

ORGANIZATIONAL TRANSFORMATION IN INFORMATION TECHNOLOGY APPLICATION (E-GOVERNMENT) (A CASE STUDY ON GOVERNMENT ORGANIZATION IN WAKATOBİ REGENCY)

Muhammad Akbar Hardin, Wempy Bangan, Arifin Utha, La Ode Mustafa
Doctoral Program Management Science, Haluoleo University, Indonesia

Abstract— This research aims to analyze and describe organizational transformation in Wakatobi Regency government, application of information technology in Wakatobi Regency government organizations, and factors giving effects on transformation of Wakatobi Regency government organizations. Results of the research show that (1) the organizational transformation in regional government in Wakatobi Regency cannot be applied effectively, both in terms of organizational transformation strategies, organizational structural transformation, information technology application and in term of changes on Human Resource role. (2) that application of information technology in Wakatobi Regency Government has no effect on political environment in Wakatobi Regency. Meanwhile, in another aspect, it can be seen from leadership, planning, stakeholder, transparency, budget and technology as well as innovation showing that these aspects influence on implementation and success of achievement of information technology application in Wakatobi Regency Government. Though it is found out a number of obstacles, namely related to adjustment of HR abilities in each organization of Wakatobi regional Government, (3) that there are a number of factors giving effects on the organizational transformation in Wakatobi Regency government, namely competition and social tendency factors. Meanwhile, economic shock and political condition factors have no effects on the the organizational transformation in Wakatobi Regency government.

Index Terms— Organizational Transformation, Information Technologi, E-Government.

1 INTRODUCTION

Organizational transformation with locus in Regional government has been implemented in Wakatobi Regency.

Wakatobi Regency is an island regency formed pursuant to the Law number 29 of 2003. Geographically, Wakatobi Regency is the only archipelago. In Regional Medium Period Development Plan (RPJMD) 2016-2021, development of information technology and communication is presented in the fourth mission namely developing innovative and participative government as well as qualified public service based on information technology. The application of information technology is one of the priority programs to be achieved. In development of an organization, organizational transformation is an inevitable issue.

Wakatobi regency government is currently developing an Information Technology System with Integrated Information System (SIT), in which the implementation of e-Government is the main target. The presence of e-Government definitely creates an efficient, effective and high productive as well as transparent government, in which all of the information technology roles are seen as the main capital both for its infrastructure, human resources and developed application system.

There are a number of phenomena in regional government, particularly in Wakatobi Regency, namely lack of apparatus resources having high level of information technology compe-

tence. There are also a number of apparatus having low level of understanding on technology or it can commonly call nowadays by a term called as gaptek or less up-to-date. This can be seen in almost regional agency organizations so the application of information technology or e-government cannot be done based on its expectation, both in the implementation, development and innovation.

The application of information technology or e-government has also the main problem namely government of Wakatobi Regency concerning technology infrastructure. It has developed and used the technology infrastructure but it is less adequate. There are some regional agency organizations complaint on low access of internet network and low access of computer. In development of technology, budget is still considered as one problem to have serious attention. Lack of budget allocation leads to development and construction of technology infrastructure in the application of e-government cannot be done as its expectation.

There are also others problems to be given attention namely policy taken by the government to optimize the application of this e-government; the absence of master-plan or blueprint as the guidance in the implementation of e-government so these leads to ineffective implementation. The application system used in the application of technology in some regional

agency organizations is not integrated so that it cannot publish accurate information or data or it cannot be easily accessed by the public.

Other problems are still related to the long duration of working on a service product, long or red tape SOP, repeated errors in service product results, unfriendly officials as well as less adequate infrastructure in giving the service to the society. Though, it may be also a corruption phenomena mainly related to types of product involving relatively small (pretty corruption) transaction costs (between public sector and society individual), but such transaction costs involve enormous portion of population. Referring at such conditions, implementation process of public sector and information provision by regional government of Wakatobi Regency in a manual manner has a number of weaknesses in its implementation, among others are : (1) Low control of leaders, (2) lateness of data from SKPD, (3) high error of data, (4) doubtful data validation, since the data is by manual, (5) high level of human error and (6) inefficient budget.

Empirically, infrastructure in available information technology use in Wakatobi Regency is not yet applied properly. This is in line with an opinion by the Head of Communication and Information Division, Communication and Information Office, Wakatobi Regency stating that currently, it is important to make any changes and transformation in the government of Wakatobi Regency. This is caused by many complaints on bad and unqualified service based on public expectation. Also, Wakatobi currently has been connected to Wakatobi 2 (Kaledupa island, Tomia island and Binongko island). "Facing the problems on infrastructure and use of technology, we try to handle the small problems first namely in regional device organization concerning internet network and local area network which it is improved currently, but there is still adequate infrastructure in Wakatobi 2 namely in the villages". (Interview, 22 June 2018). Such data show that there are still less maximum infrastructure and some problems to be solved in order to maximize the use of technology.

Referring to the empirical facts and phenomena, it is interesting to study the existence of organizational transformation in the use of technology in Wakatobi Regency. So, the focus of this study is on organizational transformation in the use of technology in the local government of Wakatobi Regency.

This study aims to analyze and describe the transformation of organizations in the Wakatobi regency government, the application of information technology to the organization of the Wakatobi district government, and the factors giving effects on the transformation of the Wakatobi district government organizations.

2 LITERATUR REVIEW

According to Lancourt and Savage (1995), organizational transformation is very important to do, there are four necessary things to be done in applying organizational transformation, namely: 1) Redefining the company's business and focus on customers. 2) Oriented in team work and flexibility in organizational structure. 3) Optimizing leadership roles and

shared values. 4) Making changes in language / terms. Changes in language / terms in the organizational structure are intended to change the mind-set and make it easier to carry out organizational transformation. This has been done by companies both in Europe and America, such as changing the term of employee into members, associates or coworkers.

There must be any changes, either realized or not, so does any organization. Organization can only survive if it can make changes. Robbins and Judge (2013) said that basically, all changes are addressed to improve organizational effectiveness in order to improve organizational ability in adapting any environmental changes as well as changes on organizational member behavior. Each environment changes must be considered since effectiveness of an organization depends on the level of how the organization can adjust itself to such changes.

Then, Sobirin (2005) stated two factors which can trigger changes, namely extern factor such as technology changes and increasing integration of international economy and organizational intern factor covering two main issues, namely (1) changes on organizational hard system tools or as called by structural changes, including changes on strategies, organizational structure and system as well as (2) changes on organizational soft system tools or called by cultural changes including human behavior changes on organization, policies on human resources and organizational culture. Each change cannot select to be structural or cultural aspect as variable to be changes, but both aspects must be managed simultaneously to achieve optimal results.

Organizational structure is a way of work task division which then is grouped and coordinated formally. Robbins (2003) stated 6 (six) elements to be considered in forming an organizational structure, namely: (1) specialization or division of labors, namely dividing a flow of work completion into a number of achievement steps completed by certain qualification. (2) Departmentalization, it is based on group similarity of work or based on territory so that the work can be coordinated. (3) Command chain, is a flow of order and authority related to the responsibilities of the levels in an organization. (4) The range of control, determines the number of levels and managers that must be owned by an organization. (5) Centralized and decentralized, is a way of making decisions based on managerial authority. (6) Formalization, is a level of work in an organization that is standardized based on rules.

Based on the description above, organizational transformation can be summarized as a process of planned change that covers various organizational aspects, including management, leadership, organizational culture, financial resources in order to achieve organizational effectiveness.

3 CONCEPTUAL FRAMEWORK

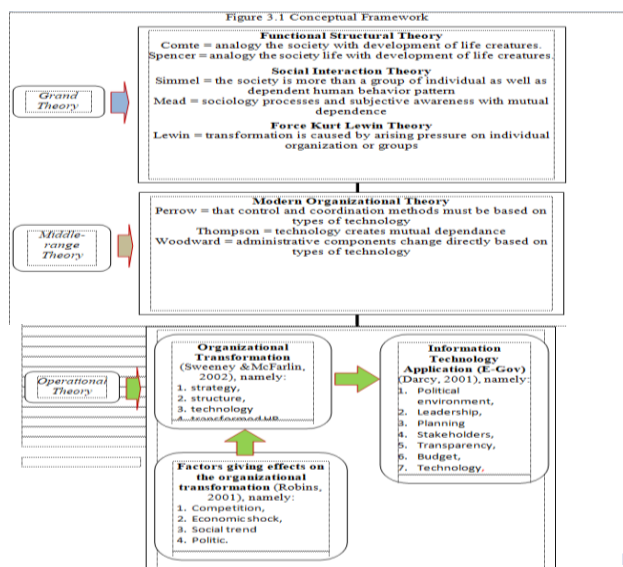
This study is on transformation or changes on organization in the use of information technology (e-government) in Wakatobi regency government. This study used qualitative approach in which it studies using functional structural theory, social interaction theory and force Kurtlewin theory (grand theory), modern organizational theory (middle range theory), organi-

zational transformation theory and application theory of e-government (operational theory). The idea of this study is to investigate changes in local government organizations which is inspired by dominant paradigm in the global development community which holds that changes in government organizations determine the performance of local governments and improve public services.

This study is directed by theories of public administration at three levels of abstraction, namely grand theory, middle-range, and operational theory. The use of all three levels of theory is important not only for the purpose of clarifying the position of the study on the organizational transformation in the use of technology but also to make it easier to understand the issues, make observations, organize facts and interpret them because it is realized that organizational transformation in the use of technology includes a complex mix of facts and values.

Organizational transformation in this study is defined as the process of transforming all elements of local government stakeholders in the use of information technology or e-government in order to improve the performance of local governments and public sector or public services. To explore organizational transformation, it used the theory of Sweeney & McFarlin (2002) namely strategic, structural, technological, and transformed human resources. In organizational transformation, there are factors that influence on it by using Robbins's theory (2001), namely competition, economic shock, social, and political trend.

This definition follows perspective of e-government as the latest paradigm in development of public administration using Darcy theory (2001) since this theory explores more comprehensively technology application in regional government since it covers entire aspects namely political environment, leadership, planning, stakeholders, transparency, budget, technology and innovation. E-government involves coordination between state apparatus and public sector which carry mutual interaction to create a clean and transparent government as well as having ability to face needs for changes effectively. This study conceptual framework can be seen in a clearer manner in the figure 3.1. as the following:



4 RESEARCH METHOD

4.1 Research Approach

This research uses a qualitative approach, since it requires more in-depth and complex information. The qualitative approach in question is a research procedure that produces descriptive data in the form of written or oral words from the object or people as these research informants. In addition, all behaviors that can be seen, heard, and felt are also observed, examined and recorded carefully through holistic interviews. It is expected that through this research, the Wakatobi Regency Government organization is better known to broader community, as well as the output of this research can provide a basic overview on the topic, generalize ideas and develop tentative theories, open up any possibility for further research on the discussed topics.

4.2 Research Location

This research was carried out at local government organizations in Wakatobi Regency. The focus of research was on the Regional Secretariat, Regional Planning, Research and Development Agency, Regional Personnel Agency, Regional Financial Management and Asset Management Agency and the Communication and Information Agency, with reference to in the formulation of the problem namely to study and analyze organizational transformation in the application of information technology to the Regional Government of Wakatobi Regency from several aspects.

4.3 Research Focus

The focus of the study examines the transformation of organizations in five regional apparatus organizations in the local government of Wakatobi Regency, namely:

- 1). Regional Secretariat, as the organization that coordinates organizational transformation in the applicatio of information technology.
- 2). Regional Planning, Research and Development Agency, as an organization that knows all regional planning and budgeting in implementing organizational transformation in the application of technology.
- 3). Human Resources and Human Resources Development Agency, as the organization that regulates and develops apparatus resources in organizational transformation in the application of technology.
- 4). Communication and Information Office, as the organization that manages, implements and evaluates the application of information technology.
- 5). Regional Financial and Asset Management Agency, as the organization that controls the use of the budget in organizational transformation in the application of technology.

4.4 Research Informants

These research informants are sources of information that are

explored to uncover facts in the field. The selection of informants is determined purposively based on the consideration that those who were considered to understanding any necessary information by the researcher. In this study, the research informants were determined, as follows:

No	Regional Device Organizations	Informants	Total
1	Regional Secretariat	- Regent - Regional Secretary - Head of BLP division - Head of General Division	1 1 1 1
2	Regional Planning, Research and Development Agency	- Head of Agency - Head of Macro Planning Division	1 1
3	Human Resources and Human Resource Development Agency	- Head of Agency - Head of Research and Development Agency	1 1
4	Financial Management and regional Asset Agency	- Head of Agency - Head of Budgeting Division	1 1
5	Communication and Information Office	- Head of Office - Head of Communication and Information Division	1 1
Total of Informants			12

4.5 Data Analysis Method

Data analysis was carried out entirely in a descriptive qualitative manner. In qualitative research, data analysis means that the arrangement of data logically and systematically is carried out continuously starting from data collection in the field until the entire research process is completed, and the researchers as the main instruments, which from the beginning must stay in the field to interact with the background and subjects.

The analysis is carried out previously before the preliminary data or secondary data study in the field. Data analysis is carried out during data collection and after the completed data collection. During the interview, the researchers have conducted an analysis on the interviewed answers, to a certain stage in order to obtain valid and credible data. The analysis is carried out interactively and lasts continuously until it is complete, until the data is saturated.

The data were analyzed using several steps according to Miles, Huberman and Saldana (2014) theory, namely analyzing data in three steps: data condensation, data display, and drawing conclusions or verification (conclusion drawing and verification). Data condensation refers to the process of selecting, focusing, simplifying.

5 RESULTS AND DISCUSSION

5.1. Organizational Transformation on Waktobi regency government

Related to the organizational transformation, organizational transformation in this study is defined as an action to make organizational transformation in the use of information technology or e-government for all stakeholder elements within the scope of the Regional Government Organization of Wakatobi Regency. Sweeney and McFarlin (2002) concluded that there are four important groups of transformation, namely: (1) strategic change, (2) technological change, (3) structural change and (4) human change. These four issues are seen as the focus of discussion about organizational transformation or organizational change in the Wakatobi Regency Government.

5.1.1. Strategy

The intended strategy in this context is a plan to implement ideas that are carried out entirely within a certain period of time in implementing organizational transformation, particularly those related to the application of information technology by the Regional Government Organization in Wakatobi Regency. In this regard, then it is necessary to understand more deeply about the organizational transformation strategy carried out by the Regional Government Organization in Wakatobi Regency in the context of applying technology.

5.1.2. Structure

The intended organizational structure in this context is the composition or relationship between each section within the scope of the Wakatobi Regional Government Organization in carrying out activities to achieve the expected goals. Related to the organizational transformation, it is intended to make organizational changes or form new organizations in order to face the application of information technology within the scope of the Wakatobi Regional Government Organization.

Based on the results of interviews with a number of informants, it can be concluded that in the framework of the application of information technology in the Regional Government Organization of Wakatobi Regency, there has been no formation of a new structure because it is considered to have an organizational structure in the agency that already has relevant main tasks and functions to the field of information technology, for example in the Communication and Information Office in Wakatobi Regency, there are already three fields that are considered capable of handling information technology, namely (1) communication, (2) statistics and (3) coding. These three fields work simultaneously.

Also, on another hand, it can also be said that the absence of new organization formation in the framework of the application of information technology in Wakatobi Regency is caused by several things, including the lack of adequate communication network readiness, and also lack of readiness by State Civil Apparatus (ASN) in handling information technology both in terms of quantity and quality. Therefore, to solve this problem, it is necessary for careful preparation. This is important to conduct since the application of new organizational structure must be carried out by careful preparation, considering readiness of employees and required technology (Dwiarti (2003).

5.1.3. Technology

Referring to a number of information from the interview, the results illustrate that the application of information technology in public services in the Regional Government Organization in Wakatobi Regency will clearly be followed by organizational transformation or organizational change. This change is caused by the urge to change, which comes from external encouragement and internal encouragement; the external one is the technological advances that make and force an organization to have changes so as not inferior to other organizations;

the internal one can be in the forms of available equipment and facilities to support any processes in the organization.

Likewise, in Wakatobi Regency, there has been organizational transformation as a result of developments in information technology including preparation of information and communication technology networks. This is intended to support the realization of e-government in Wakatobi Regency. In principle, this type of transformation has a wide range, ranging from small (less significant) changes to massive changes. Usually ordinary people, once they hear the term of technological change, will directly relate it to computerized activities. It must be admitted that any changes are caused by computers. Technological change is one of the common ways how an organization is transformed (Sweeney and McFarlin, 2002).

5.1.4. Transformed Human Resources

The transformed Human Resources (HR) as referred to in the study is about readiness for any changes in the role of the apparatus in the Regional Government Organization in Wakatobi Regency in dealing with organizational changes as a result of the application of e-government in Wakatobi Regency. This is important to understand because participation or involvement of human resources in organizational change plays an important role since one of the key factors for the success of organizational transformation is the involvement of human resources in facing organizational change.

Referring to the information given by a number of informants, it shows that readiness for changes in the role of the HR apparatus in the Regional Government Organization in Wakatobi Regency in dealing with organizational changes as a result of the application of e-government in Wakatobi cannot still be realized effectively so that changes in the maximal role of HR related to the application of information technology in Wakatobi Regency has not been able to be applied as its expectation. To overcome this, it is necessary for strategic plans to be implemented by the employees. We need to think through changes related to humans, as well as changes in the field of technology or other fields. We have repeatedly heard that there are often great challenges to change, on the part of employees (as well as on managers themselves). Therefore, it is necessary to integrate any plans for changes related to humans into corporate strategy (Sweeney and McFarlin, 2002).

5.2. Application of Information Technology in Organizational Government in Wakatobi regency

Before the application of information technology, it is necessary to prepare previously the paradigm and mindset of the users in order to accept the technology from its original manual to be automatic one since basically, information technology is created to facilitate people in carrying out their works. When an information technology is applied, there must be a system to work according to its function properly. To obtain these results, it is not easy when in a local government, it is

applied many aspects that can affect on the failure and success of the application of information technology in order to realize the application of e-government in local government. Related to e-government, Darcy (2001) formulated that there are 8 (eight) elements of success in managing e-government projects, namely (1) Political environment, (2) Leadership, (3) Planning, (4) Stakeholders, (5) Transparency / visibility, (6) Budgets, (7) Technology, (8) Innovation. These eight elements are the focus of discussion in this section.

5.3. Factors giving effects on Organizational Transformation

As aforementioned issues, there is always transformation whether it is realized or not, so does the organization. The organization can only survive if it can make a transformation or change so that the organization can survive and work optimally. Basically, all transformations lead to improved organizational effectiveness with the aim of improving organizational ability to adapt to any changes in the environment and changes in the behavior of organizational members (Robbins and Judge, 2013). There are several factors as the reasons why an organization makes changes, namely (1) competition, (2) economic shock, (3) social trends, and (4) politics (Robbins, 2001). These four things are the focus of discussion in this section.

5.3.1. Competition

Based on the data above, it is increasingly emphasized that one of the factors causing organizational transformation in Wakatobi Regency is caused by competition in the application of information technology or e-government. There is a very tight competition since many organizations including OPD must improve their quality standards in order to keep up with the ever-changing changes. If there is no change, the OPD will be difficult to realize the e-government; for example, competitiveness of existing HR quality in Wakatobi Regency OPD, especially HR who will use information technology in providing public services; likewise, the competition of means and information technology facilities that will be used in public services, both are greatly required in the application of information technology or e-government in Wakatobi Regency. It is necessary to be carried out since organizational competitors can come from any direction and in any form. High level of competition forces an organization to be able to survive. Any organizations with ability to survive in this competition are organizations that can change and respond to any challenges they face. Organizations can aggressively innovate creatively, flexibly, adaptively and sensitively to their environment (Robbins, 2001).

5.3.2. Economic Shock

The aforementioned opinions by the informants, principally are the same as stated by the Head of the Regional Development Planning Agency in Wakatobi Regency that changing

economic conditions in Wakatobi do not influence on the organizational transformation in Wakatobi Regency. Thus, it can be said that the economic shock factor does not influence or is not seen as one of the factors causing organizational transformation in Wakatobi Regency. It is said so because by the application of e-government in Wakatobi Regency, there are economic shocks, such as the existence of organizations that changed adaptively in order to adapt to the situation, such as reducing the number of workers (Robbins, 2001).

5.3.3. Social Tendency

Based on the results of interviews with the three informants as mentioned above, it clearly shows that people lifestyle in Wakatobi Regency which is always changing is influenced by application of information technology. This is also seen as one of the factors causing organizational transformation in Wakatobi Regency. This can be understood since principally, changes in one place social status conditions will influence on its society. This will continue by the time passing. One of the effects is that it will influence on any policies concerning employment as a crucial part of organizational management (Robbins, 2001).

5.3.4. Politic

The opinions of the informants as mentioned above are principally the same as those stated by the three previous informants stating that political conditions give no effects on organizational transformation in Wakatobi Regency. This also shows that political condition or political atmosphere does not influence or is not one of the factors causing organizational transformation in Wakatobi Regency. This fact is contrary to what was stated by Robbins (2001) that there are several factors as the reasons why an organization makes changes, one of which is political factor. Thus, an organization must be able to adjust to changes in political conditions where the organization is located. Thus, this political change forces the organization to change.

6 CONCLUSION AND RECOMMENDATION

6.1. Conclusion

The conclusions of this study are based on the results of the research in the previous chapters which are divided into three large groups according to the research objectives. First is the conclusion related to organizational transformation. Second is the conclusion related to the application of information technology. Third is the conclusions related to the factors that influence on the organizational transformation.

1. The first conclusion shows that organizational transformation in the Wakatobi Regency government has not been carried out effectively, both in terms of organizational transformation strategies, organizational structure transformation, application of information technology, and in terms of changes in the role of Human Resources. This is caused by a number of factors, among others are unavailability of adequate quality human resources and unavailability of quality technological network infrastructure and

infrastructure, as well as lack of coordination between related agencies in creating software, and development of data bases and knowledge bases. It is also caused by implementation of various regulations related to information technology, particularly Regulations of the Regent Number 60 of 2016 have not been implemented as its expectation (gap implementation).

2. The second conclusion shows that the application of information technology to the Government of Wakatobi Regency has no effect on the political environment in Wakatobi Regency. Meanwhile, on the other hand, seeing at the aspects of leadership, planning, stakeholders, transparency, budget and technology as well as innovation, it shows that these aspects influence on the implementation and success of the achievement on the application of information technology in the Wakatobi Regency Government. Although there are still some obstacles, which are related to the adjustment of the existing HR capabilities in each Wakatobi Regency Government Organization.
3. The third conclusion shows that the factors that influence on the organizational transformation in the Wakatobi Regency Government are factor of competition and factor of social tendency. While economic shock factor and political condition factor have no effects on the organizational transformation of the Wakatobi Regency Government.

6.2. Recommendation

Referring at the research findings taken by the researchers, then the researchers can recommend a number of the following recommendations:

1. To realize the organizational transformation in Wakatobi Regency as its expectation, it is necessary to carry out development on the human resource quality, especially those who will manage e-Government, and the need for adequate development of information technology infrastructure and data communication network access, and the need for coordination between related agencies, and also the need to increase the development of database and knowledge base, as well as the implementation of various regulations related to information technology as its expectation.
2. There are also some other needs, namely the need for commitment of support given by the leaders of the Wakatobi Regency Government and the leadership of the Regional Government Organizations in the Wakatobi Regency to support the application of information technology or e-government in the Wakatobi Regency, and the need for a master plan in order to develop the application of information technology in the Regency Wakatobi. And transparency in the application of information technology needs to be carried out in a professional manner or as expected, namely any required data by the public is always published and the public can access any required needed openly, then the need to prepare adequate facilities and infrastructure, and the need for budget support from the Wakatobi regency Government is also necessary to be prepared.

3. To avoid unfair competition between related agencies, it is necessary to create harmonization between related agencies by proper coordination and transparency by policy makers both at the central and regional levels, and the need for regular socialization on the importance of information technology and e-government application utilization in Wakatobi Regency.

REFERENCES

- [1] Achmad Sobirin. 2005. *Meraih Keunggulan Melalui Pengintegrasian Sumber Daya Manusia dan Perencanaan Strategik*, Edisi Khusus Jurnal Siasat Bisnis On Human Resources.
- [2] Dwiarti, Rina. (2003). *Transformasi Struktur Organisasi dengan Horizontal Organization Untuk Memenuhi Kompetisi Lingkungan Bisnis yang Dinamis Dimasa Mendatang*. Utilitas : Vol.11, No.1
- [3] Lancourt, J. dan C. Savage. 1995. Organizational Transformation and the Changing Role of the Human Resource Function. *Compensation & Benefits Management* 11 (4) Autumn Ed.
- [4] Miles, M.B, Huberman, A.M, dan Saldana, J. 2014. *Qualitative Data Analysis, A Methods Sourcebook*, Edition 3. USA: Sage Publications. Terjemahan Tjetjep Rohindi Rohidi, UI-Press
- [5] Robbins, Stephen P. 2001. *Perilaku Organisasi: Konsep, Kontroversi, Aplikasi*, Jilid 1, Edisi 8, Prenhallindo, Jakarta.
- [6] Robbins, P. Stephen. (2003). *Perilaku Organisasi*. Edisi Sembilan, Jilid 2. Edisi Bahasa Indonesia. PT Indeks Kelompok Gramedia, Jakarta.
- [7] Robbins, Stephen P & Judge, Timothy A. 2013. *Organizational Behavior* Edition 15. New Jersey : Pearson Education.
- [8] Sweeney, P. D, McFarlin, D. B. 2002. *Organizational Behavior*. McGraw-Hill Companies. Inc. New York.