The E-Participation in the Administrative Culture in the Republic of Korea as a Fourth Industrial Revolution Adoption

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Abstract

This paper includes a literature review of e-participation and the level of e-participation in the policy process. The e-participation is a new concept; however, it is connected to the various dimensions within the e-government implementations, the public administration, the governance, and citizens' contributions to the policy-making process. Particularly, in the Republic of Korea, The Korean case study is new and systematically organized based on the systematic change of the governance way and the interaction between the citizens and the government. The e-participation is a new form of democratic participation. Therefore, this paper will begin by defining the meaning of the e-participation concept. Focusing on how the change in administrative culture contributed to the fourth industrial revolution; highlighting the administrative culture change in the Republic of Korea over time could be a good case study from the traditional to the modernization. As a new era of e-governance in Korea; the interaction between the government sector the civic sector and the media is the key point of the e-participation formation as a communication tool.

The e-participation theory is about the concept of implementing the sharing of information from the citizens to the government panels, through the usage of the I.C.T. and the technological tools in governmental institutions. The society stakeholders are the governmental sector and the non-governmental sector the changes in the values of the participation from top-down and bottom-up to the actualizing that came from the citizens to select the desired policy agenda setting is a new finding of this research. *Methodology/Approach*: This paper tried to analyze the current literature review about electronic participation in Korea. Addressing the differences in the difference that indicated through the figures and the data. Therefore, there is a comparison between the e-participation level in the Republic of Korea, Kazakhstan, and the EU. The three

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regions' representatives East Asia, Central Asia, and Europe indicated the different levels of how the citizens begin to engage more in electronic petitions, elections, and participation.

Research questions: how does electronic participation affect Korean' citizens in their response toward the government administration? In addition, whether Korean citizens could realize the importance of the I.C.T? And Another question, is how they could become more engaged in the new world of technological usage.

Findings: Therefore, one could say that South Korean citizens became more engaged in democratic decision-making and policy discourse. The change in the administrative culture that came with the electronic government led to more transparency between the citizens and the government. The Korean people have more awareness level of the political atmosphere in the selection process of their political leaders. The accountability level is higher than before in all institutions. According to the world data democracy index; the level of democracy is increasing in the Republic of Korea from 2006 till 2022. The index increased from 7.88 to 8.03 in 2022. That has the meaning of public participation in political life is more engaging in the selection of the president according to the political party's ideas and interests. Comparing Korea's democratic index and that of regional countries like Japan and China, we will find that the Korean index is higher than the Chinese and Kazakhstan index. The regional index in the EU is similar to the Asian represented by the Korean index, however, the United Kingdom, Belgium, and Estonia are similar to the Korean. Meanwhile, in those countries, the index is not changing due to the I.C.T. and electronic government that is enabled in those countries. In Addition, in this study, through the discussion based on the literature review found about electronic participation and e-democracy, one could acknowledge that the level of electronic participation that is enabling, engaging, and empowering refers to top-down and bottom-up approaches after fair access to the information to the citizens. However, this paper suggested adding the fourth level of electronic participation: "Actualizing" which refers to the citizen's power to demand the actualizing the certain kinds of policies to be open to discussion for the policy agenda. That level is the completion of the current literature review direction most of them about the dilemma of how to make sure of the citizen's online participation during the agenda setting.

Keywords: E-participation; Fourth Industrial Revolution adoption; Public Administrative Culture

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Introduction

The Republic of Korea has a developing strategy in the fourth industrial revolution. That strategy will contribute to better governance in South Korean society. Also, the implementation of the new measurement will be a case study for most of the world about how to make the public administrative culture easier faster, and more productive. The turning from the electronic government to AI, big data, and machine learning-based governance strategy. The study of this topic considers new, important, and essential for future implementation and how that way of governance would affect the citizen's satisfaction and the interaction among the government, citizens, and stakeholders. The South Korean case study is new and very organized based on the systematic change of the governance way and the interaction between the citizens. The e-participation is a new form of democratic participation. Therefore, this paper will begin by defining the meaning of the e-participation concept. Then, will focus on the administrative culture change in The Republic of Korea over time which could be a good case study from the traditional to the modernization. The third section will focus on the fourth industrial revolution in the Republic of Korea a concept and tool that enabled the change in the decision-making cycle.

The study of e-participation and e-government in the Republic of Korea cannot pass without highlighting the technological impact of this I.C.T. on society. This research paper calls it the digitalizing of society and how the citizens interact with this new phenomenon. Therefore, the paper would like to examine the key features of the new society after AI and the I.C.T. have a remarkable impact on every aspect of their life. The previous researchers included the change from agriculture to an industrial society. However, recently we need to examine the very first technological evolutionary society represented by South Korean society. To be able to examine the new features of the most remarkable changes in digitalization people how that would help the next researcher in the analysis of the next fourth industrial revolutionary state.

> "The advanced models of e-participation in agenda setting at the local government level. Second, since this study analyzed only the relationship of offline tie strength to e-participation in agenda setting, it does not address how online social networks may affect e-participation behavior. Therefore, future studies are needed to extend the study model by incorporating the role of online tie strength. Lastly, this research focuses on citizens who have already used e-participation methods, but we have little information on why citizens decide to

use or eschew e-participation in the first place. Thus, we suggest future research on citizens' adoption of e-participation." Jooho Lee, & Soonhee Kim, (2014).

From the literature review that reviewed the electronic participation in South Korea. Have found concrete research papers such as Jooho Lee, & Soonhee Kim, Younhee Kim, and Seunghwan Myeong in the field of electronic governments and public administration. The first researchers conducted several types of research more than five important papers, specifically about the e-participations and the e-participants in the Seoul metropolitan city (SMG) since 2009. They examined the trust level between the citizens and the government, particularly; how the electronic government and the electronic participation affected the level of part participation of the more citizens in the policy agenda setting. The difference between the online and offline participation types among the citizens. And the reasons behind that difference in the citizen's engagement level during the policy preparation.

They found that the level of the social nodes and networks among the people could affect the level of participation. In addition, the socioeconomic level, education, and trust level affect the way the citizens' engagement and empowerment in the policy dialogue. Therefore, they recommend that future research work better include the adaptation of the citizen in the use of electronic participation and their level of engagement. The main hypothesis is whether South Korean citizens become more familiar with the usage of electronic participation in political participation in decision-making or not.

Literature Review

In a trial to define what is the meaning of E-participation according to the existing literature review by the United Nations Department of Economic and Social Affairs, it is clear that the different approaches and definitions of the concept differ from each study which makes it not an easy task to have a one or at least two of definitions. This paper tried to have a view of the existing literature until 2020, to have a better idea and insight into *the e-participation process in the decision-making process or a method to influence the government.* In addition, to understand the process of changing the culture of public administration in South Korea. Where the I.C.T and the e-government have remarkable achievements in the field of e-participation. "The definition used by the UN is "*the process of engaging citizens through ICTs in policy, decision-making, and service design and delivery to make it participatory, inclusive, and deliberative*" UN, (2014).
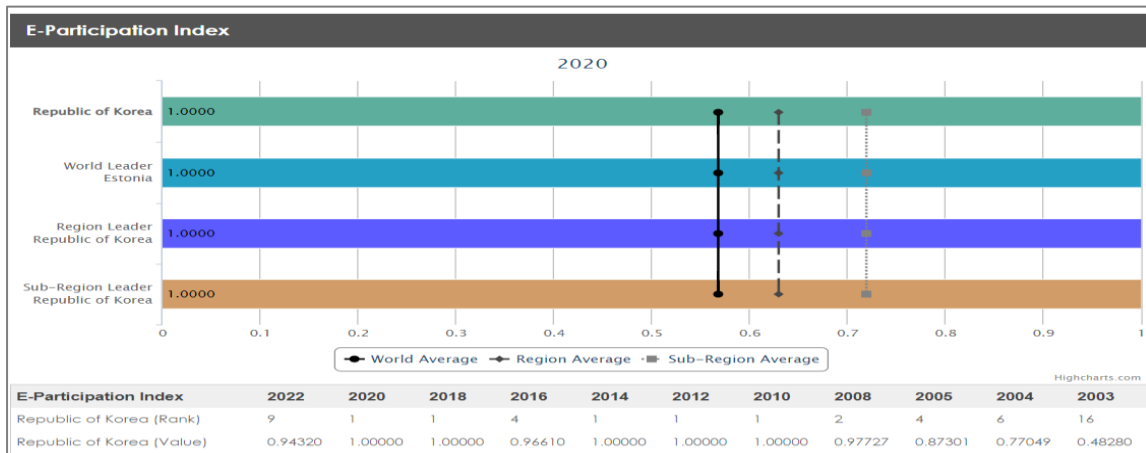
The e-participation is a new phenomenon and one could say it is not a surprising result of using technology in a technology-based society like South Korea. The interaction between the government sector the civic sector and the media is the key point of the e-participation formation as a communication tool. The society stakeholders are the governmental sector and the non-governmental sector; in this sense how could e-participation as a new socioeconomic phenomenon affect the correlation among the stakeholders? To answer this question, one needs to look through the context of the e-participation interaction atmosphere and the diagram above from "Kassen, Maxat, (2020), E-participation actors: understanding roles, connections, partnerships, Knowledge Management Research and Practice" where the case study about the Kazakhstan state how they achieved the e-participation in the interaction among the different stakeholders. However, the South Korean case differs from the Kazakhstan case study in terms of the social knowledge about how to use the I.C.T. and the type of society that perishes the democratic values that lead to depending on e-voting and 24-hour e-government initiatives.

Comparison between Korean and Kazakhstan

South Korea's UN E-government Knowledgebase Index Figure 1

Republic of Korea	
Website	National Portal
Region	Asia
Sub-Region	Eastern Asia
Income *	High income
Income Value	28,380 USD, GNI per capita
Population	50,593,662
E-Government Development Index	0.9560 Rank 2 of 193
E-Participation Index	1.0000 Rank 1 of 193
* Income data refer to World Bank classification	

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E-Participation Index	2022	2020	2018	2016	2014	2012	2010	2008	2005	2004	2003
Republic of Korea (Rank)	9	1	1	4	1	1	1	2	4	6	16
Republic of Korea (Value)	0.94320	1.00000	1.00000	0.96610	1.00000	1.00000	1.00000	0.97727	0.87301	0.77049	0.48280

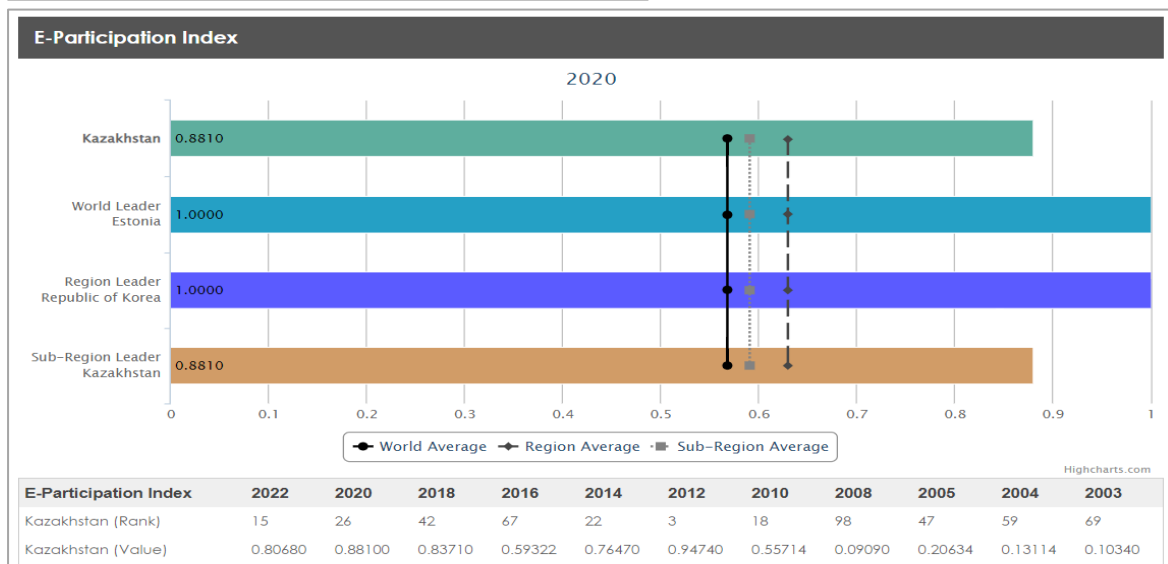| 2020 Republic of Korea	2022	2020	2018	2016	2014	2012	2010	2008	2005	2004	2003
E-Government Development Index rank	3	2	3	3	1	1	1	6	5	5	13
E-Government Development Index value	0.9529	0.956	0.901	0.89149	0.94623	0.92832	0.87854	0.8317	0.87273	0.85745	0.74413
E-Participation Index rank	9	1	1	4	1	1	1	2	4	6	16
E-Participation Index value	0.9432	1	1	0.9661	1	1	1	0.97727	0.87301	0.77049	0.4828
Online Service Index value	0.9826	1	0.9792	0.94203	0.97637	1	1	0.82274	0.97692	0.94594	0.60698
Telecommunication Infrastructure Index value	0.9674	0.9684	0.8496	0.85296	0.93503	0.83559	0.63902	0.68864	0.67127	0.66642	0.67542
Human Capital Index value	0.9087	0.8997	0.8743	0.87947	0.9273	0.94937	0.99293	0.98412	0.97	0.96	0.95

Source: UN E-government Knowledgebase

The United Nations e-government knowledgebase index indicates the e-government index by ranking and the value of each country and how it's a leading country in the located region compared with the best and first country as shown in the mark. The Republic of Korea is the leading country in the Southeast Asian region, also it is the second best in the world on the e-government and e-participation ranking after Estonia. Until the year 2020, the e-participation ranking was number one for the second following year in South Korea. In general, the Republic of Korea has achieved the number-one ranking for almost five years.

Kazakhstan's UN E-government Knowledgebase Index Figure 2

Kazakhstan	
Website	National Portal
Region	Asia
Sub-Region	Central Asia
Income *	Upper middle income
Income Value	7,890 USD, GNI per capita
Population	17,749,648
E-Government Development Index	0.8628 Rank 28 of 193
E-Participation Index	0.8068 Rank 15 of 193

* Income data refer to World Bank classification

E-Participation Index	2022	2020	2018	2016	2014	2012	2010	2008	2005	2004	2003
Kazakhstan (Rank)	15	26	42	67	22	3	18	98	47	59	69
Kazakhstan (Value)	0.80680	0.88100	0.83710	0.59322	0.76470	0.94740	0.55714	0.09090	0.20634	0.13114	0.10340

2020 Kazakhstan	2022	2020	2018	2016	2014	2012	2010	2008	2005	2004	2003
E-Government Development Index rank	28	29	39	33	28	38	46	81	65	69	83
E-Government Development Index value	0.8628	0.8375	0.7597	0.72499	0.72827	0.68438	0.55782	0.4743	0.48125	0.43437	0.38661
E-Participation Index rank	15	26	42	67	22	3	18	98	47	59	69
E-Participation Index value	0.8068	0.881	0.8371	0.59322	0.7647	0.9474	0.55714	0.0909	0.20634	0.13114	0.1034
Online Service Index value	0.9344	0.9235	0.8681	0.76812	0.74803	0.78431	0.52698	0.32107	0.45	0.32046	0.18777
Telecommunication Infrastructure Index value	0.752	0.7024	0.5723	0.56677	0.57488	0.35546	0.17969	0.13062	0.06377	0.06266	0.06206
Human Capital Index value	0.9021	0.8866	0.8388	0.8401	0.8619	0.91337	0.96773	0.97588	0.93	0.92	0.91

Source: UN E-government Knowledgebase

The e-participation in Kazakhstan is the sub-region leader in central Asia. The country ranks fifteen for the e-participation index, and twenty-eight for the e-government development index. The progress in the e-government development index and the e-participation index was from the lowest ranking countries from eight-three in 2003, and sixty-nine in the same year for the e-participation index till the year 2020 when the

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indexes recorded higher rank. That has the meaning and the proof that developing countries could achieve a good ranking toward the electronic government.

"The e-participation movement provides a working technological and organizational mechanism to enhance civic engagement and public-private partnerships both within and outside the traditional ecosystem of digital government. This could potentially be beneficial for post-totalitarian societies, which have been rarely exposed to traditions of government transparency and representative democracy in its recent history." Kassen, Maxat, (2020), p 6.

The e-participation and the regime of the country that determined to implement the electronic government, regardless, of the ruling system whether it's a democratic state or post-communist state. In the above sentence, the author included Kazakhstan's experience in applying the electronic government as a post-totalitarian regime. Unlike, the experience of the South Korean state as a designated country toward the democratic norms that began fifty years earlier in the democratic transformation process.

The E-Participation Theory

The *E-participation theory*, when it comes to the e-participation definition has founded various definitions, however, it has all the same meaning from the application of the I.C.T. and the new technology the people use to facilitate the linkages between them and the government. Beginning with health services and transportation, the most important technological application is e-services in the banking and cybersecurity systems. The voting and election system is a democratic norm that begins in the most developed world states to reach more citizens and enable them to engage and express their opinions through the e-petition system. That made the research contain several theoretical concepts in a trial to explain this new phenomenon. From the literature review, one paper has approached four theories: The E-participation theory, network theory, or, as it is often referred to, actor-network theory, inter-organizational relations, and stakeholder theory.

> "*The E-participation theory:* The key conceptual value of the theory is that it offers certain political and socioeconomic benchmarks on how to evaluate the adoption of e-participation technologies in public institutions.....*The actor-network theory: postulates that all developments in the field are driven by communication networks that are constantly created by various players through a*

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wide range of digital public platforms and related public-private partnerships in civic and business communities, in which participation helps to boost public sector innovations collaboratively, they are all contributors to these interconnected networking processes. Common interests are what interlock them as stakeholders" Kassen, Maxat, (2020), p 4.

Meanwhile, the e-participation theory is about the concept of implementing the sharing of information from the citizens to the government panels, through the usage of the I.C.T. and the technological tools in governmental institutions. In these terms, the actor-network theory has a main role in defining the usage of the technological tools in government institutions, since, that means the interaction among them will be a networked online interaction. Also, the different parties who are dealing in this online or virtual atmosphere, have interests that differ from each other. "As emphasized by Sæbø et al. (2011), a *stakeholder theory* could dramatically improve our understanding of the dynamics of e-participation initiatives in its real-life context, especially about multi-level aspects of networking and relationship in related interactions between all key actors both salient and latent. "The stakeholder theory is a widely used conceptual approach in studying the e-participation phenomenon through the lenses of its key players" Kassen, Maxat, (2020), p 5.

That's why, the researcher tends to depend on the stakeholder theory to explain the common interest of each user inside the interaction cycle. Therefore, the reason behind the establishment of any online platform of electronic government and electronic participation platforms is not a sample network, it is kind of a complicated structure. The analysis process of whom are sharing in these nodes or network depends on their interest and the classified party is important.

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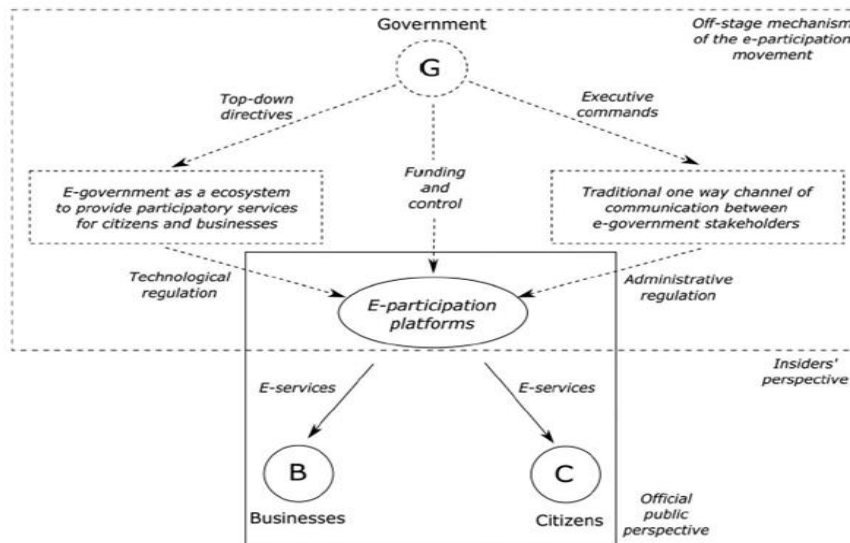
Figure 3: Source Kassen, Maxat, (2020)

Electronic participation is an intersection connection among the different stakeholders: the government and the non-government like the business groups and for certain the citizens. In this sense, there is an essential need to have at least a clear simple mechanism about how this intersection would look the above illustration [figure 3] shows that the government has two ways a top-down directive for the ecosystem and a provider of the services to the citizens. And to be like the executive commands who review the communication between the stakeholders and the citizens. That creates the electronic participation platform through the government as a funder, provider, and observer. In the end, the e-services would be provided by the government through the e-participation platform for the business and citizens. "Saebø, Rose, and Flak (2008) define e-participation as *a social activity, mediated by ICT, involving interaction between citizens, public administration, and politicians.* This definition highlights *the key importance of the triangle citizens – public administration – politicians as actors in e-participation initiatives,* and therefore as key stakeholders to consider when looking at the success and impact of such initiatives." David Le Blanc, (Jan 2020) The relationship between the government and citizens and politicians in the context of how to implement or use e-participation in a different context could differ according to the regime and the socioeconomic of the state that implements the E-participation. First, we need to go through the literature review that is related to the definition. The government will be a multi-role player: as a provider, observer, and funder.

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Research Methodology

"In August 2002 the UK government issued a consultation paper on a policy for electronic democracy. This consultation document usefully argues that e-democracy can be divided into two distinct areas – one addressing participation and the other addressing e-voting.

The OECD report argues that democratic political participation must involve the means to be informed, the mechanisms to take part in the decision-making, and the ability to contribute and influence the policy agenda, specifically, it usefully defines the following terms." Macintosh, A., (2004)

As the research approach/ methodology in this paper, the comparison is based on the literature review of electronic participation in different countries. The report from the UK government issued in 2002, declared that e-voting is a kind of technological problem, meanwhile, e-participation is a kind of connection between the government and the citizens for greater chances to have more open discussion and dialogue. Macintosh, A., (2004). According to Macintosh, A. (2004) in her important paper 'Characterizing e-participation in policy-making' these three words define clearly the type of relationship in the context of the citizen's engagement with the government: Information, Consultation, and Active participation. The first one is information which means the citizens receive data and knowledge about a certain topic from the government. The second one is the consultation which means the next level of engagement or say the first level of the engagement process between the government and citizens. The third one is the important level of interaction which is the active participation among the government and the citizens related to taking the decisions by the government related to the decision-making process.

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5.1 **E-democracy and e-participation**

Figure 4: Source OECD, (2003)

Democracy in this new era of I.C.T. and technology has taken another shape in the sense of participation and citizen engagement. No matter what is the state regime type, the main concern became how to engage the citizens through the policy-making process. And how to listen to the people to be able as a government official to implement the policies that would be welfare for the citizens. According to the OECD report in 2003 that contained more than twelve countries from the first world: the policy process cycle has five stages *Agenda Setting, Analysis, formulation, implementation, and monitoring*.

Figure 5: source Tambouris E., Liotas, N., Kaliviotis, D., Tarabanis K., A (2007)

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Before citizens could influence the decision-makers in the context of a policy or service provision initiative, the choice of what to address by the government, meanwhile, the citizens' decision could be shared through updating the agenda-setting process. E-participation allows the citizen to share their values and opinions during the making process itself, moreover, through the e-petition and the consultations platforms the governmental institutions use to make a better outcome for policy implementation. The I.C.T. and technology application in the policy process-making begins in the first early stage at the stage of agenda-setting when the policy analysts and policymakers have the desire to listen to the certain group of people who will be at the center of the issue that will be discussed to implement. The citizens hearing stage as this paper would like to call it. Since the timing would be the best for the electronic hearing and opinion engagement. "A review of OECD member countries' experience reveals three key factors for consideration when seeking to use ICTs for online citizen engagement, namely: Timing, Tailoring, and Integration." OECD (2003). The best time for the citizens to hear them is during the policy discussion, and also during the monitoring after the issuing of the policy. Tailoring is to try to fit the policy with the scope of the targeted group of people according to their education, income, and their level of understanding of current issues. Meanwhile, the integration part is crucial as the rest of the people who cannot take the online initiatives are essential to hear them and to be able to engage in policy-making.
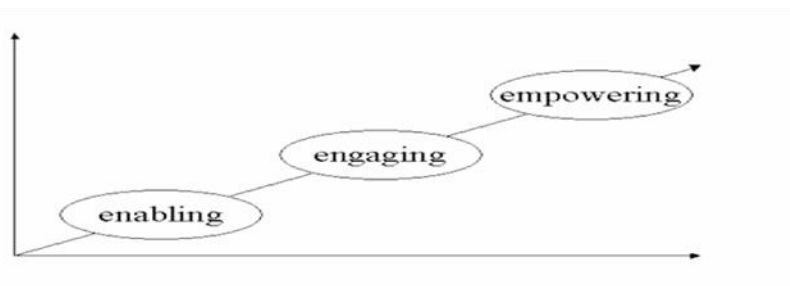
6. **Research Findings**

Figure 6: The three levels of participation that can be used to characterize e-democracy initiatives, source Macintosh, A. (2004). p4.

The electronic consultation is to conduct online surveys and discuss the online forum whether on the government websites or through the official channels that can reach more people who are not able to use the online frequently to ensure of engage and enable more citizens. The e-participation comes as an electronic petition and referenda

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amending legislation. The bottom-up engagement and the top-down engagement are most considered in policy-making.
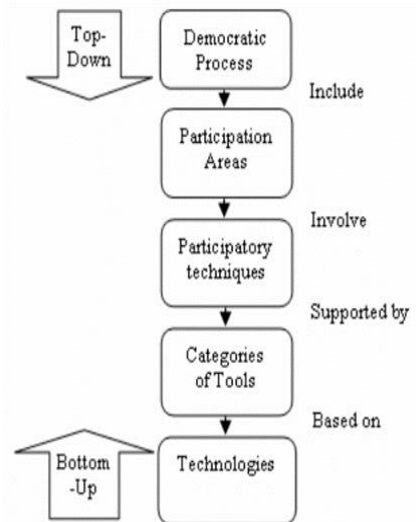

Figure 7: Source Tambouris E., Liotas, N., Kaliviotis, D., Tarabanis K., A, (2007)

"Appropriate ICT tools as in the next phase can be used to enhance and support particular e-Participation techniques upon a certain level of modification from the traditional sense of (offline) participation. In case of a bottom-up approach, ICT tools can act proactively and lead to introduce new participatory techniques and subsequently broaden the participation." Tambouris E., Liotas, N., Kaliviotis, D., Tarabanis K., A, (2007) As the citizen's participation enabling and hearing must come from the bottom-up approach. According to the following diagram from Macintosh, A. (2004) research the level of electronic participation has three levels enabling, engaging, and empowering. As per the previous discussion in the policy-making process, the two levels of the top-down and bottom-up approaches are included in these three levels of electronic participation as engaging and empowering. The OECD framework of electronic participation is about making sure full citizens are engaged and empowered in the policy process discussion.

Figure 8 The Levels of Participation

Levels of Participation
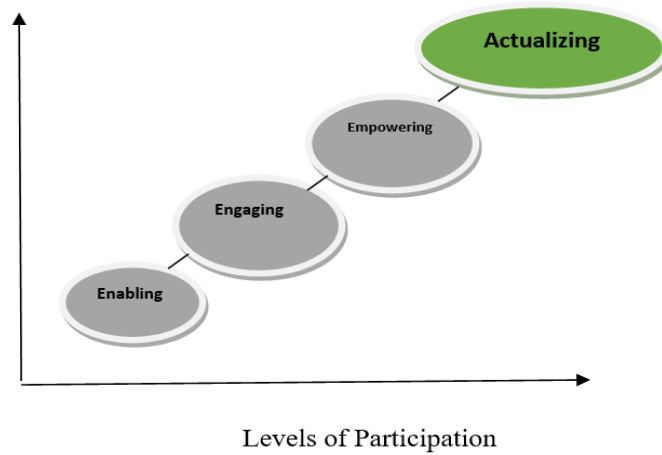
"The Digital Government services with the largest impact on citizens are the Internet civil applications and petitions. These services allow citizens to file petitions and print out certificates from home without having to pay visits to government offices. Korea's Digital Government not only handles these services in a fast manner but also facilitates the participation of citizens through information disclosure and opinion gathering, through which the feedback is applied to enhance the reliability of policies."[1]

However, this paper suggests on this process add another important word that describes the process of engagement and interaction with the government and citizens: *the actualizing*; the main intention behind the whole process of citizen engagement in the policy-making process. Therefore, in Figure 8 this paper's new findings first added the actualizing over the levels of participation made by Macintosh, A. (2004). From the South Korean experience of the citizen's engagement in the policy-making process, there is a need to add the *Actualizing,* from the people *side* as they have the right to make sure of the implementation of the selected policy as they discussed. In South Korea, Korean citizens could collect electronic petitions to start to issue desired policies through the bottom-up approach to push the government to accept their needs. Therefore, in this case, the citizens have the collective awareness to collect each other opinions in a democratic behavior through the government online panel to gather the electronic petition. That is more helpful to the policymakers before they start the policy-setting agenda, the call of collective people will lead them to begin to consider the issues.

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1 https://www.dgovkorea.go.kr/
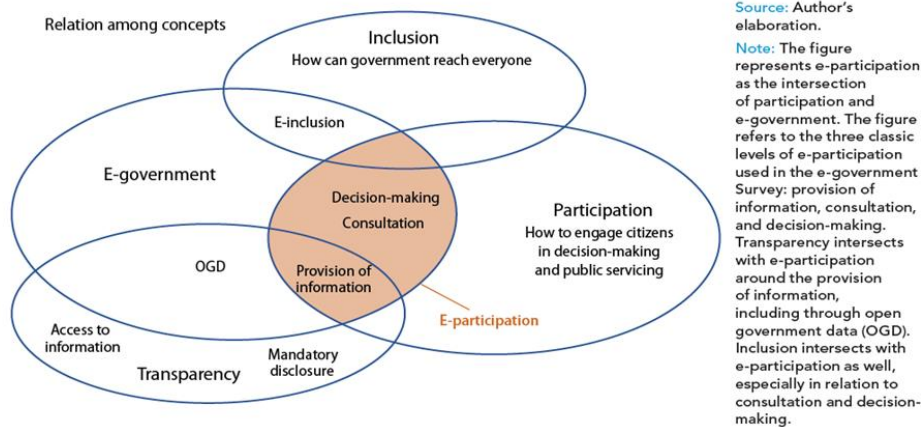
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7 Challenges to e-participation

Figure 9: source David Le Blanc. (JANUARY 2020).

On the other hand, the other types of communication methods that become under e-participation are the parliament's activities, "this includes providing information on the contact information of members of parliaments; on the calendar of parliamentary activities; on the forthcoming opportunities for public consultation and other forms of engagement". Missingham, (2011) in this shape of intersections among the three classic levels or stages of e-participation, one can figure out that these levels used in the e-government studies could indicate where the e-participation is located. The scholars put it or study it within the intersection of the existing literature review of the e-government, offline participation, and the inclusion mechanism about how the government could reach everyone, in addition to the transparency and access to information. The question here is that we need to study these different approaches and levels to come to a definite conclusion about how e-participation could affect the decision-making process.
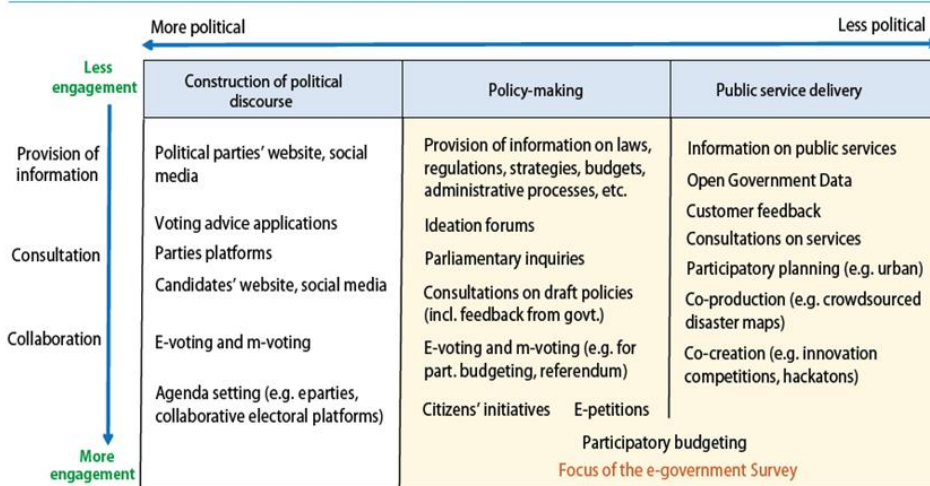
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Figure 10: source David Le Blanc. (JANUARY 2020).

"The political impetus for e-participation came from different sources. In Europe at the beginning of the 21st century, e-participation was seen as a way to re-create trust in public institutions, increase their legitimacy, and re-engage citizens in democratic processes in the face of growing indifference toward formal political processes". Kalampokis et al., (2008)

In this part, we can say that the development of the technologies enabled the governments to change to electronic government. Most of its capacity would affect the legitimacy of the state and its relation with the citizen who should trust them and react to their decision-making directly. That changed the way the interaction occurs to change the democracy to deepen one. Peixoto and Fox, (2016) According to the UN survey in 2018, most of the e-governments faced a fast change toward e-participation from the "supply side" as they described it except for the Oceania region and African content. (UN, 2018)
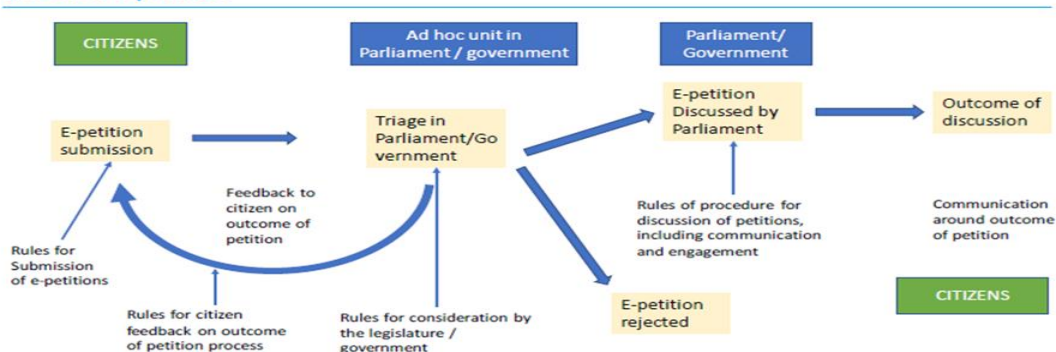
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Figure 11: source David Le Blanc. (JANUARY 2020).

The e-governments started to have different ways as platforms within the e-petition to be able to reach their citizens. Most in the EU and London follow the "Vosidées" platform in Luxembourg (Feilner, 2016), the Westminster e-petition system in the United Kingdom (Asher et al., 2019), or e-petitions in Germany. Jungherr and Jürgens, (2010). Or another kind of mechanism that the EU governments use to engage their citizen to participate in the legislative and the executive process of the decision-making process called "citizens' initiative", including initiatives relies on crowdsourcing, such as hack tons and innovation competitions, for creating new e-services.
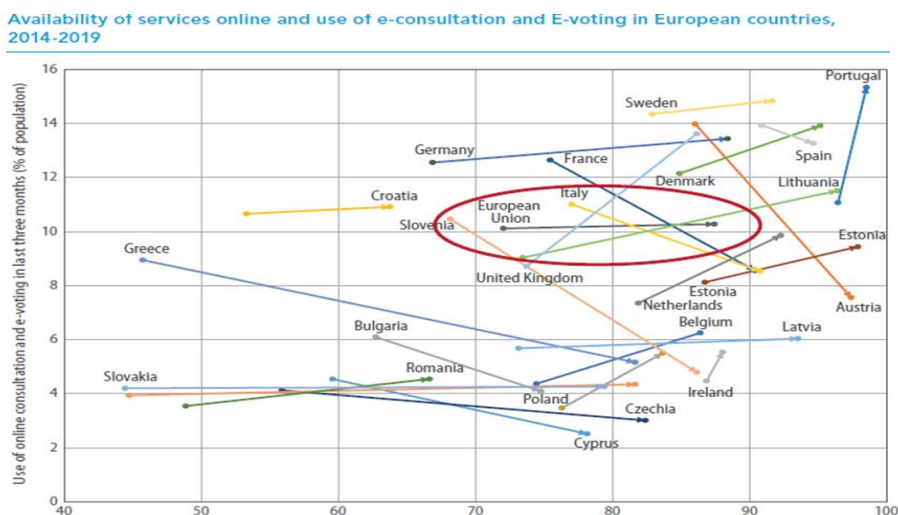
Figure 12: source David Le Blanc. (JANUARY 2020).

The question now is if the governments are better off depending on the e-participation through the e-petition system to engage their citizens in the EU is safer, or if they are cautious about it. By looking through this figure, it could be noticed that a country like Estonia is supposed to be higher than the others since it is well known for its e-government based on the smart cities initiative it has. May the individual behavior make it differ inside the EU within each country's political and socio-economic level?

However, the European Union, which started the e-participation initiative, shifted its view towards a more protective approach by implementing such policies rather than before that depends on open-mindedness for democratic change through e-participation and more citizen engagement. Nevertheless, that entire attitude has changed to a "single digital market and not much on e-democracy and e-participation." Lironi, (2018)

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Figure 13: Source David Le Blanc. (JANUARY 2020).

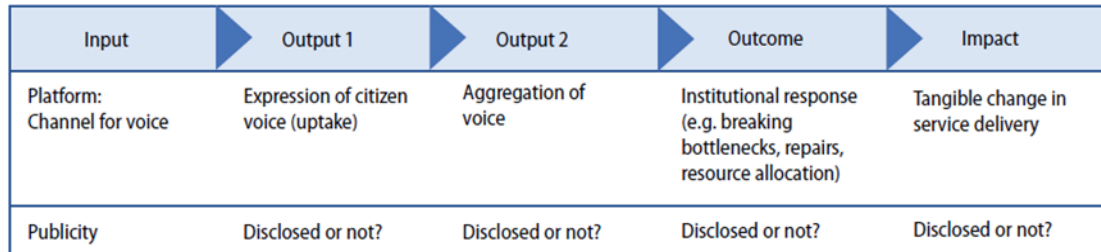The discussion about e-participation is easy, but inaction is as difficult as it seems. The process towards the implementation of the e-participation for better engagement between government-citizens in the policymaking process takes more than it appears from efforts. According to the E-participation: A Quick Overview of Recent Qualitative Trends study made by the United Nations Department of Economic Affairs in 2020Januray, scholars might find some challenges in the study of how to achieve or put in action the e-participation according to different measurements and contexts.

8 Discussion

8.1 The Formation of Public Administration Culture and democratic value

The administrative culture structure formation is the production of a set consisting of human behaviors within the institution. There are two approaches to the culture of public administration's transformation. The functionalist approach and the structuralist' approach. The functionalist is about the individuals' attitudes and beliefs, which are affected by the institutions and the individuals' psychological factors. Unlike, the structuralist that depends on the historical analysis that came from traditional values. "As functionalists have argued, political socialization, through the mass media, personal experiences, family, school, etc., has affected the political activity and belief of individuals." Yun, E. G. (2009). Meanwhile, the structuralist is about the collective values, not the individuals. As an example, the federal system of America's constitutions and political powers separation shows the values of the voters and other parties. That has a meaning the culture of the administration in any nation is very old or needs a long time to come with the course of the history of the nation.

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However, Gidden's structuration theory is about the relation or correlation between the structuralist and the functionalists that depends on the relation between the structure and the agent. According to Gidden's notion, the interaction between the structure and the agent is the main factor behind the administrative culture change within a social system shaped by the behaviors of the individuals and the structure through social innovation and change, not the functionalist's conservative view.
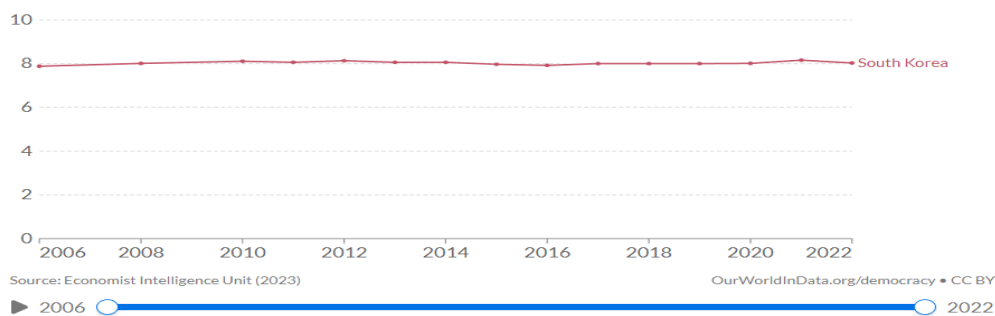
The interaction between the liberal and Confucianism cultural aspects affected the development process of Modern Korean culture formation. In an era of the globalized big world as a small connected town, the sense of authority and the opposition to it is the hierarchy system in Asian culture. "South Korean behavior, which may be characterized by its dominant values, cultures, and ideologies, has constantly been influenced by both traditional Confucian and modern liberal values." Yun, E. G. (2009) South Korean society has changed a lot since the beginning of the 90s as mutually organized interest groups like the industrial and business associations were already excited and followed by more civic associations. After a decade of not being able to have more associations during the park's period. "The Park's and Chun's regimes were unwilling to tolerate the existence of large, independent organizations. However, the growth of civil society and a fair free market may be essential for generating Confucian capitalism in the process of democratization." Yun, E. G., (2009)

Country	Year	democracy_eiu
South Korea	2006	7.88
	2008	8.01
	2010	8.11
	2011	8.06
	2012	8.13
	2013	8.06
	2014	8.06
	2015	7.97
	2016	7.92
	2017	8
	2018	8
	2019	8
	2020	8.01
	2021	8.16
	2022	8.03

Figure 13: Source World Data Democracy [2]

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2 World data democracy index https://ourworldindata.org/grapher/democracy-eiu?country=~KOR

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That's the answer to one of this paper's main questions: whether South Korean citizens realize the importance of the I.C.T? Therefore, one could say that South Korean citizens became more engaged in democratic decision-making and policy discourse. And another question, how they could become more engaged in the new world of technological usage? The change in the administrative culture that came with the electronic government led to more transparency between the citizens and the government. The Korean people have more awareness level of the political atmosphere in the selection process of their political leaders. The accountability level is higher than before in all institutions. According to the world data democracy index; the level of democracy is increasing in the Republic of Korea from 2006 till 2022. The index increased from 7.88 to 8.03 in 2022. That has the meaning of public participation in political life is more engaging in the selection of the president according to the political party's ideas and interests. Comparing South Korea's democratic index and that of regional countries like Japan and China, we will find that the Korean index is higher than the Chinese and Kazakhstan index. The regional index in the EU is similar to the Asian represented by the Korean index, however, the United Kingdom, Belgium, and Estonia are similar to the Korean. Meanwhile, in those countries, the index is not changing due to the I.C.T. and electronic government that is enabled in those countries.

Source: Economist Intelligence Unit (2023)   OurWorldInData.org/democracy • CC BY

Source: Economist Intelligence Unit (2023)   OurWorldInData.org/democracy • CC BY

"Based on the expert assessments and index by the Economist Intelligence Unit (2023). It combines information on the extent to which citizens can choose their political leaders in free and fair elections, enjoy civil liberties, prefer democracy over other political systems, can and do participate in politics, and have a functioning government that acts on their behalf. It ranges from 0 to 10 (most democratic)." [3] World data democracy index

8.2 South Korea's Society Transformation

There are various study papers about electronic participation and electronic leadership, In this study paper, the authors presented a new concept to study. E-leadership is a comparative approach within different cultural backgrounds like the United States and South Korean society's cultural approaches. They examined how the cultural aspects could lead to a difference in the way the leadership has taken within an organization, notably the world changed a lot after using I.C.T. in most if not of our lives. The survey they did about the differences between leadership and e-leadership in both countries and the main eight questions of the survey is critical in the recent study of the leadership perspective. "We explore eight research questions useful in theorizing about e-leadership, develop constructs of e-leadership, and describe the current development of e-leadership." (LiuC., 2020)

9 Korean case study findings

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3 World data democracy index https://ourworldindata.org/grapher/democracy-eiu?country=~KOR

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The result shows that *South Korean culture tends to be more collective and engaged one more than the USA's society.* "South Korea's ranking of 85/100 indicates a low level of tolerance for uncertainty, whereas the U.S. ranking of 46/100 indicates a greater tolerance for uncertainty." Hofstede, (1980) paper states that the adaptive structuration theory presented an exceptional model for e-leadership at both the organizational and systematic orders. This paper would like to use the e-participation definitions and previous studies for the E-participation community survey in South Korea. That will be explained later in this research paper. Indeed, to be able to discuss E-participation in Korea must first go through the E-government implementation process. The I.C.T. advanced societies have changed from the old traditional systematic-based societies. For that reason, would like to investigate and analyze the factors that lead to different societies. After using and applying it in their primary life. Particularly, this part will focus on South Korean society. Technology is the main feature of the living aspect in collaborative communication, and communications focus on building teams' culture.

To sum up, what they come with: must start first with cultural dimensions (i.e., Hofstede). Hofstede's model has received some criticism (Javidan et al., 2006). "Hofstede drew on empirical data from one private sector Multinational Corporation which has argued to be a limited sample and a particular perspective (Soendergaard, 1994). Also, Hofstede used countries as the unit of analysis for cultural differences, which does not adequately account for countries with multiple sub-cultures (Baskerville, 2003). Future research should use additional cultural typologies and theories to complement the findings here." Liu, C., Van Wart, M., Kim, S., Wang, X., McCarthy, A., & Ready, D., (2020). Therefore, the research must begin with the cultural background of the selected society as a research focus. The cultural dimension is an essential factor that affects people's mindset and how they react toward the usage and implementation of technology.

The issue of failing to analyze stakeholders' motivation to engage correctly can lead to missed opportunities to tap citizens' skills for co-producing public services, co-creation and innovation, and contribution to the policy debate. Research has emphasized the critical importance of linking e-participation to formal decision-making processes. For instance, while e-petition systems have developed over the world, their articulation with decision-making processes remains a challenge. Similarly, the impacts of participatory budgeting can vary tremendously, depending on how individual initiatives are designed and how they are set into broader democratic and public administration reforms. "In all

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these definitions, the government has a role to play. That is to say, e-participation usually does not cover civic initiatives or political discussions that take place without the involvement of the government as *initiator, moderator, or receiver.*"Yun, E. G. (2009)
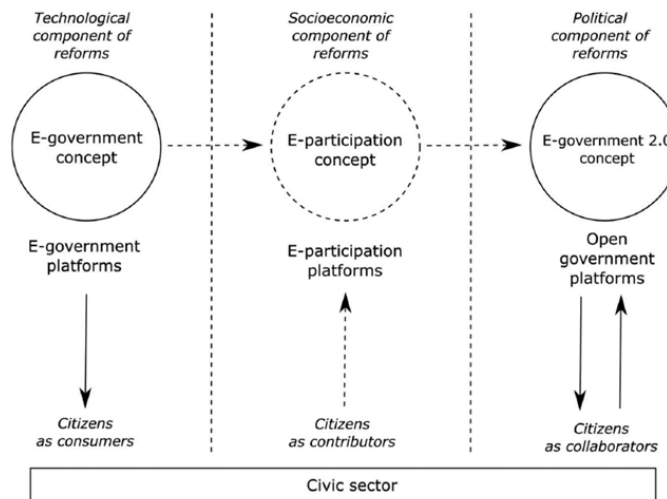
Figure 13: Source Kassen, Maxat, (2020)

As e-participation is a new concept it is connected to the various dimensions within the e-government implementations, the public administration, the governance, and citizens' contributions to the policy-making process. Meanwhile, the change in the electronic government that led to electronic participation did not occur in one stage; there were three stages according to the illustration diagram above in the transformation from the technological components of reforms where the citizens were the consumers of the provided services through the electronic government. Then the next stage, the citizens after they got familiar with the usage of the electronic services, became contributors to the e-services through the e-participation platform. Later, in the third stage, the citizens became collaborators through the political components of reform, they got more engagement with the government through platforms such as the government 2.0 initiatives.

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9.1 Republic of Korea an e-government provider

Year	2008	2012	2017	2020
Export revenue from e-government system sales to foreign governments	KRW 30.4 million	KRW 342.1 million	KRW 236.1 million	KRW 449.7 million
Number of e-government systems exported	Not Applicable	Not Applicable	180	324
Number of e-government systems exported	30	Not Applicable	72	79
Source: Ministry of Interior and Safety, 2012 and 2020.				

Figure 14 Exports of Korean e-government systems to foreign governments: Source Mark Turner, Joseph Kim, and Seung-Ho Kwon, (2022)

The South Korean government export for electronic government systems to regional countries around the world. The sharing experience for better governance is the key to why the Korean people like to share their development case study with the rest of the world. The Asian philosophy behind collective work and cooperation is the main motivation why they would like to have good linkages with others. The revenues from the electronic government sales since 2008 is about 30.4 million KRW reaching 449.7 in 2020. From thirty electronic government sales to seventy-nine in 2020, that has meaning and proof of the remarkable achievement that the Korean people have made in the field of I.C.T. and electronic government initiatives.

9.2 E-participation and Decision-making in South Korea

Initiatives related to e-participation submitted to the UN Public Service Awards in 2018 and 2019

Main area of e-participation addressed	Local	National
Information	Argentina Republic of Korea	Indonesia Spain Thailand
Citizen feedback and complaint systems	Indonesia	India Mexico Uzbekistan
Consultation	Brazil Republic of Korea	Armenia
Coproduction		Indonesia Malaysia Mauritius
E-petition	Republic of Korea	
Ideation forum	Austria	
Multi-function platform	Argentina Spain	Singapore
Participatory budgeting	Australia Colombia Republic of Korea	Portugal

Figure 16: Source David Le Blanc. (JANUARY 2020)

E-participation and decision-making in the Republic of Korea have got much more interest from researchers for several years since the Korean case presents the I.C.T.'s advanced societies and an e-participation influence among citizens and government.

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Soonhee Kim and Jooho Lee had at least more than five important papers, specifically about e-participations and the e-participants in the Seoul metropolitan city (SMG) since 2009. *"We used the 2009 E-participation Survey data collected from a web-based survey. The sample frame was 10,136 citizen members of Oasis who have posted at least one suggestion over the last three years. 1,076 participants responded to the survey (response rate of 10.6 percent)."* They surveyed the e-participants in the SMG who used the OASIS e-participation program. The first paper was published in 2012, under the title of *"E-Participation, Transparency, and Trust in Local Government."* Later in 2014, they published another paper under the title of *"Active Citizen E-Participation in Local Governance: Do Individual Social Capital and E-Participation Management Matter?"* they discussed based on the same survey conducted in 2009, results but from a different approach or could say adding new factors like the individual social capital and E-participants.

In 2017 various publications about the E-participation and decision-making, Transparency, and individual social capital impact, one of them under the title: *"Citizen Participation and Transparency in Local Government: Do Participation Channels and Policy Making Phases Matter?".* Later, in 2019 they made new research following the same survey results, under the title *"Gender and E-Participation in Local Governance: Citizen E-Participation Values and Social Ties."* Jooho Lee, & Soonhee Kim, (2014). These researchers over the past ten years had focused on the same survey result in the Seoul metropolitan city, as the authors mentioned in a trial to figure out and analyze the different factors within the e-participation in South Korea. For instance, through the concrete literature review, they had made for the academic research, in a trial to collect more information and to be able to fill up the gap in the literature as they mentioned. In brief, they mentioned it is better to have a cross-national research analysis for more cases along with the Korean case since each country has a different culture in the usage of the participation concept itself. In Addition, the main findings of their research about the trust level of the online participant in the agenda-setting during the policy preparation depend on the social capital and the control variables of the electronic participation management from the government side. They mentioned that the offline participants and the online participants could be different in their level of participation. According to the research results about the level of trust and the reasons that made the citizens want to get involved in electronic participation.

Besides, the longitude research will be a more effective start for the South Korean case as long as the survey was conducted only in 2009, as This paper suggests so far, society

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has changed a lot in terms of the usage of ICTs and online social networks developed too much.

E-participation in South Korea, In Younhee Kim and Seunghwan Myeong's papers on trust in e-government and network 'usage, the literature gap first sight about Kim& Lee's studies is the question of how online networks affect e-participation affects the level of trust in e-government. For that reason, Myeong's research work is important in the area of social networks and ICT in developing the process of the E-government and AI area in South Korea. Kim & Myeong, (2014). "A recent study on citizens' satisfaction with e-government and its association with trust in the federal government in the United States found that if citizens find e-government transparent, they are more likely to return to the site, recommend it, use it, and express more trust in the government agency". Kim & Myeong, (2012). Seoul Metropolitan Government (SMG) has been working on how to use information technology to expand citizen participation in government affairs beyond traditional methods of citizen engagement since the administration of former Mayor Goh Kun in 1998. The evolution of e-government development and e-participation applications at the local level in the Republic of Korea should be understood in the context of (1) the South Korean Self-Governance Act 1988, which encouraged local governance and decentralization, and (2) national government reform efforts aimed at e-government development to promote transparency, participation, and anti-corruption (Kim 2009). Furthermore, few empirical studies have been conducted to examine how e-government technologies and the management of e-participation shape participants' perceived influence on decision-making and their assessments of government transparency. There are important gaps in the discourse of public administration when it comes to the effectiveness of citizen participation and e-participation programs in various countries. Kim, S., & Lee, J., (2012).

9.3 Digital South Korean citizens

"The value of democracy has become aggressively important for being plugged into political and government spheres, because of the impact of interactions between citizens and the government has exceeded the initial expectations of the e-government system.... E-democracy refers to any collective action that improves democratic values and the quality of public participation using, which intends to narrow a participatory gap among citizens in policymaking or political processes." Kim & Myeong, (2014).

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The Development of Electronic Regimes

	First wave: Underdeveloped	Second wave: Developing	Third wave: Developed
Regime Priority	E-government Website development, business applications	E-democracy Authentic participation	E-governance Partnership
Value	Efficiency, effectiveness	Democracy	Trust
Key player	Governments	Citizens	Governments, nongovernmental partners, community groups
Keyword	Technology infrastructure	Citizens	Networks
Unit	Institution	Individual	Community group
Platform	Web 1.0, content management system (CMS)	Web 2.0	Social media

Figure 17: Source Kim & Myeong, (2014)

Kim & Myeong, (2014) "Puzzling Out the Wisdom of E-Crowds in Trustworthy E-Government Practices" paper concept is to highlight the importance of the trust level between the citizens and the government. The changing to the electronic state as they described it; the state where everything depends on the I.C.T. and the networking connection. Where citizens need to have a good understanding of essential participation in decision-making and online voting. The above schedule has three stages: the first wave of the electronic regime is the condition of the state that is about to enter the second wave of the electronic era, and this first wave is when the state is underdeveloped. In this early stage, the value is effective and efficient, the key player is the government. The second wave is the "developing" when the key player is the citizens and their values the democracy. The third wave is the "developed" when the key player becomes the governments, non-government groups, and community groups their value is trust in governance. "This notion of digitalization has become a key feature of the latter stages of Korea's compressed modernity: "a phrase encapsulating how the country has leapfrogged conventional development stages to move from a traditional agrarian society to a paradigmatic information society." Dal Yong Jin, (2017). However, the Republic of Korea has not invented such digital technologies as the Internet, broadband, and smartphones, an understanding of Korea's digital technologies is crucial because the adaptation, development, and penetration of these digital technologies are highly innovative. They have also been successfully diffused within such a short period.

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Conclusion

This paper tried to analyze the current literature review about electronic participation in South Korea. Addressing the differences in the difference that indicated through the figures and the data. Therefore, there is a comparison between the e-participation level in South Korea, Kazakhstan, and the EU. The three regions' representatives East Asia, Central Asia, and Europe indicated the different levels of how the citizens begin to engage more in electronic petitions, elections, and participation. In addition, this paper tried to search for some questions and answers about the digitalized Korean people who are more likely to be a model for future studies about electronic participation and e-citizens. The hypothesis discussed whether South Korean citizens became more familiar with electronic participation in political participation during decision-making or not. Therefore, one could say that South Korean citizens are the most adapted people to the usage of electronic participation and electronic governance. The figures and data this paper provides from the World Data Survey website comparing the Republic of Korea with other developed countries indicate that Korean citizens are most familiar with the I.C.T application due to the government initiatives as an electronic government to the bottom-up sharing perspective. The keyword behind this change is the citizens' type. Koreans are digital citizens who are living in the digital fourth industrial revolution. Research questions: how electronic participation affect South Korean' citizens in their response toward the government administration? In addition, whether South Korean citizens could realize the importance of the I.C.T? And Another question, is how they could become more engaged in the new world of technological usage. Therefore, one could say that South Korean citizens became more engaged in democratic decision-making and policy discourse. The change in the administrative culture that came with the electronic government led to more transparency between the citizens and the government. The Korean people have more awareness level of the political atmosphere in the selection process of their political leaders. The accountability level is higher than before in all institutions. According to the world data democracy index; the level of democracy is increasing in the Republic of Korea from 2006 till 2022. The index increased from 7.88 to 8.03 in 2022. That has the meaning of public participation in political life is more engaging in the selection of the president according to the political party's ideas and interests. Comparing South Korea's democratic index and that of regional countries like Japan and China, we will find that the Korean index is higher than the Chinese and Kazakhstan index. The regional index in the EU is similar to the Asian represented by the Korean index, however, the United Kingdom, Belgium, and Estonia are similar to the Korean. Meanwhile, in those countries, the index is not

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changing due to the I.C.T. and electronic government that is enabled in those countries. Through the discussion based on the literature review about electronic participation and e-democracy, one could acknowledge that the level of electronic participation that is enabling, engaging, and empowering refers to top-down and bottom-up approaches after fair access to information to the citizens. However, this paper suggested adding the fourth level of electronic participation: "Actualizing" which refers to the citizen's power to demand the actualizing the certain kinds of policies to be open to discussion for the policy agenda. That level is the completion of the current literature review direction most of them about the dilemma of how to make sure of the citizen's online participation during the agenda setting. This paper has noticed that the Korean people could have this phenomenon of beginning to claim the issues and collect the electronic petition to be able to issue the certain policy that is another new level of democracy.

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