

ANALYSIS OF THE CRITICAL SUCCESS FACTORS OF E-GOVERNMENT ADOPTION: A SYSTEMATIC REVIEW OF LITERATURE

TANTY OKTAVIA¹, BAYU REZKY HEMUNANTIO², HENRIKUS ERIC SETIAWAN³, IDHAM KHALID MAHASIN⁴

¹Information Systems Management Department, Binus Graduate Program – Master of Information Systems Management, Bina Nusantara University, Jakarta, Indonesia 11480

^{2,3,4}Information Systems Department, School of Information Systems, Bina Nusantara University, Jakarta, Indonesia 11480

E-mail: ¹toktavia@binus.edu, ²bayu.hemunantio@binus.ac.id, ³henrikus.setiawan@binus.ac.id, ⁴idham.mahasin@binus.ac.id

ABSTRACT

Nowadays, Information and Communication Technology (ICT) changes how people engage with each other because these technologies encompass all the services that involve computing, data management, communications provision, and the internet. It also deals with the transmission and reception of information. ICT improves people's lives by providing newer, better, and faster methods for them to communicate, network, seek support, access information, and learn. ICT is used as a support tool for good governance development, so it allows for higher levels of effectiveness and efficiency in governmental tasks. This research aims to find out what are the critical success factors of E-Government adoption by using the Systematic literature review methods and approaches. CSF's primary objective is to promote the development of electronic government to be more efficient by eliminating the less impactful factor and focusing more on the important one. This research targeting the papers published in 2014 – 2022 based on president's law number 96 year of 2014, Pitelabar the Governmental plans about E-government development. The results are that we found 74 kinds of Critical success factor through all the papers that has been reviewed, and perceived ease of use is the most common CSF by being found in 12 papers.

Keywords: *Implementation, E-Government, Adoption, Stakeholders, Critical Success Factor*

1. INTRODUCTION

In this global era, everything that includes information communication technologies are easier to access developed and obtained. Thanks to the Internet and search engines, which provide access to an infinite amount of information, are always being enhanced to offer users quick and easy ways to obtain what they're looking for. Online service is a platform that provides access to various types of data or information for different uses via the Internet. Examples of online services include online banking, education, news, shopping, social media networks, and e-mail. Information Communication and Technologies (ICT) is a broad term that refers to all services and technology associated with the internet, telecommunications, computers, and data management.

ICTs could be utilized to model scenarios and identify solutions to issues as well as to search,

create, analyze, and show information. ICT enables users to cooperate and exchange information on a large scale, as well as fast access to thoughts and perspective from many various individuals, organizations, and societies. The government is forced to use ICT and transform it into electronic (E-Government). ICT is used as a support tool for good governance development, so it allows for higher levels of effectiveness and efficiency in governmental tasks.

E-governance is important for many benefits of the economic growth that being offer by digitalize many sectors and segments in the society. E-government is meant for any kind of different level of reach in society, so that the implementation of e-government will be advantageous to all associates levels of government. On its implementation, there are 3 kinds of E-government. G2C (government to Citizens) this one is usually a public application, so the citizen can connect within

their government through its platform. G2B (government to business) this one was made by the government for the Business environment so the economy of the country should be running as it is. The last one is G2G (government to Government) it connects the interactions nationally or internationally considering how the benefits of it allow them to implement the government operation remotely and everywhere online.

E-government in Indonesia itself has been around for a quiet of time, and it's one of the priorities sectors of the country development in accordance with the president's law number 96 year of 2014, and there's 5 important sectors which is E-governance, E-health, E-education, E-logistic, E-procurement (PERPRES Pitalebar NO 96, 2014). Example of E-government implementation, In January 2016, the Indonesian government changed the formerly manual tax payment method with e-Billing. It provides consumers with the ease of paying taxes online rather than going to tax offices and standing in line. BPJS were also create a special application for KIS (Kartu Indonesia Sehat) Participant to access the information easier, and that could be downloaded in your phone. From this app, the user can feel the benefits just as same as the services that they do offline.

E-government utility in Indonesia happen because of the changes of how the nation run fundamentally, from the authoritarian and centralize government system to a democratic government that established the authority both central and regional autonomy (Sosiawan, 2008). The actual meaning of the changes is a condition where the government is demanded to be a government that is transparent, clean, truthful, and can be dependent on responsibility. E-government is one of the steps of those changes, where it makes the public services more efficient and flexible, and it also improves the satisfaction of the user, public and the government that runs itself. The services that E-government provides makes the previous activity more transparent and affective for everyone that benefits from it where it saves a lot of times (Mustafa et al, 2021)

While some have been unsuccessful, numerous governments throughout the world are seeking to implement the concept of electronic governance in their respective countries (J.C.D. et.al, 2009). Most E-Government projects in developing countries have failed, with 35% of e-Government projects failing completely, 50% failing partially, and only 15% succeeding (Heeks, 2004). As a result, this study contains critical success factors of E-Government to minimize failure during implementation. Exploring the important variables for E-Government adoption

helps in the effective execution of the e-Government project, minimizing the chance of failure, which can have detrimental impacts (Altameem. et.al, 2006). Critical success criteria are not limited to information technology; certain success determinants can be drawn from social science, economics, and politics.

Factors that affect or determine the effectiveness of the alleged CSF (Critical Success Factors) is the variables that were being analyzed for the future governance development considering there is still a room for E-government improvement (Lee et al, 2011). Organizations can prevent the failure of an E-Government project by defining CSF specifically in the development of E-Government Implementation. Knowing the CSF allows the company to concentrate on several elements that might guarantee the success of the government strategical plan rather than spending time and effort on all factors that only has a little impact. It is believed that the research would result in general criteria for success, particularly for government agencies, to use to support Indonesia's effective adoption of e-government (Al-Kaabi, R., 2010).

A fundamental scientific procedure called systematic literature review enables researchers to see the "lay of the land" in a certain field. This method finds, assesses, and synthesizes research findings to produce an overview of the most recent data that can support evidence-based practice. The reason we use the SLR method is because this method compares the findings that have been obtained by previous research so that the objectives sought are easier to achieve through the elimination system of the factors exposed in the findings. one of the comparisons of how we know how strong the factor findings are is how often the variable is found among the studies that have been reviewed by researchers. For example, from 50 studies found, we can determine what factors are critical.

There are some previous similar studies that discussed on the matter of E-government Adoption by using the Systematic review on the Critical Success Factors. This study analysis conducted a review of those papers done by international academics that examine the CSF of e-Government implementation. We found 3 previous studies that specifically use Systematic review and meta-analysis that discussed about Critical success factor of E-government adoption. According to Napitupulu et al, (2017), 52 definitions of CSFs for e-government were found by using the approach of a method Prisma 2009. Giri Sucahyo et al (2017) finds the results of the papers indicated total of 67 CSFs E-Government implementation that were acquired, of which 12 CSFs were measured from the public's

perspective and 55 CSFs were measured from the government's perspective, and all the 67 CSF on this paper finds are equals which no one is more important nor less important. Asti Amalia et al (2017) this study established a list of 36 generic success criteria and this research article hopes to contribute the CSF research on the adoption of e-government in Indonesia.

This research aims to find what is the critical success factor that influences the adoption of e-government by its citizens according to several research that are associated to one another from different journal publications and conference papers. Studying E-Government adoption can potentially result in the successful delivery of online services by helping governments better understand the requirements of their citizens (Ozkan and Kanat, 2011). (Lee et al, 2011) claim that there is still much room for improvement in the research findings that have investigated citizens' decisions to adopt the e-government services.

What makes our research different from the previous studies is that we wanted to focus on classifying the stakeholders of the SCFs, which one affects who. There are 3 stakeholders here which play a role that is Government, Private Company or business, and Citizens or The User who uses the public services of E-government. The goal for the classification is for the future development of E-government so it becomes more efficient on the developing process, so they can focus on factors based on the stakeholders that they aim for rather than focusing on all factors. Just a reminder that these previous research papers are 5 years old, and there is obviously a new paper that could be cited for newer research. Especially since the covid pandemic where the government encourages its people to use online-based services due to the application of maintaining distance in their activities. Therefore, we must find out about the behavior of the public in the use of E-government in the past few years in order to get more recent results. Every CSF generated may assist organizations in paying attention to and concentrating on the crucial area that can guarantee the efficient implementation of e-Government.

For this literature reviews, we decided to review the paper that published in 2014-2022 based on the priorities sectors of the country development in accordance with the president's law number 96 year of 2014 where it mentioned the development of E-government and its being one of government priorities and main program of Pitalebar (broadband) Development plan where technology are needed for the country to improve their competitiveness against other country from this innovation (PERPRES

Pitalebar NO 96, 2014). If you look at the 10 Best Inventions in Last Decade that Changed the Technology Sector" (*yourtechdiet*) which relates with the technology matters. This study took time as a consideration of the relevancy of the technology that is used to implement E-government for the future of good governance.

2. LITERATURE REVIEW

2.1 E-government Adoption

Adoption of E-Government is a key factor in the success of E-government programs in developing nations. However, with the increased interest in e-government, the question of how successfully the service that governments have implemented has arisen. Some research which examines the e-government for instance, a study on the adoption of e-government used the concept of "citizen trust" as a model, with the other components being "perceived risk," "perceived behavioral control," "perceived utility," and "perceived ease of use." The critical component for each of their chances of success in this investigation is the observed system.

The intention of citizens to use e-government to receive public services is typically referred to as the adoption of e-government (Mirchandani et al. 2008). According to Kurfal et al. (2017), most of the research in this field focuses on how knowledgeable, motivated, and trusting individuals are to adopt e-government. Given the potential for electronic government to reduce costs and improve the service of public services in comparison to the more conventional paper-based services, such study is essential (Karunasena and Deng 2012). Indonesia is developing e-government quickly. The Presidential Order No. 6/2001 served as the official launch of the "e-Indonesia" program. The Ministry of Communication and Information Technology oversees this project, which serves as the foundation of the present E-government plan. Following the initiative's implementation, the Indonesian government offers a variety of E-government services, such as the Indonesian National Single Window for export and import operations, the Indonesia Online Immigration Service for visa and passport applications, and the National Online Taxation for tax number registration and the filing of necessary tax information (Obi and Naoko 2016; Republic of Indonesia 2014).

2.2 E-government In Indonesia

Information and communication technologies (ICT) are used in electronic government to enhance the provision of

governmental services to individuals and enterprises (Mirchandani et al. 2008). It may be viewed from a variety of perspectives. For instance, Nam (2014) defines e-government as the provision of governmental services via the use of digital technology. E-government, according to Hwang and Syamsuddin (2008), is a means of enhancing citizen government communication. According to Pujianto et al. (2011), e-government is a process that helps governments improve their interactions with their constituencies, that includes individuals and corporations which is the main stakeholders that fills the role of E-government implementation and adoption. E-government in Indonesia are needed as a platform for the nation to compete with others country on the adaptability on technological standpoint. Which is why the adoption is needed to penetrate across the country, especially the citizen ICT literacy on how to adapt on the technological changes.

The government of Indonesia, like many other nations, recognizes the value of e-government in improving the public's access to and understanding of governmental services. The "e-Indonesia" was officially launched by the government project in 2001 to facilitate the growth of e-government (Republic Indonesia 2014). From 2014 to 2019, the government has pledged to invest \$6.78 billion on E-government development (Republic of Indonesia 2014). The outcome of this endeavor, e-government in Indonesia has improved substantially (United Nations 2016). As a result, the National Online Taxation System is developed, the Indonesia Online Immigration Service is established, and the Indonesia National Single Window is created. (Obi and Naoko 2016).

2.3 Critical Success factor

According to (Waspodo 2009) states that a few areas where achieving adequate outcomes would guarantee competitive performance for people, departments, or organizations are known as essential success factors. For the business to succeed and the manager's objectives to be accomplished, there are several critical success variables that must be met. Key variables or often referred to as key success factors, key result factors, or pulse points are variables that define the factors that cause organizational success. The concept of grouping CSFs can be started and developed since doing a literature review using descriptive and comparative studies (Yang, et al., 2009), on the closeness of the relationship and the similarity of information between the CSFs variables.

The CSFs are the elements that successfully contribute to an individual, department, or organization's competitive performance. The elements that impact the successful implementation of e-government are the CSFs. It could be a different factor, including stakeholder, cost, time, functional needs, security, privacy, and trust, which formulated CSFs. The success elements from the state e-government and the local e-government are similar. The CSFs are visible from a citizen, corporate, and governmental standpoint. They have an impact on the successful implementation of e-government. According to citizen perspectives, inadequate internet access, insufficient government financing, public engagement, and a lack of ICT infrastructure are the biggest challenges.

2.4 Factor Stakeholders

Groups of people with an interest in a firm and who may have an impact on or be impacted by its decisions are called stakeholders. Internal and external stakeholders are the two categories into which stakeholders are divided. The company/industry itself, shareholders, business owners, and personnel are examples of internal stakeholders. While external stakeholders are those outside of the company, such as customers, suppliers, rivals, investors, the government, a local community, the media, and society at large. Stakeholders are all parties, whether individuals, communities or groups of people who have a relationship and interest in the organization, company and the issues being discussed. According to Freeman (1984). Freeman's definition of a stakeholder is: Any group or person that has the potential to influence or be impacted by the accomplishment of an organization's goal is referred to as a stakeholder in that organization.

Stakeholder priority may be categorized into three categories from a business perspective. Employees, clients, and investors are the first and most crucial group, without whom the company cannot function. It is the same case in E-government where the main stakeholders are the Government who create the laws & policies, the private company who responsible with the infrastructure of the E-government, and lastly the citizen who is the one that uses the services on E-government adoption. In this case, we use the factor stakeholders as a classification to help the future development to find a specific critical success factor based on the stakeholders that they focused on, so the development process will be more efficient.

2.5 Systematic literature Review

A thorough and "systematic" approach called a systematic literature review is a way to examine pertinent material in your subject. The process of doing a systematic literature review includes not only the information found in the literature but also the ways in which it was discovered, including the search techniques you employed and the places and ways in which you looked for it. A systematic Pay close attention to the criteria you used to determine whether the content you found should be included in the review. In order to provide you a thorough overview of your issue area, to highlight the body of earlier research on the subject, and to show the concepts and research procedures that are presently being used, systematic literature reviews are undertaken, just like any other examination of the literature. Using the literature, you may determine your research gap and narrow it.

Systematic literature reviews try to find as much relevant research on a certain research subject as possible, using precise procedures to identify what can be asserted with confidence based on these studies. Methods should be precise and systematic in order to provide diverse and dependable outcomes. In this way, systematic reviews decrease the bias that might emerge in other techniques of examining research findings (EPPI 2015). To be a legitimate research result, a literature review should attempt to be neutral when reviewing the literature. When writing a literature review, keep a variety of voices in mind to demonstrate clear justification behind the inclusion of specific publications and theories.

3. METHODOLOGY.

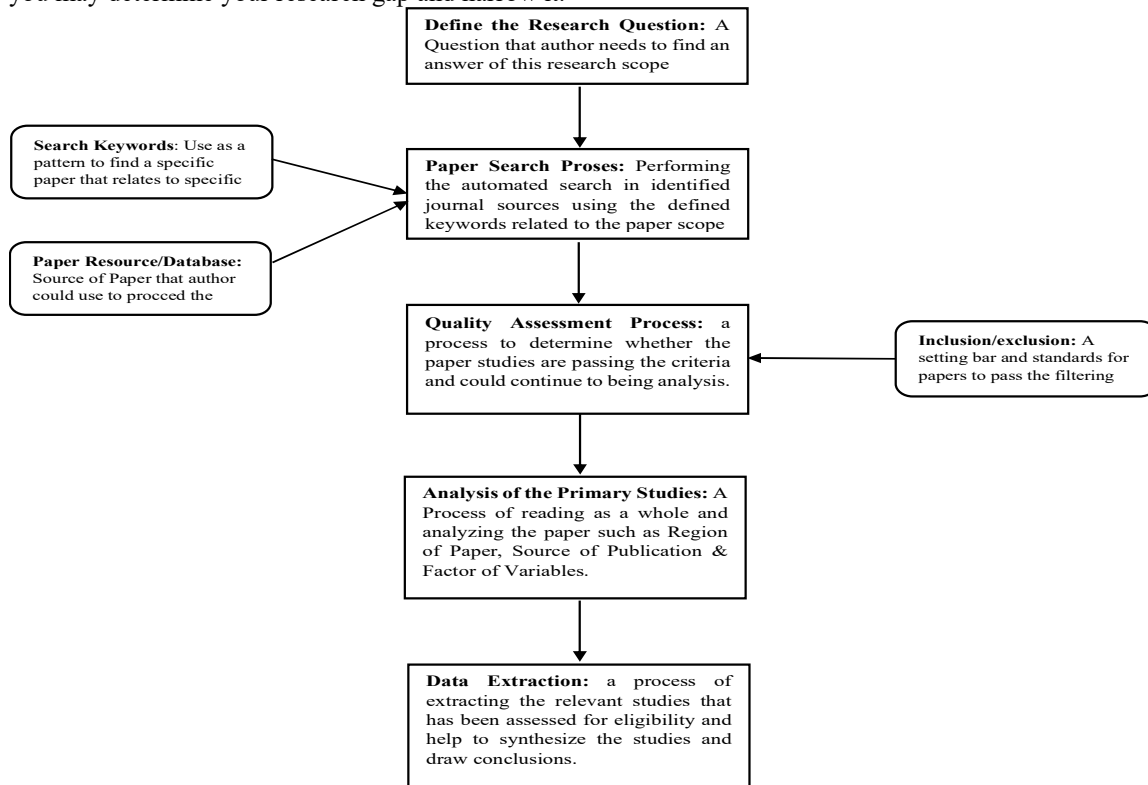


Figure.1. Systematic Literature Review Process

This paper is using a Systematic literature review as its methods on the research about Factors that Supports the Variable were looked for. The research process was classified into a couple parts, which are: Determine the research Question, Search Strategy and Search String (Study Paper Source & Keywords), Study Selection processes, Quality Assessment Criteria, and lastly data extraction and

analysis to answer the research question. The two major goals of this review are to find, categorize, and synthesize the current literature on strategic foresight as well as to pinpoint potential topics and avenues for further study.

3.1 Define the Research Question

Before this research starts, we need to define the research question, so it makes the scope

of this research clearer. The question itself tells the goal of what kind of answer that were needed for this literature reviews. From the introduction itself, the scope of this study is to find the Critical Successor factor of E-government Implementation and Adoption. This question was also needed to find who the stakeholders of those successor factors are based on activity, so it can be classified specifically.

Table 1: Research Question

ID	Research Question
Q1	What are the Critical Successor factors of E-government Implementation
Q2	What are the Critical Successor factors of E-government Adoption
Q3	Who are the stakeholders of the critical successor factors based on the activity realization

3.2 Paper Search Process

The first step is defining the resource or database of literature to find a fit article/journal for the scope of this paper. The selected sources for the systematic literature review are as follows:

- Science Direct (<https://www.sciencedirect.com>)
- Taylor & Francis (<http://taylorandfrancisgroup.com/journals>)
- ACM Digital Library (<https://dl.acm.org>)
- IEEE Xplore Digital Library (<https://ieeexplore.ieee.org/Xplore/home.jsp>)
- Wiley Library (<https://onlinelibrary.wiley.com>)

The data is filtered using the Boolean operator to create a pattern of keywords that is used to discover research papers that are relevant to addressing the research question. This allows the priority of the data search to be determined according to the symbols that are utilized. The symbols and Boolean operators that were used in this paper such as OR, AND which can be used in the Advanced search on these websites to find specifics research that we want. The combinations of the keyword's strings are as follows:

- ("Adoption" OR "Implement" OR "Implementation" OR "Adopt")
- ("E-Government" OR "Electronic Government")
- ("Factor" OR "Critical factor" OR "component")
- ("Success" OR "Successor")

3.3 Quality assessment Process

The scope of this quality assessment process is to determine whether the paper studies pass the criteria and could continue to being analysis. These selection criteria can assist you in determining whether to add a paper for further analysis. The SLR analysis will only use the relevant papers that are kept. We read the candidate studies as a whole and tried to find the answer by looking at the paper's abstract, paper's conclusion, hypothesis that the paper trying to approve, validity of the hypothesis whether it supported or not. Only papers which describe the issues related to Critical Success Factor of E-government implementation that's going to pass the Quality assessment process.

The inclusion criteria of the searching mechanism consist of three processes of filter. The first step is the "Studies Found" procedure. All articles discovered from source publications linked to the selected keyword will be saved as Studies Found. After that, the paper is filtered based on the title and abstract. If the title and abstract complementary and match to identify the study subject, then this article will maintain as "Candidate Studies". The final step in filtering these articles is to properly study all the candidate papers in order to answer the research question. If the study is appropriate to answer the research topic, those publications will be labeled as "Selected Studies".

There are criteria that must be met while looking for literature papers to obtain reliable and high-quality data. The following conditions must be met.:

- Published year of the paper is 2014-2022 Based on The Presidential Law No 96 Year of 2014, the Pitalebar Plans about E-government Development in Indonesia
- The paper that's been reviewed is related to the keywords.
- The articles that were defined as "Selected Studies" Meet the required criteria of quality assessment.
- The Duplicate Paper of the same study is excluded.

3.4 Analysis of the Primary Studies

This process is an important part of the systematic review process, where we read carefully the "Selected Studies" as whole and analyzed the paper such as the regions of paper, source of publication, the authors of the research paper, and the factor of the variable that has been proved on the hypothesis, which is the critical successor factor. The results are being classified into a table in the results chapter where it makes the systematic

reviews clearer for the people to read it. Hopefully this analysis can be implemented, whether it's for theory or practice for future research.

3.5 Data Extraction

There were 432 publications in the study's literature that were analyzed using all available resources and criteria, and 110 of those papers met the requirements for candidate studies based on how closely their titles and abstracts linked to the research topic. Only 29 "chosen papers" can be utilized in this research to determine the paper's scope after further examination.

Table 2: Data Extraction

Source	Found	Candidate	Selected
Science Direct	92	21	10
IEEE	142	41	24
Taylor & Francis	99	21	13
ACM	58	14	4
Wiley	41	13	6
Total	432	110	57

4. RESULT

Literature review has aimed to dig into the factors that are connected to the critical successful factor for the adoption of e-government. The usage of online services amongst the citizen has emerged a new opportunity and challenge for the Government to implement the Information and Communication Technology (ICT). Because of that reason, this study will identify the critical success factors that have important roles in improving E-government system. In this chapters, this paper presents a demographic table of the "Selected Studies" literatures, such as source publications, region of paper, the CSF of the paper that has been read and reviewed as a whole, and the factor result to find which factors is the most influential amongst the others. We also classify the stakeholders that are responsible for those factors, so it defines more clear information for a future governance development.

There are two key theoretical and practical consequences of this work. The outcome can serve

as a reference in theory for those who are trying to do research in E-government implementation and adoption. For the practice these results can be used as a big picture or to identify the critical success factors that have a positive impact on the adoption. The factors that have been found can be used a strategy for E-government to improves the implementation on the future, so it makes the development easier because it specified which factors that specifically has the most effects on the E-government adoption. For example, ICT infrastructure is one of the important factors on E-government adoption because the user rely on its technology to use it more efficient, from that statement itself could be a consideration for the future development of E-government Implementation. Hopefully the results of this study conducted an important answer for a future government development to make it more efficient.

4.1 Region of Research Papers

146 writers from 29 different nations worked together to create the 57 selected articles that became the literature papers. With a total of 7 literature pieces, South Africa and China are the two nations that have contributed the most. In second place is Malaysia with 5 papers, followed by Indonesia, and UK with 4 papers. The regions of the paper are investigated to see the differences of each country standard's about how they use and implement E-governments as a public-services.

Table 3: Region of Research Proses

Region of Research	Total of Paper	Region of Research	Total of Paper
South Africa	7	Sweden	1
China	7	Gaborone	1
Malaysia	5	Ghana	1
Indonesia	4	Kuwait	1
UK	4	Lebanon	1
South Korea	3	India	1
Spain	3	Cyprus	1
Saudi Arabia	2	Romania	1
Portugal	2	Jordan	1

Region of Research	Total of Paper	Region of Research	Total of Paper
Uni Arab Emirates	2	Vietnam	1
Egypt	1	Qatar	1
Kenya	1	USA	1
Nigeria	1	Peru	1
Turkey	1	Pakistan	1

This tables shows you the title of the paper, published year, and type of paper which can be a journal or a conference. A conference paper is a brief and precise written document that is given in research conferences, as opposed to a journal article, which is a lengthy piece of writing that is published in journals and magazines. The results and analysis of a research project are presented in conference papers as well as publications. Additionally, before manuscripts are accepted for publication, both journal articles and conference papers are reviewed (Vrdoljak, Anton, 2022).

4.2 Source of Publication

Table 4: Source of Publication

No	Title	Year	Type
1	Electronic Services for...	2014	J
2	Applying the technology...	2014	J
3	E-Government Strategies...	2014	J
4	E-Voting in Nigeria: The case of...	2014	C
5	An Investigate on...	2014	C
6	Analysis of the Adoption...	2014	C
7	Decisive Factors for...	2014	C
8	E-Government Web Portal...	2014	C
9	Security Challenges of...	2014	C
10	A Study on...	2015	C
11	Citizen-Centric...	2015	C
12	Acceptance of e-gov..	2015	C
13	Exploring Determinants of...	2015	C
14	The imperative of...	2015	J

No	Title	Year	Type
15	Citizenship, trust, and behavioral...	2015	J
16	A Preliminary Study on...	2016	C
17	An Investigation of...	2016	C
18	Factors that Influence...	2016	J
19	Citizen Adoption of E-Government...	2016	J
20	Are U.K. Citizens Satisfied With...	2016	J
21	E-government Websites...	2016	C
22	Quality Evaluation of...	2016	C
23	Adoption of e-Gov Pakistan...	2016	J
24	A demand-based e-gov...	2016	C
25	E-government implementation...	2016	C
26	Factor Affecting Adoption of...	2017	J

No	Title	Year	Type
27	Knowledge Management...	2017	C
28	Exploring the determinant and...	2017	J
29	The impact of security and...	2017	J
30	E-government and public...	2017	J
31	An empirical investigation of...	2018	J
32	Quality assessment of...	2018	J
33	A Conceptual Model for...	2018	C
34	Identifying Factors Affecting...	2018	C
35	Impact of Culture on...	2018	C
36	Obstacle Factor Analysis of...	2018	C
37	Citizens' Readiness to Adopt and...	2018	J
38	Does e-government performance...	2018	J
39	Understanding the Use of...	2019	C
40	The influence of...	2019	J
1	Predictors of...	2019	J
42	E-government and...	2019	C
43	E-Government Adoption...	2019	C
44	User-stakeholders'	2019	J
45	Improving qualities of e-government...	2019	J

No	Title	Year	Type
46	Hue combinations for the web...	2019	C
47	Malaysian urban poor adoption of...	2019	J
48	E-Government implementation...	2020	J
49	Appropriate e-government...	2020	C
50	The Determinant of...	2020	C
51	Drivers and barriers to e-government...	2020	J
52	Adoption of e-Government in...	2020	J
53	The Effect of...	2020	C
54	The effects of information literacy...	2020	J
55	Determinants of E-gov testing...	2020	J
56	The institutional change...	2021	J
57	Determinants of e-government service adoption...	2022	J

4.3 Expression of Synthesis

All the "selected paper" has been read carefully through the abstract, hypothesis, and results to find the answer to the research question on each paper. The answer could be found in the conclusion and the hypothesis that has been proved to have a positive result and accepted as a valid point to answered. One papers could answer more than one variable to be answered, because occasionally these variables could be related with each other's. The expression of the synthesis might be accomplished at this point. Overall, 74 CSF of E-Government adoption as a result of the synthesizing process, a total of 202 factors that has been found across the papers, and we validated the list of discovered Critical Success Factors with an expert using desk research, and then it divided into six areas of domains to classify the factors.

Table 5: Critical Success Factor

Domain	Critical Success Factors	Papers Found
Technological acceptance	Perceived ease of use	[7] [12] [16] [33] [43] [45] [2] [52] [37] [47] [55] [46]
	Behavior Intention	[33]
	Active Citizenship	[15] [28] [54]
	Citizen online experience	[24]
	Motivation	[24]
Technological support	ICT Infrastructure	[9] [11] [30] [26] [1] [17] [3] [19] [40] [4]
	Privacy and Security	[8] [9] [10] [36] [49] [7] [45] [4]
	Website Design	[8] [[10] [22] [33] [26] [38]
	Service quality	[10] [13] [42] [26] [19] [37]
	Information Quality	[8] [10] [45] [20]
	Facilitating condition	[18] [41] [55] [50]
	System Quality	[10] [20]
	System Accessibility	[45] [1]
Technological support	Website Quality	[57]
	Internet availability	[6]
	ICT Skills	[9]
	IT Expertise	[36]
	System capability	[30]
	System Availability	[45]
System Responsiveness	[45]	

Domain	Critical Success Factors	Papers Found
	ICT Support	[45]
	Perceived risk	[26]
	Website Efficiency	[47]
	Internet Quality	[57]
	Performance quality	[38]
	Security Culture	[29]
	ICT Functional support	[25]
	IT Resource	[25]
Perceive of citizens	Citizen Trust	[7] [17] [36] [26] [54] [18] [37] [24]
	Perceived usefulness	[2] [52] [55] [46] [12] [16] [33] [43]
	Citizen participation	[5] [6] [11] [36] [44] [3]
	Citizen Awareness	[13] [16] [26] [45] [23]
	Citizen IT literacy	[51] [17] [42] [30]
	Perceived Benefits	[13] [49] [31]
	Trust in Government	[33] [23] [46] [28]
	Performance expectancy	[18] [41] [34] [40] [50]
	Transparency	[21] [3] [19] [40]
	Effort expectancy	[34] [35] [18] [50]
Perceive of citizens	Trust of Internet	[23] [46] [33]
	Perceived public value	[33] [32]
	Trustworthiness	[15] [28] [54] [55]

Domain	Critical Success Factors	Papers Found
	Perceived of privacy	[49] [46]
	Quality of Public Service	[3] [19]
	Perceived Useability	[26]
	perceived service quality	[37]
	Perceived information literacy	[54]
	Perceived online safety	[24]
	Perceived Security	[46] [9]
Government Support	Accountability	[3] [40]
	Government policy	[36] [39] [48] [29]
	confidentially	[18]
	Organization condition	[36]
	Government Barrier	[31]
	Infrastructure cost	[57]
	Political issues	[48]
	Financial barrier	[48]
	Institutionalization	[48]
	Government communication efficiency	[1]
	Level of preceding	[56]
	Cost effectiveness	[25]
	Working culture	[25]
E Government Readiness	[4]	
Organization structure	Knowledge management	[6] [27]
	leadership	[5] [36]
	Training management	[5]
	Performance evaluation	[5]
	Environmental cognition	[48]
Environmental factor	[4]	

Domain	Critical Success Factors	Papers Found
	Organization readiness	[28]
Culture	Social Influence	[7] [16] [29] [53] [41] [55] [24] [46]
	Social Culture	[48] [56] [41] [4] [13] [49]
	Attitude	[2] [14] [18] [33] [43]
	Adaptability	[5] [12]
	Corruption	[4]

4.4 Stakeholders Classification

We categorize the stakeholders that influence the variables based on the CSFs of e-government. They are consisted of the government, businesses, and individuals. Government and corporate partnerships must be aware of what they need to do to implement e-government successfully and attain its success factors. The issue of what citizens expected from electronic governance is also addressed. As a result, the CSFs are categorized in this table according to how stakeholders related with the variables that influence the adoption of e-government.

Table 6: Factor Stakeholders

Stakeholder	Affecting Factors
Citizens	Perceived ease of use, Citizen Trust, Perceived usefulness, Social Influence, Citizen participation, Social Culture, Citizen Awareness, Attitude, Citizen IT literacy, Trust in Government, Performance expectancy, Perceived Benefits, Effort expectancy,
	Trust of Internet, Behavior Intention, perceived public value, Adaptability, Trustworthiness, Perceived of privacy, Perceived usability, Perceived service quality, Active Citizenship, Perceived information literacy, Perceived online safety, Citizen online experience, Motivation, Perceived Security

Private Partnerships	ICT Infrastructure, Privacy and Security, Website Design, Service quality, Information Quality, Facilitating condition, System Quality, System Accessibility, Quality of Public Service, Website Quality, Internet availability, Training management, Performance evaluation, ICT Skills, IT Expertise, System capability, System Availability, System Responsiveness, ICT Support, Perceived risk, Website Efficiency, Internet Quality, Performance quality, Security Culture, ICT Functional support, IT Resource
Government	Government policy, Transparency, leadership, Accountability, Knowledge management, Organization condition, Government Barrier, Infrastructure cost, confidentially, Political issues, financial barrier, Institutionalization, Environmental cognition, Government communication efficiency, Organization readiness, Level of preceding, Cost effectiveness, Working culture, E Government Readiness, Environmental factor, Corruption

4.5 Discussion

From this SLR approach, we found various factors to determine the critical success factors of E-government adoption from the papers that have been selected that's has passed the literature's standards across different countries. From all the 57 seven papers that has been reviewed, the results tells that Perceived ease of use, being found in 12 papers, is the most common factor that affects the successful of E-government adoption. Followed by the second most common factor is ICT infrastructure by being found in 10 papers in this literature review. The third most common factor is citizen trust and perceived usefulness. Followed by the rest of the critical success factor table such as security, website design, social culture etc.

If you're talking about the most common factor across, you need to understand the definition of it so people can understand more clearly. The definition of perceived ease of use is the degree to which an individual feels that utilizing a specific information technology system will be effortless. Users are more inclined to adopt an application that is seen to be easy to use than another (Davis, 1989). ICT infrastructures were also important because it is the core of how the E-government runs its system. The term "ICT Infrastructures" refers to all organization's information and communications technology (ICT) infrastructure and systems, including networks, software, hardware, firmware,

and business websites. A citizen trust is a state of condition where people have no fear about using something and perceived usefulness is a state where people believe in getting a benefit of doing something.

This literature review also classifies the domain using desk research to validate with an expert, we identified a list of critical success factors and divided them into six areas. The goals of this domain classification are to help the future researcher to find similar studies across the factors. For example, the CSF of Social influence and Social Culture are from the same domain, which is the same subject of the paper studies, the culture. So, if they wanted to research more on similar factors, they could do research about E-government adoption from the culture standpoint.

From the 201 of total factors, a classification of the factor stakeholders was created for the future development of E-government adoption to be more specific on choosing the factors that they focused on. For example, the stakeholders of the factor "Government policy" is the government because it specifically affects the policies on E-government adoption what to do and what can't to do. ICT infrastructure is related to the private partnership because they offer the technology infrastructure such as computer hardware for the government to fulfil the realization of the E-government adoption development. Lastly the citizen as the stakeholders, for example of the affection factors is Citizen trust, which make us think how come they will adopt the E-government if they don't trust and feel safety about it.

The purpose of stakeholder's classification is to identify the stakeholders of the Critical Success Factor table that has been conducted. The goal of the classification is to define the responsible stakeholders that are related to the affecting factor. Expectantly the reader could understand who is filling the role of the CSF that you wanted to focus on. For example, for future research, to analyze the Political issues on E-government, you can consider digging deeper on government standpoint as we reckon it's the stakeholders of the factors.

5. CONCLUSION

This Paper successfully explores the critical success factor that might be crucial for the future of E-government Adoption. By using the literature review methods, from the 5 source of websites, 74 critical success factors were found amongst the paper that has been reviewed through using the method by read it as a whole. These papers were also

classified by the region of paper, type of journal, and the stakeholders of the critical success factor.

From all 74 Critical success factors that has been conducted across the papers, Perceived ease of use is the most common CSF amongst the others factor by being found in 12 papers, followed by ICT infrastructure on 10 papers, the third is both of the citizen trust and perceived of usefulness. Followed by the rest of the critical success factor table such as security, website design, social culture etc.

The aim of this paper is to hopefully help the government with the future developments of E-government adoption. The CSF goal is to make the development more efficient by eliminating less impactful factors and focusing more on the important ones. Many countries have failed on their E-government adoption development because its ineffective without the research of CSF. We hope that this report will provide another recommendation for the government to consider.

6. FUTURE RESEARCH AND LIMITATION

It has been a challenge to organize the factors of each variable, even though there are many and various hypotheses to support it, there are not enough databases and research publications to adequately describe the accepted concept. Therefore, to validate those components, extensive empirical testing using formal statistics is needed to see how strong of a variable on those critical factor that was generated and also to avoiding the risk of bias on collecting data. For the future and the next research, social media might be useful as a platform to improve the E-government adoption, considering how almost every person nowadays uses social media to communicate. We see this as an opportunity to improve the E-government adoption more and more.

REFERENCES:

- [1] D. Dănăiață, C. Margea, L. Hurbean and A. S. Artene, "Electronic Services for Business Environment," *Procedia Soc Behav Sci*, vol. 124, pp. 351-360, 2014.
- [2] J. L. M. Cegarra, J. G. C. Navarro and J. R. Córdoba Pachón, "Applying the Technology Acceptance model to a Spanish City Hall," vol. 34, pp. 437-445, 2014.
- [3] J. M. R. d. I. Fuente, "E-Government Strategies in Spanish Local Governments," *Local Government Studies*, vol. 40, pp. 600-620, 2014.
- [4] L. Brooks and A. B. Mohammed, "E-Voting in Nigeria: The case of the independent national electoral," in *ACM International Conference Proceeding Series*, 2014.
- [5] S. Al-Shuaili, M. Ali, A. A. Jaharadak and M. Al-Shekly, "An Investigate on the Critical Factors that can Affect the Implementation of E-Government in Oman," in *2019 IEEE 15th International Colloquium on Signal Processing & Its Applications (CSPA)*, Penang, Malaysia, 2019.
- [6] D. L. Rhongo, A. d. Almeida and N. David, "Analysis of the Adoption and Use of ICT for e-Government Services: The Case of Mozambique," in *2019 IST-Africa Week Conference (IST-Africa)*, Nairobi, Kenya, 2019.
- [7] M. Freire, N. Fortes and J. Barbosa, "Decisive Factors for the Adoption of Technology in E-Government Platforms," in *2014 9th Iberian Conference on Information Systems and Technologies (CISTI)*, Barcelona, Spain, 2014.
- [8] X. Jiang and S. Ji, "E-government web portal Adoption: A service level and service quality," in *Proceedings of the Annual Hawaii International Conference on System Sciences*, 2014.
- [9] H. Sang, Y. Sae and R. H. Gun, "A Study on The Factors Affecting The Continuous Use of E-Government Services Focused on Privacy and Security Concerns," in *IEEE/ACIS International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD)*, Toyama, Japan.
- [10] N. Alharbi, M. Papadaki and P. Dowland, "Security challenges of E-government adoption based on end users' perspective," in *The 9th International Conference for Internet Technology and Secured Transactions (ICITST-2014)*, London, UK, 2015.
- [11] I. Otieno and E. Omwenga, "Citizen-Centric Critical Success Factors for the Implementation of E-government: A Case Study of Kenya Huduma Centres," in *2015 IST-Africa Conference*, Lilongwe, Malawi, 2015.
- [12] T. Ahmed, N. Alhadi and M. E. Seliaman, "Acceptance of e-Government Services in Sudan: an Empirical Investigation," in *2015 International Conference on Cloud*

- Computing (ICCC)*, Riyadh, Saudi Arabia, 2015.
- [13] S. Alghamdi and N. Beloff, "Exploring determinants of adoption and higher utilisation for e-Government: A study from business sector perspective in Saudi Arabia," in *2015 Federated Conference on Computer Science and Information Systems (FedCSIS)*, Lodz, Poland, 2015.
- [14] O. Al-Hujran, M. M. Al-Debei, A. Chatfield and M. Migdadi, "The imperative of influencing citizen attitude toward e-government adoption and use," *Computers in Human Behavior*, vol. 53, p. 189–203, 2015.
- [15] B. A. Rania Fakhoury, "Citizenship, trust, and behavioural intentions to use public e-services: The case of Lebanon," *International Journal of Information Management*, vol. 35, no. 3, pp. 346-351, 2015.
- [16] J. L. Y. Jin and A. Amin, "A Preliminary Study on the Factors Affecting the Adoption of E-Government Services by Malaysians," Bandar Seri Iskandar, Malaysia.
- [17] J. S. D. Muntasser A. Wahsh, "An investigation of factors affecting the adoption of cloud computing for E-government implementation," in *2015 IEEE Student Conference on Research and Development (SCoReD)*, Kuala Lumpur, Malaysia, 2016.
- [18] G. Rodrigues, J. Sarabdeen and S. Balasubramanian, "Factors that Influence Consumer Adoption of E-government Services in the UAE: A UTAUT Model Perspective," *Journal of Internet Commerce*, vol. 15, no. 1, pp. 18-39, 2016.
- [19] L. Carter, V. Weerakkody, B. Phillips and Y. Dwivedi, "Citizen Adoption of E-Government Services: Exploring Citizen Perceptions of Online Services in the United States and United Kingdom," *Information Systems Management*, vol. 33, no. 2, pp. 124-140, 2016.
- [20] V. Weerakkody, Z. Irani, H. Lee, N. Hindi and I. Osman, "Are U.K. Citizens Satisfied With E-Government Services? Identifying and Testing Antecedents of Satisfaction," *Information Systems Management*, vol. 33, no. 4, pp. 331-343, 2016.
- [21] K. Gabriel, N. James and W. Agnes, "E-government websites user experience from public value perspective: Case study of iTax website in Kenya," in *2016 IST-Africa Week Conference*, Durban, South Africa, 2016.
- [22] Y. Akgül, "Quality evaluation of E-government websites of Turkey," in *2016 11th Iberian Conference on Information Systems and Technologies (CISTI)*, Gran Canaria, Spain, 2016.
- [23] M. Rehman, M. M. Kamal and V. Esichaikul, "Adoption of e-Government Services in Pakistan: A Comparative Study Between Online and Offline Users," *Information Systems Management*, vol. 33, no. 3, pp. 248-267, 2016.
- [24] E. Kabbar and P. Dell, "A demand-based e-government adoption model (DeAM)," in *EGOSE '16: Proceedings of the International Conference on Electronic Governance and Open Society: Challenges in Eurasia*, 2016.
- [25] M. Tendani, M. O. Nixon and T. Hossana, "E-Government Implementation: Lessons from South African Municipalities," in *SAICSIT '16: Proceedings of the Annual Conference of the South African Institute of Computer Scientists and Information Technologists*, 2016.
- [26] K. J. Bwalya, "Factors Affecting Adoption of e-Government in Zambia," *EJISDC*, vol. 38, no. 1, pp. 1-13, 2017.
- [27] I. D. Sensuse, P. Pudy, E. Cahyaningsih and H. Noprisson, "Knowledge management practices in e-Government," in *2017 3rd International Conference on Science in Information Technology (ICSITech)*, Bandung, Indonesia, 2018.
- [28] L. Yikai, Q. Guijie, W. Kangning and C. Jiali, "Exploring the determinant and influence mechanism of e-Government cloud adoption in government agencies in China," *Government Information Quarterly*, vol. 34, no. 3, pp. 481-495, 2017.
- [29] A. Nawaf, P. Maria and P. Downland, "The impact of security and its antecedents in behaviour intention of using e-government services," *Behaviour & Information Technology*, vol. 36, no. 6, pp. 620-636, 2017.
- [30] A. Osei-Kojo, "E-government and public service quality in Ghana," *Journal of Public Affairs*, vol. 17, no. 3, 2017.
- [31] I. G. Mosud Y. Olumoye, "An empirical investigation of factors influencing integrated e-Government implementation in Nigeria: A case of housing and urban development agency," *EJISDC*, vol. 84, no. 1, 2018.
- [32] S. F. Verkijika, "Quality assessment of e-government websites in Sub-Saharan Africa:

- A public values perspective," *EJISDC*, vol. 84, no. 2, 2018.
- [33] N. S. Sara ElKheshin, "A conceptual model for E-government adoption in Egypt," in *2016 11th International Conference on Computer Engineering & Systems (ICCES)*, Cairo, Egypt, 2017.
- [34] H. Gunawan, "Identifying Factors Affecting Smart City Adoption Using The Unified Theory of Acceptance and Use of Technology (UTAUT) Method," in *2018 International Conference on Orange Technologies (ICOT)*, Nusa Dua, Bali, Indonesia, 2018.
- [35] Y. Yavwa and H. Twinomurinzi, "Impact of Culture on E-Government Adoption Using UTAUT: A Case Of Zambia," in *2018 International Conference on eDemocracy & eGovernment (ICEDEG)*, Ambato, Ecuador, 2018.
- [36] J. K. Putri and D. I. Sensuse, "Obstacle Factor Analysis of E-Government Implementation at the Ministry of Tourism," in *2018 International Conference on Advanced Computer Science and Information Systems (ICACSIS)*, Yogyakarta, Indonesia, 2018.
- [37] I. K. Mensah, "Citizens' Readiness to Adopt and Use E-government Services in the City of Harbin, China," *International Journal of Public Administration*, vol. 41, no. 4, pp. 297-307, 2018.
- [38] L. Ma and Y. Zheng, "Does e-government performance actually boost citizen use? Evidence from European countries," *Public Management Review*, vol. 20, no. 10, pp. 1513-1532, 2018.
- [39] N. A. Marzuki and N. I. Arshad, "Understanding the use of e-Government portal in rural areas in Malaysia: A proposal towards a policy," in *International Conference on Computer and Information Sciences (ICCOINS)*, Kuala Lumpur, Malaysia.
- [40] M. Mahmood, V. Weerakkody and W. Chen, "The influence of transformed government on citizen trust: insights from Bahrain," *Information Technology for Development*, vol. 25, no. 2, pp. 275-303, 2019.
- [41] I. K. Mensah, "Predictors of Electronic Government Services Adoption: The African Students' Perspective in China," *International Journal of Public Administration*, vol. 42, no. 12, pp. 997-1009, 2019.
- [42] S. Oni, K. A. Berepubo, A. A. Oni and S. Joshua, "E-Government and the Challenge of Cybercrime in Nigeria," in *Sixth International Conference on eDemocracy & eGovernment (ICEDEG)*, Quito, Ecuador, 2019.
- [43] S. Pérez, J. Cabrera, J. Rodríguez and C. Raymundo, "E-Government Adoption Model Extended with Public Value in Peru," in *International Conference on Industrial Technology and Management (ICITM)*, Cambridge, UK, 2019.
- [44] T. Ngonzi, "User-stakeholders' responsiveness: A necessary input for achieving in e-governance transformation in developing countries," *EJISDC*, vol. 85, no. 6, 2019.
- [45] M. Solange, M. I. Sirajul and G. Åke, "Improving qualities of e-government services in Rwanda: A service provider perspective," *EJISDC*, vol. 85, no. 15, 2019.
- [46] V. Ruse and a. M. W. M. Faraon, "Hue combinations for the web: Towards a repertoire of design guidelines for combining color hues based on cultural background," in *ICCTA '19: Proceedings of the 2019 5th International Conference on Computer and Technology Applications*, 2019.
- [47] L. Shuib, E. Yadegaridehkordi and S. Ainin, "Malaysian urban poor adoption of e-government applications and their satisfaction," *Cogent Social Sciences*, vol. 5, no. 1, pp. 1-18, 2019.
- [48] L. Glyptis, M. Christofi, D. Vrontis, M. d. Giudice, S. Dimitriou and a. P. Michael, "E-Government implementation challenges in small countries: The project manager's perspective," *Technological Forecasting and Social Change*, vol. 152, 2020.
- [49] A. Bayaga, "Appropriate e-government service support and influences on end-users," in *Conference on Information Communications Technology and Society (ICTAS)*, Durban, South Africa, 2020.
- [50] A. Faroqi, T. L. M. Suryanto and E. M. Safitri, "The Determinant of E-Government Services Adoption among Citizen in Indonesia," in *2020 6th Information Technology International Seminar (ITIS)*, Surabaya, Indonesia, 2020.
- [51] S. Mercy, D. Gayatri, C. Perez and B. Manvita, "Drivers and barriers to e-government adoption in Indian cities," *Journal of Urban Management*, vol. 9, no. 4, pp. 408-417, 2020.

- [52] A. Yerlan, B. Ilyas, B. Kanat and T. Margaret, "Adoption of e-Government in the Republic of Kazakhstan," *J. Open Innov. Technol. Mark. Complex*, vol. 6, no. 3, 2020.
- [53] El-Ebiary and Baker, "The Effect of the Organization Factors, Technology and Social Influences on E-Government Adoption in Jordan," in *International Conference on Smart Computing and Electronic Enterprise (ICSCEE)*, Shah Alam, Malaysia, 2020.
- [54] T. Lee, K. L. Byung and L. G. Seulki, "The effects of information literacy on trust in government websites: Evidence from an online experiment," *International Journal of Information Management*, vol. 52, 2020.
- [55] L. Chen and A. K. Aklirikou, "Determinants of E-government Adoption: Testing the Mediating Effects of Perceived Usefulness and Perceived Ease of Use," *International Journal of Public Administration*, vol. 43, no. 10, pp. 850-865, 2020.
- [56] C. Kim and K. A. Kim, "The Institutional Change from E-Government toward Smarter City; Comparative Analysis between Royal Borough of Greenwich, UK, and Seongdong-gu, South Korea," *J. Open Innov. Technol. Mark. Complex.*, vol. 7, no. 1, pp. 1-33, 2021.
- [57] H. N. Trong, T. V. Dang, V. Nguyen and a. T. T. Nguyen, "Determinants of e-government service adoption: an empirical study for business registration in Southeast Vietnam," *Journal of Asian Public Policy*, vol. 15, no. 3, pp. 453-468, 2022.
- [58] Sosiawan, "Tantangan dan Hambatan dalam Implementasi eGovernment di Indonesia.," *Jurnal Penelitian Fisip UPN Yogyakarta.*, vol. 1, no. 5, 2008.
- [59] Altameem, "Critical Success Factors of E-Government: A Proposed Model for E-Government Implementation," in *Conference: Innovations in Information Technology, 2006*, 2006.
- [60] R. Heeks, "Causes of E-Government Success and Failure: Factor Model. Institute for Development Policy and Management, University of Manchester, Manchester.," *Journal of Software Engineering and Applications*, vol. 8, no. 4, 2004.
- [61] S. Y. Giri and N. Darmawan, "Critical success factors of e-government implementation based on meta-ethnography," in *2017 5th International Conference on Cyber and IT Service Management (CITSM)*, Denpasar, 2017.
- [62] A. A. Surya G Soni Fajar, "The critical success factors model for e-Government implementation in Indonesia," in *2017 5th International Conference on Information and Communication Technology (ICoICT)*, Melaka, 2017.
- [63] M. Kurfali, A. Arifoglu and G. Tokdemir, "Adoption of e-government services in Turkey," *Computers in Human Behavior*, pp. 168-178, 2017.
- [64] K. Karunasena and H. Deng, "Critical factors for evaluating the public value of e-government in Sri Lanka," *Government Information Quarterly*, vol. 29, no. 1, 2012.
- [65] J. Hwang and I. Syamsuddin, "Failure of E-Government Implementation: A Case Study of South Sulawesi," in *2008 Third International Conference on Convergence and Hybrid Information Technology*, Busan, 2008.
- [66] R. Al-Kaabi, "Critical success factors of e-government: A proposal model for e-Government implementation in Kingdom of Bahrain," in *Proceeding of the 6th International Conference one-Government (ICEG)*, 2010.
- [67] M. K. Kipingu and D. P. Shayo, "Technology and Immigration System: A New Paradigm for Improving Government Service Delivery in Tanzania," *PanAfrican Journal of Governance and Development*, vol. 2, no. 2, pp. 81-106, 2021.
- [68] T. Nam, "Determining the Type of E-Government Use," *Government Information Quarterly*, vol. 31, no. 2, pp. 211-220, 2014.
- [69] T. Obi and I. Naoko, "A Decade of World E-Government Rankings," *Global E-Governance Series*, vol. 29, p. 98, 2015.
- [70] B. Pudjianto, H. Zo, A. Ciganek and R. J. J, "Determinants of E-Government Assimilation in Indonesia: An Empirical Investigation Using Toe Framework," *Asia Pasific Journal of Information Systems*, vol. 21, no. 1, 2011.
- [71] M. D and K. J. J Johnson, "Perspectives of Citizens Towards E-Government in Thailand and Indonesia: A Multigroup Analysis," *Information Systems Frontiers*, vol. 10, no. 4, pp. 483-497, 2008.
- [72] L. J and A. M. Kim H.J, "The willingness of e-Government service adoption by business users: The role of offline service quality and

- trust in technology.," *Gov. Inform. Q*, vol. 28, no. 2, pp. 222-230, 2011.
- [73] O. S and K. I.E, "e-Government adoption model based on theory of planned behavior: Empirical validation," *Gov. Inform. Q*, vol. 28, no. 4, pp. 503-513, 2011.
- [74] J. Gagne and K. Walters, "Online teaching experience: A qualitative meta-synthesis study," *MERLOT Journal of Online Learning and Teaching*, vol. 5, no. 4, pp. 577-589, 2009.
- [75] Waspodo, "Kerangka Kerja Pengukuran Kinerja Berdasarkan Balanced Scorecard Untuk Departemen Sistem Informasi," *KOMUNIKASI MASSA*, vol. 5, no. 1, 2009.
- [76] J. Yang, M. Ho, G. Q. Shen and D. Derek S, "Exploring critical success factors for stakeholder management in construction projects," *Journal of Civil Engineering and Management*, vol. 15, no. 4, pp. 337-348, 2009.
- [77] R. E. Freeman and M. John F, "Strategic management: A stakeholder approach," *SSRN Electronic Journal*, 1984.