

A Collective Action In Indonesia Local E-Government Implementation Success

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Abstract: Despite the burgeoning number of studies of e-government implementation, very few scholars have focused on the relationship between e-Government implementation success and the roles of actors' collaboration in particular within a local government context. Drawing on Van de Ven (2005) collective action theory, this paper endeavors to conduct an in-depth investigation through a case study of government actors perform collective action in local e-government implementation. Data were gathered through field observation, in-depth interviews, and written material. The data, then, were analyzed using the grounded theory approach through open, axial, and theoretical coding. By claiming that technology is fundamentally a collective action process, this study investigates the logic embedded in the actors' collaboration to build and implement e-Government at the local level. This study found that local government actors successfully perform a collective action in local e-government implementation through a harmony of coordination, cooperation, communication, and sharing responsibilities among local actors. Local e-government systems and infrastructures were built and implemented through intensive coordination and collaboration with the central government, internal local government, and private actors. Responsibilities to develop and maintain the local e-government systems and infrastructures are shared across local institutions.

Index Terms: Actors; collective action, e-government implementation;, local government

1 INTRODUCTION

Government organizations built information technology infrastructure and implement information systems to transform their organizations' performance and improve their services delivery. Scholars [e.g. 1, 2] give term as "e-government" for the government information technology and information systems within government organizations. E-government implementation is understood as "the implementation of information and communications technology to change the structure and process of government organizations aiming at performance improvement" [3]. Such e-government projects involve many actors to ensure the success of an implementation. Benefits of e-government Implementation include; reduce the time and cost of governmental agencies and citizens interaction [4, 5], increase trust in government, [6], more efficient and cost-effective government operations [7, 8], data exchange [9], and increase government accountability within citizens perspective [1]. Those benefits help the government and citizens achieve economic and social growth in more efficient ways. In most instances, governments' institutions are seen as the initiator and driver for the implementation and operation of e-government systems. However, the empirical evidence from the Indonesian case studies rather indicates that there is a collection of actors that needs to be involved and managed to ensure the success of e-government implementation. The notion of a group of actors has been coined 'running in packs' by van de Ven [10], who studied innovation in knowledge-intensive industries. Van de Ven [10] argues that technological innovation is fundamentally a collective action process, which requires collaboration among heterogeneous actors to implement and maintain it because, in most cases, a single actor does not have enough resources to make changes effectively. Many different actors need to collaborate and make active contributions to the implementation of innovation within organizations [11, 12]. The coalition among actors is expected to reduce constraints regarding financial resources, skills, legislation, and culture. Through the use of a collective action perspective, this study is trying to develop a new understanding of local government collaboration in e-government implementation. By understanding the collective action of actors in e-government implementation within the local government context, we shed light on how local government actors shape innovation within

their organization [13]. This study, therefore, may improve our understanding of local government actors in a collective e-government project implementation and provide a new paradigm in strategies to implement e-government initiatives. The focus of the paper will be on how different local government actors collectively achieve their objectives in e-government project implementation within the Indonesian local government.

2 METHODOLOGY

2.1 Research Paradigm

This study applied a case study method to study e-government systems implementation in a local government in Indonesia. A case study method is suitable to understand the phenomenon that requires a close and in-depth investigation, and the context is not clearly defined [14]. E-government implementation is a complex government initiative due to the involvement of many institutions that requires interaction, across social, political, and cultural institutions and the complexity requires an investigation through an interpretive case study research [15-17].

2.2 Data Collection Procedures

Data was collected through multiple means such as document, archival records, in-depth interviews, and field observation [18, 19]. The primary data were gathered through in-depth interviews, which lasted between 45 minutes to one hour. The interview involved 12 participants from a different level of local government departments. All interviews were transcribed and sent back to the participants for final confirmation.

2.3 Data Collection Procedures

The data was collected through multiple means such as document, archival records, physical artifact, and interviews [18, 19]. The primary data were gathered through semi-structured interviews, which lasted between 45 to one hour of 21 participants from the case study comprises of 12 participants. All interview transcripts were sent back to the participants for final confirmation. Table 1 describes the various organizational positions of participants.

Table 1: Participants characteristics and roles

Participants' Roles	Number of participants	Participants code
Management level	4	J1, J2, J3, J4
IT/ IS Team Members	5	J5, J6, J7, J8, J9
Operational IT/IS staff	3	J10, J11, J12

Data collection from different levels of an organization hierarchy will contribute to drawing a more informed conclusion of this study [20] because this study is able to generate information from different perspectives. The field visits were carried out twice and several contacts, such as emails and phone calls, were also made to gain additional data. During field visits, field notes were made, and written materials that support the main data were also collected.

2.4 Data Analysis

Data analysis used grounded theory technique in which the coding process broadly followed the method outlined by Strauss and Corbin [21] in that the data analysis was carried out through iterations; open coding, axial coding and selective coding to a smaller number to identify collective action strategies in the local e-government implementation. The grounded theory approach helps the researcher to examine the categories from data by "refining their meanings and articulating relationships among them" [22]. As a result, the researcher is able to build theoretical categories that informed the findings of the research and establish the theoretical perspectives.

3 RESULTS

3.1 Case Description

The Indonesian government formally adopted e-government when the government enacted Presidential Instruction No.3/2003 concerning the National Policy and Strategy of e-government implementation and use. The main objectives of the Presidential Instruction are to improve public services, establish interactive communication between government departments and businesses, enhance communication among government departments, improve efficiency and transparency, and facilitate communication between central and local governments. As a result, government institutions, including local governments, are able to improve their competitiveness in global development. Citizens also have the opportunity to participate in local development policies. The regulation was followed by the launching of the e-government

implementation Blue Print by the Minister of Information and Communication in 2004 [23]. The BluePrint provides objectives, guidelines, and standardization for local governments in implementing and use of e-government. The aim of e-government implementation within government institutions is re-stated in the BluePrint and are to improve public service delivery, support clean governance, improve transparency, work process, organization performance, and response to change. At the beginning of e-government implementation, there were three two Ministries (Ministry of Internal Affairs and Ministry of Communication and Information) and one national agency, namely The Agency for the Assessment and Application of Technology (BPPT) that intensively involved in e-government implementation. However, since the Indonesian government issued president regulation number 95/2018, which introduces an electronic-based government system or Sistem Pemerintahan Berbasis Elektronik (SPBE), other agencies are also involved. The term SPBE reflects a new paradigm of e-government implementation. A new team to support the SPBE was established to coordinate and to speed-up e-government implementation and use policy at central and local government institutions. At the same time, the team which consists of Ministry of Government Apparatus and Reformation Bureaucracy, Ministry of Information and Communication, Ministry National Development Planning, Ministry of Finance, Ministry of Internal Affairs, The Agency for the Assessment and Application of Technology, and The Agency of Cyber and Country Secret Service, develop infrastructures and improve e-government governance [24]. Jembrana is a regency in Bali province that has successfully implemented e-government systems since 2001. The local government has become a role model for other local governments in Indonesia to their success in e-government implementation to support their organizational reform and provide efficient services. The local government was also awarded twice the best local government for information technology implementation. The local IT team developed almost all e-government systems. The local government's ability to maintain e-government systems implementation has attracted more than 400 other regencies and institutions to visit Jembrana and learned e-government project management [25]. The implementation of e-government systems within Jembrana started in 2001 when the local leader started cooperation with the BPPT. Since then, the local government has implemented and used about 34 e-government systems [26]. Central government bodies transferred numbers of the key e-government systems, and others are developed by the local IT team, as depicted in table 2.

Table 2: Key E-government Systems

E-Government Information Systems	Description
KANTAYA	The system is a virtual office system which connects all applications used for local government office operation. KANTAYA was designed and implemented in 2001 through the collaboration between BPPT and the local IT staff. The system supports local employees in performing their daily tasks and communication between local departments.
SIMDA	SIMDA was designed and implemented in 2002 in collaboration with the National Office for Research and Technology Implementation (BPPT). The system is used as the regency office information system which integrates other systems such as

	e-library system and SMS center.
E-JKJ	E-JKJ is a system that was designed for the regency Health Insurance system. Previously, the E-JKJ system was used by local hospitals and health centers to support the hospital and health center to claims payment electronically to the local government office.
J-NET	It is a Jimbarwana Network. The network infrastructure was built in 2007. The network connects all local government offices in a network. The network infrastructure was constructed through a collective financial scheme between central regency offices, districts, villages, hospitals, and schools.
SIAK	SIAK is an information system that is used to manage local population data. The system was designed and implemented in collaboration between the Ministry of Internal State Affairs and the local Department of Civilization and Civil Servicing 2007. The system implementation is mandatory, which is regulated by central government rule No. 23 in 2006.
SIADINDA	It is the regency Departmental Financial Information System. The system was mandated in 2008 by central government law No. 58 the year 2005, and the regulation was replaced by the Ministry of Internal State Affairs law No. 55 the year 2008. At a later time, the bill was replaced again by law No. 21 the year 2011. The system was designed and implemented by a local private vendor
J-ID	The J-ID was the birth of national e-Identification. The local IT team developed the system, and the local population data was transferred from the National Population database.
E-ID or E-KTP	The E-ID is the electronic national identification system. The system was designed based on the J-ID system. The implementation and the use of E-ID are mandatory, and it is regulated by President Decision No. 26 the year 2009.
e-Voting System	The e-voting system was implemented in 2010. The system supports local citizens to vote for their leader at the village level. The local citizen can use the system by integrating their I-ID numbers with the e-voting system.
E-procurement system	E-procurement system was voluntarily implemented and used in 2009, but the system became a mandatory system in 2010 based on President issued Presidential Instruction No. 54 in 2010. The system is controlled and standardized by the Agency for Government Goods and Procurement Services.

In order to support e-government systems implementation, the local government constructed a regency internet network by building J-Net (Jimbarwana Network) (see figure 1 below). The J-Net links all villages and districts in the regency through the

J-Net. The implementation of J-Net has supported the improvement of e-government systems implementation within the regency. All districts and villages are able to transfer data and provide services across the regency.

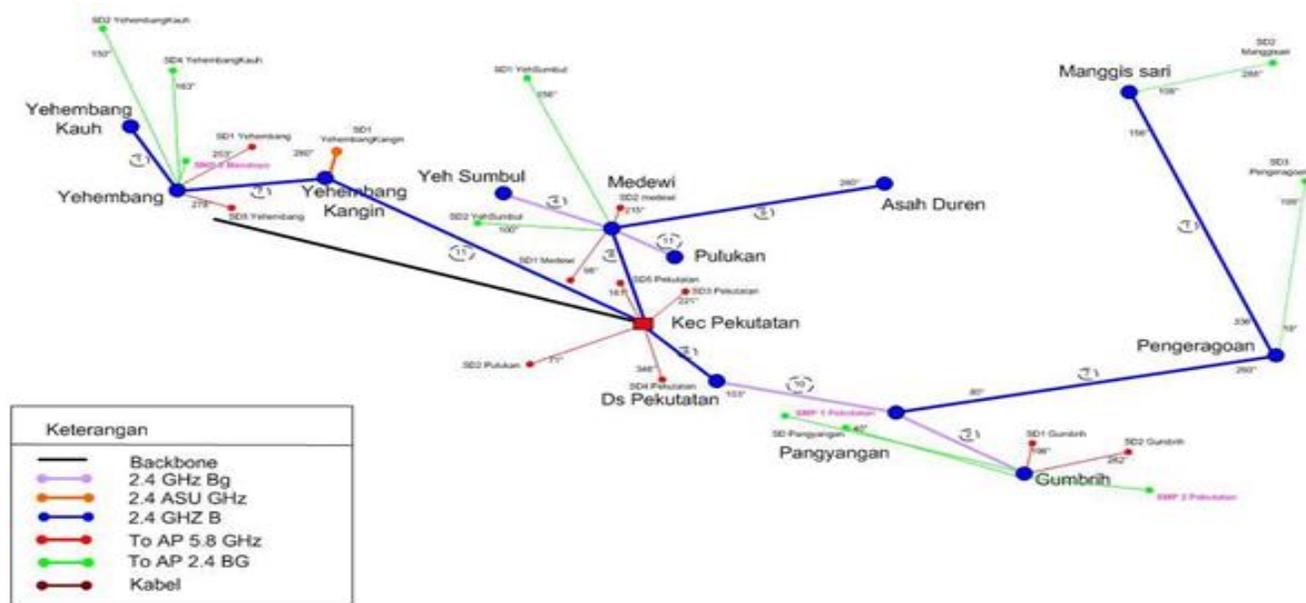


Figure 1: Jimbarwana Network (J-Net)

3.2 Collective Action in Local E-Government

Implementation

The collective action of local actors in e-government implementation was practiced through intensive coordination, cooperation, communication, and sharing responsibilities among the local actors. The four mechanisms of collective action practices are discussed in the following.

a). Coordination

Jembrana regency actors view coordination with multi-actors as an important mechanism in harmonizing their action to sustain e-government systems implementation. Regular and flexible coordination with relevant central government

institutions is mostly practiced in maintaining central government transfer systems. Vertical coordination between central government departments and local IT team or local department help the local government synergizing the maintenance and operation of transferred systems. For example, the regency staff within the Department of Civil and Civilization Services coordinate to maintain the operation of the Demographic Information System, which was transferred by the Ministry of Internal State Affairs. The system is regulated by I Government law no. 23 the year 2006. Vertical coordination is vital to harmonize the relationship between the local government and central government because the operation of the e-government systems should follow the

central and regulation requirements. The need for collaboration between central and local institutions is targeted to similar actions that should be taken by both lower and higher institutions. Other than vertical coordination, the local government also coordinates with other relevant local government and other non-government institutions such as banks and companies in implementing e-government systems. For example, the implementation of e-ID (electronic identification) system in all regencies in Bali province required all regencies to coordinate between them. An employee says: We also did a lot of coordination and consultation in Bali, such as with Denpasar city regarding e-ID card implementation, Each month, we hold a regular meeting where we discuss our problems encountered during task completion. We also discuss what application should be implemented and how to improve current applications (J.1) Some citizens have a double manual ID, which was obtained from different regencies. The implementation of e-ID within a regency often requires coordination with other regencies because of the need for citizens' data verification between regencies. Meanwhile, coordination with non-government institutions is targeted to eliminate resistance as stated by a participant that there was a bank that did not accept new e-ID for proving citizens' identity, and they require old ID from the villages. However, after their coordination with the bank, the misunderstanding was resolved.

b). Cooperation

Succeeding of e-government systems implementation sustainability within the regency is supported by their ability to cooperate with multiple relevant actors to gain skills, knowledge, infrastructure, and political support. The cooperation includes vertical cooperation with central government bodies, horizontal cooperation with other regencies and private sectors, local interdepartmental cooperation within regency. For example, when Jembrana regency started implementing earlier e-government systems such as Virtual Office system (KANTAYA) and Regency office information system (SIMDA), the regency cooperates with National Bureau for Technological Research and Implementation (BPPT) to get planning strategy and human skill support as indicated by the following participants: We cooperated with BBPT, and we made a plan to set an intranet network when we implemented KANTAYA and SIMDA information systems..... Cooperation with BPPT also includes training of human resources, program design and application building (J.1) Cooperation with the central government also involved other relevant ministries departments such as the Ministry of Internal State Affairs regarding demographic information system (SIK) and E-ID. The involvement of legislative members in at the beginning the process of e-government procurement implementation was a part of the regency government effort to gain support from politicians. The cooperation between local government executives and politicians was intended to solve political barriers and social resistance from citizens regarding system implementation. Some of the local leaders and private companies resisted the e-government procurement system because it prevents them from making collusion and practices corrupt behavior. Furthermore, some of the local companies involved in goods and services auction are also related to parliament family members and friends. As a result, gaining political support from parliament members is important to avoid resistance from

them.

c). Responsibility Sharing

Sharing burdens and responsibilities regarding e-government implementation has increased a sense of collectivism among local employees and leaders within the local government organizations. Maintaining the e-government system and infrastructures requires the regency leaders and employees to mobilize resources such as financial, infrastructure, and skilled workers. Interaction through sharing the burdens and responsibilities was an innovative strategy to achieve the goal. The duties were distributed across local institutions and departments to reduce burdens in sustaining e-government. This includes tasks and skills distribution as well as cost-sharing regarding e-government systems development, use, and maintenances across the regencies. To reduce burden related to a lack of financial resources to maintain e-government systems and infrastructures, the local IT department imposes local institutions to bear maintenance cost responsibility. The strategy helped the IT department to reduce costs in maintaining the continual operation of e-government systems across regency offices. The regency also encourages local institutions to endow resources voluntarily. Local institutions are required to allocate their annual budget for their e-government system maintenance. All local leaders within the regency department demanded all to institutions to collectively take some of the cost maintenance burdens for their e-government systems. As a result, the regency has successfully built and maintained its e-government network infrastructures. For example, the Jimbarwana network (J-NET) was successfully built through a collaborative financial scheme. All local institutions such as schools, hospitals, districts, and villages took part in financial allocation to build and maintain the network.

d). Communication

A common understanding of the importance of e-government implementation and use within the regency was built through effective communication strategies. The local government top leader clearly communicates the e-government project implementation to all local actors. The top leader also implements strong policies to guarantee the operation and use of e-government systems within all local organizations' levels and units. One prominent example is the local government's top leader (the Regent) issued a local regulation to impose all local employees within the regency to implement and use e-government systems to improve service quality and work performances. Other than mandating all employees to use e-government systems, the regulation also guides all local employees and other actors regarding e-government implementation, use, maintaining, and developing within their organizations' units. The top local leader also practices persuasive and coercive communications strategies to motivate employees and department leaders to support e-government implementation sustainability collectively. Persuasive communication was practiced by providing rewards for their employees who regularly use the e-government systems. For example, department leaders give an incentive for IT staff to motivate them to work harder, as described by the following IT staff: Of course, they receive a salary, but that is not enough, we give them more rewards. if they work from morning till late evening they are tired, so we give them extra money for lunch, although they have been

paid (J.1) The local leader uses a coercive mode of communication to ensure all employees and department leaders within the local departments to take serious action to e-government implementation and use for their office administration operation. The strong communication strategies are often practiced during departments' leader meeting. Department leaders and employees across local institutions pay a strong commitment to ensuring the e-government is successfully implemented. All local department leaders enthusiast to work hard in achieving their ultimate goals and to succeed all given tasks through coordination and cooperation between local department leaders and with other relevant local actors. The sense of involvement in completing their assigned tasks may also have caused them to work harder and to find appropriate solutions to accomplish their tasks. For example, the department leaders provide rewards and punishment to enhance employees' commitment to maintaining e-government systems.

4 DISCUSSION

The findings show that collective actions in e-government implementation were practiced through coordination, cooperation, and sharing responsibility mechanisms within the local government and with central government departments as well as with private agencies. The regency ability to practice a variety of coordination mechanisms [e.g: 27] helped them to mobilize all actors to succeed in the e-government systems implementation. Cooperation with multi relevant actors at central and local levels provides opportunities to local government to reduce the gap in taking collective action to support e-government implementation. Because through cooperation, they can obtain and use resources collectively, such as human resources and infrastructure [28]. Cooperation, which is established through applying punishment [29, 30] and providing incentives [31] were intended to encourage local actors to participate collectively in supporting e-government implementation. Mandatory coordination and cooperation have been found success in information technology implementation. For example, coordination in the implementation of the IRIS system in the Municipality of Venice was mandated by a normative agreement between institutions within the municipality [32]. Cooperation between relevance institutions also positively affect the introduction of innovation because of the opportunity to exchange resources such as skills and technological product [33]. In this study, the regency cooperation with central government institutions has resulted in skill transfer from the central government to the local government. The cooperation also helps the local government gain trust and benefits toward various e-government systems implementation [34]. The perceived trust and benefits towards e-government systems were built by central government institution legitimacy. For example, mandatory transferring of the Population Information System by the Ministry of Internal Affairs was perceived as a very benefits system to manage the local government population data. The impact of flexibility and diversity in coordination and cooperation is the opportunity to share responsibilities and burdens among institutions within the local government. Each institution carries responsibilities and burdens to supporting e-government systems implementation collectively, such as maintenance and infrastructure cost. Chatterjee, et al., [27], Huxham & Vangen [29], and Kumar & Van Dissel [35] use the term "sharing of risks" in addressing the positive impact (which also includes

promoting collaboration and partnership) of coordination and cooperation mechanism diversity within organizations. In this study, we view the "responsibilities and burden" to implement e-government in the IT department within the local government as "risks." For example, there is a risk in the J-NET infrastructure building in the regency, not remaining operational because the high cost of the infrastructure requires hardware provision and maintenance across the local government. However, when the responsibility of the cost is shared between regency central office departments, districts, villages, schools, hospitals, and other institutions, the J-NET infrastructure was successfully built and maintained for durable operation and use. Similarly, maintaining e-government systems and infrastructure across the regency institutions is a huge financial burden for the IT Department. However, the financial burden is minimized when it is shared with all relevant institutions by encouraging each institution to allocate budget to maintain the systems and infrastructure. IT personnel, skills, and knowledge were also distributed across departments, districts, and other institutions to support the deployment of the systems. As a result, the institutions' reliance on one actor, such as the IT team or the local government leaders, can be reduced. However, the coordination, cooperation, and sharing responsibility to take the collective actions in e-government implementation were reinforced by affective communication practiced by the local leader. Coercive and persuasive communications to gain local employees' commitment to supporting e-government implementation were consistently applied during the project implementation. Reliable communication strategy has been considered significantly contributed to technology success implementation [e.g: 36, 37]. This is based on the idea that communication is able to increase awareness among institutional actors regarding the project status, and problems occur during implementation [38]. When actors are well informed regarding the project status, their participation and commitment may increase. Previous studies in IT implementation [39-41] and e-government [42, 43] argue that successful information technology implementation is strongly determined by a project champion and strong leadership. However, our study demonstrates that the success of information technology implementation within public organizations is not only determined by a project champion, but also by the ability of government organization to "run in packs" to take collective action with different actors through flexible coordination, cooperation and sharing responsibility among them. Our study also argues that the absence of a project champion in an e-government project implementation can be substituted by collaboration or "running in packs" of all actors. When the actors "run in packs," the feeling of involvement in the project is increased, which results in increasing their commitment [44] to implement and maintain e-government systems. As a result, even though public leadership might be frequently terminated, as found by Frederickson, Rainey, Backoff, & Levine [45], the operation of the e-government systems might be maintained because all actors are feeling of involvement when they "run in packs" during the e-government implementation. The reliance on strong political leadership or a project champion might not sustain IT implementation within government organizations. For example, a telekiosks project implementation in India failed to be maintained when the local leader was no longer in charge [46]. This means the continuity of a public IT project is

uncertain when a public leader or project champion is removed because it depends on the new leader's strong or weak commitment. However, if a government IT project is implemented based on the collective action of all actors within a government organization, the durable of the project implementation might be achieved. Therefore "running in packs" to take collective action in e-government systems implementation may be more important rather than simply rely on a strong leadership or a project champion commitment. Furthermore, flexibility and differentiation in coordination and cooperation as well as sharing responsibility and burden practiced in this case study has supported the actors within the local governments to be able to "run in packs" [10] to perform "collective action" [31, 47-49] in supporting their e-government systems implementation. Knoke [47] and Markus [48] content that a collective action taken by employees within an organization can help the organization's members achieve their ultimate goals and solve their common challenges easily. The importance of this collective action is justified by Van de Ven [10], who argues that no single actor has sufficient resources, power, and legitimacy to make change alone, which then suggests actors to "run in packs" to achieve their goals. For example, institutions' collective action to contribute financial cost to build and maintain the J-NET in the regency has supported the network and e-government operation. More importantly, the collective action taken by the regency's executive and legislative has reduced financial, political, and social barriers in the project implementation.

5 CONCLUSION

This study has identified that the collective action strategy has significantly influenced the local government's ability to implement e-government systems successfully. The ability of the local government to practice a diversity of coordination, cooperation, and sharing responsibilities among actors helps the local government to implement their e-government systems successfully. Leaders and employees become more committed when the local government views the e-government project implementation as a collective action between them. Actors' commitment is established through their involvement when they are "running in packs" to take collective action to sustain their e-government systems. Although previous studies found that project champions play a significant role in IT implementation sustainability, this study concludes that the finding might not necessarily be applicable to public organizations in which their leaders are often terminated due to the nature of political systems. We argue that diversity of coordination and cooperation, as well as sharing responsibility across organizational members and groups, might help them to "run in packs" to sustain e-government systems.

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REFERENCES

- [1] Y.-C. Chen, L.-T. Hu, K.-C. Tseng, W.-J. Juang, and C.-K. Chang, "Cross-boundary e-government systems: Determinants of performance," *Government Information Quarterly*, vol. 36, pp. 449-459, 2019/07/01/ 2019.
- [2] J. Choudrie, E. D. Zamani, E. Umeoji, and A. Emmanuel, "Implementing E-government in Lagos State: Understanding the impact of cultural perceptions and working practices," *Government Information Quarterly*, vol. 34, pp. 646-657, 2017/12/01/ 2017.
- [3] S. Mofleh, M. Wanous, and P. Strachan, "Understanding National E-government: The Role of Central Government " *Electronic Government, an International Journal* vol. 6, pp. 1-18, 2009.
- [4] Q. Al-Maatouk, M. S. B. Othman, M. E. Rana, and W. M. Al-Rahmi, "A cloud based framework for e-government implementation in developing countries," *International Journal of Engineering & Technology*, vol. 7, pp. 3018-3021, 2018.
- [5] M. de-Miguel-Molina, "E-Government in Spain: An Analysis of the Right to Quality E-Government," *International Journal of Public Administration*, vol. 33, pp. 1-10, 2009/12/31 2009.
- [6] M. Grimsley and A. Meehan, "e-Government information systems: Evaluation-led design for public value and client trust," *European Journal of Information Systems*, vol. 16, pp. 134-148, 2007/04/01 2007.
- [7] F. Lin, S. S. Fofanah, and D. Liang, "Assessing citizen adoption of e-Government initiatives in Gambia: A validation of the technology acceptance model in information systems success," *Government Information Quarterly*, vol. 28, pp. 271-279, 2011/04/01/ 2011.
- [8] N. A. Siddiquee, "E-Government and Innovations in Service Delivery: The Malaysian Experience," *International Journal of Public Administration*, vol. 31, pp. 797-815, 2008/06/03 2008.
- [9] B. Otjacques, P. Hitzelberger, and F. Feltz, "Interoperability of E-Government Information Systems: Issues of Identification and Data Sharing," *Journal of Management Information Systems*, vol. 23, pp. 29-51, 2007/05/01 2007.
- [10] A. H. Van de Ven, "Running in Packs to Develop Knowledge-Intensive Technologies," *MIS Quarterly*, vol. 29, pp. 365-377, 2005.
- [11] A. K. L. Hernandez, A. Fernandez-Mesa, and M. Edwards-Schachter, "Team collaboration capabilities as a factor in startup success " *Journal of Technology Management & Innovation*, vol. 13, pp. 13-23, 2018.
- [12] Z. Kilic, V. Ates, and A. Erceg, "A Comparative Analysis of E-Government Services Of Croatia, Poland And Turkey," *INTERNATIONAL JOURNAL OF eBUSINESS and eGOVERNMENT STUDIES*, vol. 11, pp. 150-165, 2019.
- [13] R. Lamb and R. Kling, "Reconceptualizing Users as Social Actors in Information Systems Research " *MIS Quarterly*, vol. 27, pp. 197-235, 2003.
- [14] R. K. Yin, "The Case Study Crisis: Some Answers," *Administrative science quarterly*, vol. 26, pp. 58-65, 1981.
- [15] G. Walsham, "Interpreting Case Studies in IS Research: Nature and Method," *European Journal of Information Systems*, vol. 4, pp. 74-81, 1995.
- [16] G. Walsham, "Doing Interpretive Research," *European Journal of Information Systems*, vol. 15, pp. 320-330, 2006.
- [17] R. Stockdale and C. Standing, "An interpretive approach to evaluating information systems: A content, context, process framework," *European Journal of Operational Research*, vol. 173, pp. 1090-1102, 2006.
- [18] I. Benbasat, D. K. Goldstein, and M. Mead, "The Case research Strategy in Studies of Information Systems," *MIS Quarterly*, vol. 11, pp. 369-386, 1987.

- [19] R. K. Yin, *Case Study Research - Design and Method*, 3 ed. London: Sage, Thousand Oaks, 2003.
- [20] R. Scheepers and H. Scheepers, "Contexts of Relevance in Explanatory Case Studies in Information Systems: Ubiquitous Information Technology Implementation in Organizations," in *24th International Conference on Information Systems Seattle, Wash.*, 2003, pp. 25-35.
- [21] A. Strauss and J. M. Corbin, *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*, 2 ed. California, USA: Sage Publications, Inc, 1998.
- [22] L. Jin and D. Robey, "Bridging Social and Technical Interfaces in Organizations: An Interpretative Analysis of Time Space Distanciation " *Information and Organization*, vol. 18, pp. 177-204, 2008.
- [23] DEPKOMINFO. (2004, 05 March). *Blue Print Sistem Aplikasi e-Government*. Available: <http://www.aptel.depkominfo.go.id/download/BluePrint1.pdf>
- [24] I. Machdi. *Atasi Inefisiensi Anggaran, Perpres E-Government Diteken Presiden* [Online]. Available: <https://menpan.go.id/site/berita-terkini/atasi-inefisiensi-anggaran-perpres-e-government-diteken-presiden>
- [25] G. I. Winasa. (2009, *Filosofi Leadership Kami adalah Kepemimpinan Air*. *Majalah e-Indonesia*. Available: <http://www.majalaheindonesia.com/Bupati%20Jembrana.htm>
- [26] G. Suinaya, "Laporan Ketua Komite E-Development Kabupaten Jembrana Tahun 2010," *Hubkomninfo*, Ed., ed. Jembrana: Pemkab Jembrana, 2010.
- [27] D. Chatterjee, R. Grewal, and V. Sambamurthy, "Shaping up for E-commerce: Institutional Enablers of the Organizational Assimilation of Web Technologies," *MIS Quarterly*, vol. 26, pp. 65-89, 2002.
- [28] J. S. Costa, A. B. G. R. Maia, A. R. P. d. Freitas, J. C. L. d. S. Filho, M. C. S. Abreu, and M. C. T. Filho, "Social Technology as a Sustainable Public Policy: The Mandalla Project in Ceará " *Journal of Technology Management & Innovation*, vol. 8, pp. 177-187, 2013.
- [29] C. Huxham and S. Vangen, *Managing to Collaborate: The Theory and Practice of Collaborative Advantage*. New York: Routledge, 2005.
- [30] E. Ostrom, J. Walker, and R. Gardner, "Covenants With and Without a Sword: Self-Governance is Possible " *American Political Science Review* vol. 86, pp. 404-417, 1992.
- [31] E. Ostrom, "Collective Action and the Evolution of Social Norms," *Journal of Economic Perspectives*, vol. 14, pp. 137-158, 2000.
- [32] A. Cordella and N. Tempini, "E-government and organizational change: Reappraising the role of ICT and bureaucracy in public service delivery," *Government Information Quarterly*, vol. 32, pp. 279-286, 7// 2015.
- [33] J. F. Sastre and C. E. V. Vera, "Cooperation for innovation in developing countries and its effects: evidence from Ecuador," *Journal of Technology Management & Innovation*, vol. 12, pp. 48-57, 2017.
- [34] G. H. S. M. d. Moraes and F. d. S. Meirelles, "User's Perspective of Eletronic Government Adoption in Brazil," *Journal of Technology Management & Innovation*, vol. 12, pp. 1-10, 2017.
- [35] K. Kumar and H. G. Van Dissel, "Sustainable Collaboration : Managing Conflict and Cooperation in Interorganizational Systems " *MIS Quarterly*, vol. 20, pp. 279-300, 1996.
- [36] A. M. Aladwani, "Change Management Strategies for Successful ERP Implementation," *Business Process Management*, vol. 7, pp. 266-275, 2001.
- [37] F. F.-H. Nah and J. L.-S. Lau, "Critical factors for successful implementation of enterprise systems," *Business Process Management Journal*, vol. 7, pp. 285-296, 2001.
- [38] C. R. Holland and B. Light, "A critical success factors model for ERP implementation," *Software, IEEE*, vol. 16, pp. 30-36, 1999.
- [39] H. Akkermans and K. van Helden, "Vicious and virtuous cycles in ERP implementation: a case study of interrelations between critical success factors," *European Journal of Information Systems*, vol. 11, pp. 35-46, 2002.
- [40] H. Liang, N. Saraf, Q. Hu, and Y. Xue, "Assimilation of Enterprise Systems: The Effect of Institutional Pressure and The Mediating Role of Top Management," *MIS Quarterly*, vol. 31, pp. 58-87, 2007.
- [41] L. Zhang, M. K. O. Lee, Z. Zhang, and P. Banerjee, "Critical Success Factors of Enterprise Resource Planning Systems Implementation Success in China," *Proceedings of the 36th Hawaii International Conference on System Sciences (HICSS'03)*, p. 10, 2003.
- [42] B. Farholt and F. Wahid, "E-Government Challenge and The Role of Political Leadership in Indonesia: The Case of Sragen " *Proceedings of the 41st Hawaii International Conference on System Sciences - 2008*, pp. 1-10, 2008.
- [43] M. P. Gupta and D. Jana, "E-government evaluation: a framework and case study," *Government Information Quarterly*, vol. 20, pp. 365-387, 2003.
- [44] J. Hartwick and H. Barki, "Explaining the Role of User Participation in Information System Use " *Management Science*, vol. 40, pp. 440-465, 1994.
- [45] H. G. Rainey, R. W. Backoff, and C. H. Levine, "Comparing Public and Private Organizations," in *Developments in Research* vol. 36, H. G. Frederickson, Ed., ed: *Public Administration Review: Wiley-Blackwell*, 1976, pp. 233-244.
- [46] R. Kumar and M. L. Best, "Impact and Sustainability of E-Government Services in Developing Countries: Lessons Learned from Tamil Nadu, India," *The Information Society*, vol. 22, pp. 1-12, 2006.
- [47] D. Knoke, "Incentives in Collective Action Organizations," *American Sociological Review*, vol. 53, pp. 311-329, 1988.
- [48] M. L. Markus, C. W. Steinfield, R. T. Wigand, and G. Minton, "Industri-wide Information Systems Standarization as Collective Action: The Case of The U.S. Residential Mortgage Industry " *MIS Quarterly*, vol. 30, pp. 439-465, 2006.
- [49] M. Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups*. New York: Harvard University Press, 1971.