement of security and privacy protection can be enhanced in local government when getting technological experts from different stakeholders such as in Malaysia, MIMOS Berhad, Chief Government Security Office, The Malaysian Administrative Modernization and Management Planning Unit (MAMPU), and Cybersecurity Malaysia has agreed to prepare a systematic plan for the creation of 'Public Sector Cyber Security Framework' (RAKKSSA) to be implemented in any of the public sector agencies, especially the local government to effectively provide more secured e-participation platform and gaining trust from the public people to participate.

## 5. CONCLUSION

When implementing the effective e-participation mechanism, the local authority should acknowledge the current level of democracy and nature of participation among the local communities before they can successfully initiate the project. By identifying this determination factor, there is much likely the success of high-rate of e-participation participant. By acknowledging the current e-participation performance in Malaysia as according to the Economist Intelligence Unit (EIU) (2020) for the Democracy Index for Malaysia and the E-Participation Index by the United Nations (2021), the local government can set proper and systematic planning to execute the e-participation accordingly with the current status of the civic participation level among the local community.

Last but not least, the state of technological development for e-participation can be crucial for the determination success of e-participation in the Malaysia local government in the present-days. The e-

participation implementation and innovation process can be the best to practice from the level of local government[7]. Again, there are three rationales behind these practices. The reasons are by creating new potential for the local government to promote and increase the civic participation rate among the local community, lowering the costs and expenditures for information dissemination and interaction with the local community as well can increase the digitalization of society from where ever the local people lived. To make it happened, the local government should increase the current e-participation facilities to make them more convenient, responsive, and effectively.

This study could help support the local government in Malaysia specifically for creating, implementing and managing an effective e-participation platform for a greater and empowering the voices of the people in contributing their own-self ideas, views, opinions, and thoughts for an improvement of the local government supervision and acknowledged the needs of the local communities. By identifying the recent critical determining factors of the e- participation can help the local government in Malaysia build more constructive e-participation frameworks that can be beneficial. The Malaysian local government should acknowledge that the current e-participation platforms should be more simplistic, responsive, dynamic, and be an effective tool for the local communities to empowering their e-democracy mediums for two-way communication between both parties. Joint development with related stakeholders can be beneficial for the local government in achieving any relevant and salient factors or settings for the co-development of effective e-participation tools. The authors here would like to recommend an expansion of the future research in the related field of e- participation from a different context for a better and more comprehensive view of the current e-participation practices and studies.

## ACKNOWLEDGMENTS

The research was supported by Ministry of Higher Education Malaysia (MOHE) through the Fundamental Research Grant Scheme (FRGS) (Ref: FRGS/1/2018/SS02/UUM/02/2)

(S/O Code: 14185).

**REFERENCES**

- [1] H. Hassan Bin Yaakob, "Penyertaan Awam: Kejayaan Dan Kegagalannya Dalam Perancangan Pembangunan."
- [2] T. Kaya And M. Sağsan, "Key Success Factors For E-Participation Maturity Levels: A Proposal For Case Study Of Northern Cyprus Municipalities Educitizens View Project Syrian Immigrants View Project," 2016. [Online]. Available: [Http://Dergipark.Ulakbim.Gov.Tr/Ybs/](http://Dergipark.Ulakbim.Gov.Tr/Ybs/)
- [3] A. Ko And E. Francesconi, "Electronic Government And The Information Systems Perspective," 2016. [Online]. Available: [Http://Www.Springer.Com/Series/7409](http://Www.Springer.Com/Series/7409)
- [4] A. Aiyeola, R. Bin Abdullah, N. Shamsudeen, And Z. Zaiton Ibrahim, "Examine The Level Of Public Participation In Environmental Impact Assessment Process: A Case Of Mrt Project In Malaysia," 2014. [Online]. Available: [Www.Iosrjournals.Org](http://Www.Iosrjournals.Org)
- [5] R. Bergmüller, "Conflict Management In The Process Of Impact Assessment," 2015. [Online]. Available: [Www.Iaia.Org](http://Www.Iaia.Org)
- [6] M. Ghazi, I. & Haliza, And A. Rahman<sup>2</sup>, "Public Involvement In Environmental Issues With Reference To Jajahan Kuala Krai, Kelantan," 2011.
- [7] D. Le Blanc And N. Settecesi, "E-Participation: A Quick Overview Of Recent Qualitative Trends," 2020. [Online]. Available: [Https://Www.Un.Org/Development/Desa/Contents](https://Www.Un.Org/Development/Desa/Contents)
- [8] N. Zulkifli, S. Rahman, S. M. Nurudin, S. A. Hamik, A. S. P. Mohamed, And R. Hashim, "Managing Public Perception Towards Local Government Administration," *International Journal Of Public Policy And Administration Research*, Vol. 3, No. 2, Pp. 14–20, 2016, Doi: 10.18488/Journal.74/2016.3.2/74.2.14.20.
- [9] M. Ghazi, I. & Haliza, And A. Rahman<sup>2</sup>, "Public Involvement In Environmental Issues With Reference To Jajahan Kuala Krai, Kelantan," 2011.
- [10] A. Marzuki, "Challenges In The Public Participation And The Decision Making Process," *Sociologija I Prostor*, Vol. 53, No. 1, Pp. 21–39, Mar. 2015, Doi: 10.5673/Sip.53.1.2.
- [11] M. Toots, "Why E-Participation Systems Fail: The Case Of Estonia's Osale.Ee," *Government Information Quarterly*, Vol. 36, No. 3, Pp. 546–559, Jul. 2019, Doi: 10.1016/J.Giq.2019.02.002.
- [12] R. Medaglia, "Eparticipation Research: Moving Characterization Forward (2006-2011)," *Government Information Quarterly*, Vol. 29, No. 3, Pp. 346–360, Jul. 2012, Doi: 10.1016/J.Giq.2012.02.010.
- [13] A. Ostling, "Ict In Politics: From Peaks Of Inflated Expectations To Voids Of Disillusionment." [Online]. Available: [Www.Epracticejournal.Eu](http://Www.Epracticejournal.Eu)
- [14] "Work Programme 2018-2020 13. Europe In A Changing World-Inclusive, Innovative And Reflective Societies Important Notice On This Work Programme."
- [15] D. Napitupulu, K. Adiyarta, And Albar, "Public Participation Readiness Toward E-Gov 2.0: Lessons From Two Countries," In *Acm International Conference Proceeding Series*, 2019, Vol. Part F148155, Pp. 240–243. Doi: 10.1145/3326365.3326397.
- [16] C. Sanford And J. Rose, "Characterizing Eparticipation," *International Journal Of Information Management*, Vol. 27, No. 6, Pp. 406–421, 2007, Doi: 10.1016/J.Ijinfomgt.2007.08.002.
- [17] Ø. Sæbø, J. Rose, And L. Skiftenes Flak, "The Shape Of Eparticipation: Characterizing An Emerging Research Area," *Government Information Quarterly*, Vol. 25, No. 3, Pp. 400–428, Jul. 2008, Doi: 10.1016/J.Giq.2007.04.007.
- [18] United Nations Publications., *United Nations E-Government Survey 2016*. United Nations, 2017.
- [19] P. K. Paul, P. S. Aithal, And A. Bhuimali, "Internet Society: The Pioneers In Internet And Network Science For Building Digital Society And Information Age-A Case Study." [Online]. Available: [Https://Ssrn.Com/Abstract=3008761](https://Ssrn.Com/Abstract=3008761)
- [20] J. M. Balkin, "Digital Speech And Democratic Culture: A Theory Of Freedom Of Expression For The Information Society," 2004.
- [21] S. Bax, "Digital Education: Beyond The 'Wow' Factor."
- [22] D. Helbing, *Thinking Ahead-Essays On Big Data, Digital Revolution, And Participatory Market Society*. Springer International Publishing, 2015. Doi: 10.1007/978-3-319-15078-9.

- [23] N. Naprathansuk, W. Pharcharuen, And A. Manaf, "An Analysis On Fragile People Of A Local Government Strategic Between Malaysia And Thailand In Time Of Covid-19 Pandemic," 2021.
- [24] L. Porwol, P. O'donoghue, J. Breslin, C. Coughlan, And B. Mulligan, "Social Inclusion And Digital Divide: Eparticipation Dilemmas In Municipalities," In *Acm International Conference Proceeding Series*, 2012, Pp. 389–392. Doi: 10.1145/2463728.2463802.
- [25] R. Pérez-Morote, C. Pontones-Rosa, And M. Núñez-Chicharro, "The Effects Of E-Government Evaluation, Trust And The Digital Divide In The Levels Of E-Government Use In European Countries," *Technological Forecasting And Social Change*, Vol. 154, May 2020, Doi: 10.1016/J.Techfore.2020.119973.
- [26] R. Gong, "Digital Inclusion: Assessing Meaningful Internet Connectivity In Malaysia." [Online]. Available: [Www.Krinstitute.Org](http://www.krinstitute.org).
- [27] M. Torcal And P. Christmann, "Congruence, National Context And Trust In European Institutions," *Journal Of European Public Policy*, Vol. 26, No. 12, Pp. 1779–1798, Dec. 2019, Doi: 10.1080/13501763.2018.1551922.
- [28] F. Bannister And R. Connolly, "Trust And Transformational Government: A Proposed Framework For Research," *Government Information Quarterly*, Vol. 28, No. 2, Pp. 137–147, Apr. 2011, Doi: 10.1016/J.Giq.2010.06.010.
- [29] "The Influence Of Knowledge Sharing On Performance Among Malaysian Public Sector Managers And The Moderating Role Of Individual Personality," 2012.
- [30] H. Jusoh And H. Ahmad, "Keefisienan Perkhidmatan Pihak Berkuasa Tempatan Di Wilayah Bandaraya Kuala Lumpur: Perspektif Komuniti," 2009. [Online]. Available: [Http://Www.Citiesalliance.Org](http://www.citiesalliance.org)
- [31] R. De And S. Sarkar, "Rituals In E-Government Implementation: An Analysis Of Failure," Pp. 226–237, 2010, Doi: 10.1007/978-3-642-14799-9\_20i.
- [32] J. H. Snider, "Why E-Democracy Failed In The United States."
- [33] I. Susha And Å. Grönlund, "Eparticipation Research: Systematizing The Field," *Government Information Quarterly*, Vol. 29, No. 3, Pp. 373–382, Jul. 2012, Doi: 10.1016/J.Giq.2011.11.005.
- [34] R. M. Ramli, "Hybrid Approach Of E-Government On Malaysiane-Government Experience," *International Journal Of Social Science And Humanity*, Pp. 366–370, 2013, Doi: 10.7763/Ijssh.2012.V2.127.
- [35] J. Moreno, M. A. Serrano, And E. Fernández-Medina, "Main Issues In Big Data Security," *Future Internet*, Vol. 8, No. 3, 2016, Doi: 10.3390/Fi8030044.
- [36] M. Bouhriz And H. Chaoui, "Big Data Privacy In Healthcare Moroccan Context," In *Procedia Computer Science*, 2015, Vol. 63, Pp. 575–580. Doi: 10.1016/J.Procs.2015.08.387.
- [37] H. A. Rahman, "Public Involvement On Environmental Issues In Malaysia With Refernce To Alor Star, Kedah." [Online]. Available: [Http://Www.Thegef.Org/Gef/Public\\_Involvement](http://www.thegef.org/gef/public_involvement)
- [38] N. Rusydina Khadzali And Z. M. Zan, "E-Participation: A Systematic Understanding On Public Participation In The Government In 21 St Century," Vol. 13, 2018.
- [39] G. Sharma And P. Kharel, "E-Participation Concept And Web 2.0 In E-Government," 2015. [Online]. Available: [Www.Tijournals.Com](http://www.tijournals.com)
- [40] J. Manhire, "Participation 2.0 And Planning: Web 2.0 Technologies For Planning And Policy-Making In New Zealand Councils," 2016.