ANALYSIS OF FACTORS AFFECTING THE LEVEL OF E-GOVERNMENT IMPLEMENTATION IN WEST JAVA

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Abstract: To increase public accountability, transparency, and so that the government is more effective and efficient in running government. Local governments use a tool called e-government. Not only has the objectives of transparency and accountability, but the use of e-government application systems is also expected to be able to improve the performance of local governments to be more economical, efficient and effective. The purpose of this study is to determine what factors influence the application of e-Government in the West Java local Government and the relationship or correlation of each factor to the application of e-Government. It is hoped that this research can provide an overview and input for the government in particular the regency / municipal government in Indonesia regarding what factors influence the implementation of e-Government. This study aims to examine the effect of PAD, capital expenditure, financing revenue, GRDP, education level, and population factors on the e-government index value. Data analysis used linear regression analysis with quantitative research methods. The results of the study based on linear regression indicate that the PAD, capital expenditure, financing revenue, GRDP, and population factors have a positive effect on the e-government index value in regency / municipal governments in West Java.

Keywords: E-government, New Public Management, Good Governance, Electronic Based Government System.

INTRODUCTION

The field of Public Administration in the world began to introduce New Public Management (NPM) in the 1990s. The term NPM was first put forward by Christopher Hood in his article "All Public Management of All Seasons". The concept of NPM was originally used to describe the state of public sector management in the UK and New Zealand. Also, New Public Management is a concept used to help improve the performance of public sector management. In this theory, it is said that to improve the performance of public sector management, it is necessary to adopt several management practices and techniques applied in private sector management into public sector management (Mardiasmo, 2018).

With this change in public sector management, there have also been changes in public sector accounting. Public sector accounting then follows and adapts to the changes that occur (Mardiasmo, 2018).

One of the forms of implementing New Public Management in Indonesia is the application of e-Government. According to (Rose et al., 2015), public service, service level, and service quality are the values that underlie e-Government as seen from the ideals of public service from New Public Management.

In 2003, the Government of Indonesia issued a Regulation on e-Government, namely Presidential Instruction No. 3 of 2003. In Presidential Instruction No. 3 of 2003, e-Government is intended to ensure the integration of the management and processing systems for electronic documents and information in developing a transparent public service system (Indonesia, 2003).

The fundamental goal of e-Government development is to improve government-public relations through information about government processes, and the existence of two-way interactions between the community and government. This is based on Article 28F of the 1945 Constitution which reads: "Everyone has the right to communicate and obtain information to develop their personal and social environment, as well as the right to seek, obtain, possess, store, process and convey information using all types of channels available." (Indonesia, 2003).

According to the World Bank, e-Government is defined as "the use of information technology by government agencies to improve services to the public, business people, and at the same time facilitate cooperation with other government agencies". Furthermore, according to the World Bank, e-Government should be directed at empowering communities through broad access to the available information.

In the instruction of the President of the Republic of Indonesia Number 3 of 2003 concerning the National Policy and Strategy for the Development of E-Government, it is mentioned about the matters which are the considerations for the implementation of E-Government in Indonesia, including; the rapid advancement of communication and information technology and the potential for its widespread use opens up opportunities for accessing, managing and utilizing large volumes of information quickly and accurately, that the use of information and communication technology in government processes (E-Government) will increase efficiency, effectiveness, transparency and accountability of government administration, that to carry out good governance and improve effective and efficient public services, it is necessary to have policies and strategies for developing E-Government (Indonesia, 2003).

Governance can be defined as a way of managing public affairs. The United Nations Development Program (UNDP) defines good governance as "the exercise of political, economic, and administrative authority to manage a nation's affairs at all levels". Governance includes all mechanisms, processes and institutions in which citizens and community groups prioritize their interests, exercise legal rights, fulfil obligations and bridge differences between them (Mardiasmo, 2018).

From this understanding, it can be seen that UNDP places more emphasis on political, economic, and administrative aspects of governance at all levels. Political governance refers to the policymaking process (policy/strategy formulation). Economic governance refers to the process of making decisions in the economic sector which have

implications for the problem of equity, reducing poverty and improving the quality of life. Administrative governance refers to a system of implementing policies.

Referring to this conception, good governance has several key attributes such as being effective, participatory, transparent, accountable, productive, and equal and able to promote law enforcement. Above all, the main attribute of good governance is how to use power and authority in solving various public problems.

Presidential Instruction No. 3 of 2003 concerning National Policy and Strategy for e-Government Development, mandates every Governor and Regent / Mayor to take the necessary steps by their respective duties, functions and authorities to implement e-Government development nationally (Indonesia, 2003).

This means that starting from 2003 each reporting entity and accounting entity at the central and local governments will begin to develop e-Government in the process of preparing government financial reports. Regional Work Units as accounting entities that are part of the regional government accounting and financial reporting systems certainly play an important role in providing complete and correct data and information to achieve the quality of local government financial reports.

The stage of implementing e-Government according to Presidential Instruction No. 3 of 2003 concerning national development policies and strategies, that the implementation of e-Government can be implemented through the following levels:

1. The level of preparation includes:
a. Creation of information sites in each institution;
b. HR preparation;
c. Preparing easy access facilities, for example providing a Multipurpose Community Center, etc .;
d. Socialization of information sites both for internal and for the public.
2. The level of maturation which includes:
a. Creating an interactive public information site;
b. Making interfaces of connection between other institutions.
3. The level of consolidation includes:
a. Making public service transaction sites;
b. Making application and data interoperability with other institutions.
4. The level of utilization includes:
a. Making applications for services that are G2G (Government To Government), G2B (Government To Business) and G2C (Government To Citizen) integrated.

Then next is the stage defined by the World Bank which is the simplest model. This model measures the degree of interaction created by the system (website) owned by the government. These forms of engagement are uniform with the classic, much-cited stage model of the evolution of websites in the commercial world. The three stages: (a) Publish, (b) Interact, (c) Transact.

However, the implementation of e-Government has not been maximally realized, even though regulations on e-Government have been issued. This is a big challenge for local governments and must be done carefully with careful preparation and structured.

In developing countries, challenges in implementing e-Government can be classified into two categories, namely internal and external factors. One of the external factors is the level of corruption that occurs in government and the size of government organizations. Then the internal factors are the characteristics of society and the quality of E-Government itself (Samuel et al., 2020).

Another problem of implementing e-Government is revealed in a study which states that one of the obstacles to implementing e-Government is the level of public education and the quality of infrastructure (Samuel et al., 2020). Then another obstacle to e-Government implementation is related to the complexity of government organizations and the government's capacity to fund e-government (Gallego-Álvarez et al., 2010).

Also, other research on E-Government outside Indonesia, one of which was carried out on the factors that make it successful and errors in implementing e-Government in Egypt (Elkadi, 2013). Then implementation of e-Government in Jordan (Al-Naimat et al., 2013). A similar study was also conducted who examined the factors that influence the implementation of e-Government in 92 cities in Spain (Serrano-Cinca et al., 2016).

Turning to Indonesia, there are several obstacles and challenges in implementing e-Government, namely obstacles in the field of regulations and implementation guidelines, quality of human resources, limited facilities and infrastructure (Wulansari & Inayati, 2019). Then when viewed from financial factors, found that local revenue (PAD) has a significant effect on the application of e-Government (Napitupulu, 2015).

The purpose of this study is to determine what factors influence the application of e-Government in the West Java local Government and the relationship or correlation of each factor to the application of e-Government.

It is hoped that this research can provide an overview and input for the government in particular the regency / municipal government in Indonesia regarding what factors influence the implementation of e-Government. On the other hand, this research is also expected to provide an overview and input for further studies related to this research.

Several previous studies on the implementation of e-Government have been carried out both domestically and abroad. Broadly speaking, previous research on e-Government implementation can be categorized into three groups of themes, namely the effect of e-Government implementation on an output, evaluation of the application of e-Government, the factors that influence the implementation of e-Government.

In contrast to previous studies, in this study, the authors used the Regency / City Government in West Java as the research subject. Local government is an agency that is directly affected by changes in government regulations, in this case, is the application of e-Government. 6 factors studied namely local income, capital expenditure, financing, income per capita, community education level, community population.

This study, using the Regency / City Government in West Java as the sample. These districts/cities were selected as samples because they have the same characteristics as the population in terms of the various BPK audit opinions, namely WTP and WDP. In 2019 the BPK found nine weaknesses in internal control and eight problems related to

non-compliance with statutory provisions, which did not affect the fairness of the 2019 Financial Statements.

The phenomenon of the application of e-Government in Indonesia and the existence of BPK audit findings in the preparation of financial reports at the Regency / City Government in West Java shows that there are still problems in the application of e-Government. Based on this, the writer is interested in doing this research. Also, the authors want to re-examine the extent to which the application of e-Government in districts/cities in West Java and examine the effect of local revenue, capital expenditures, local government financing, regional income per capita, level of community education and community population on the level of implementation. e-Government in Regency / City Government in West Java.

The limitation of the problem in this study is to measure the influence of the factors that affect the level of e-government implementation in the Regency / City Government in West Java. Research on the level of e-Government in all Regencies / Cities in West Java and the influence of these factors is expected to provide evidence and a more concrete picture of the level of e-Government implementation in all District / City Governments in West Java and the factors that affect it.

The following are the factors that the authors will examine in this study:

Locally-generated revenue (PAD)

One of the factors that make the implementation of e-government successful is Regional Original Income (PAD) (Napitupulu, 2015). This means that if the regional economic welfare is high, then the local government has sufficient costs to serve its people through the implementation of e-Government because the implementation of e-Government requires large costs (Gallego-Álvarez et al., 2010). From this description, the authors suspect that:

H1 = The higher the local revenue, the higher the level of e-Government implementation.

Regional Government Capital Expenditure

One of the factors that implement e-government successful is district/city government resources (Napitupulu, 2015). District/city government resources are linked to specific characteristics such as financial strength and technological capacity. Adequate information and communication technology facilities will support the level of e-Government implementation (Samuel et al., 2020).From this description, the authors suspect that:

H2 = The higher the capital expenditure, the higher the level of e-Government implementation.

Local Government Financing

One of the factors that make the implementation of e-government successful is the presence of external pressure (Napitupulu, 2015). The existence of financing can support the implementation of e-government because of external pressures that demand transparent disclosure of local government financing. Thus, when local governments have financing, the disclosure of financial information to the public becomes important

by issuing reports that reflect the financial situation of the government (Mayasari, 2016). From this description, the authors suspect that:

H3: The higher the local government funding, the higher the level of e-Government implementation.

Regional Income Per Capita

One of the factors that make the implementation of e-government successful is the awareness of the community and local government itself (Napitupulu, 2015). Regions with a higher income per capita level will have a higher level of political oversight and tend to have more demand for accountability by the community (Elkadi, 2013). From this description, the authors suspect that:

H4: The higher the regional income per capita, the higher the level of e-government implementation in the government.

Education Level

One of the factors that implement e-government success is computer/internet literacy from users/communities (Napitupulu, 2015). The level of education greatly influences people's ability to access information technology, so it will also affect the successful implementation of e-Government (Samuel et al., 2020). From this description, the authors suspect that:

H5: The higher the public education, the higher the level of e-government implementation in the government.

Population

One of the factors that implement e-government success is a supportive socio-cultural environment (Napitupulu, 2015). Local governments are more likely to adopt e-Government technology than smaller local governments because larger local governments tend to have greater demands for providing public services and improving information services (Elkadi, 2013). From this description, the authors suspect that:

H6: The higher the population, the higher the level of e-government implementation in the government.

From the results of the description of the factors above, it can be seen that the framework in the form of a diagram:
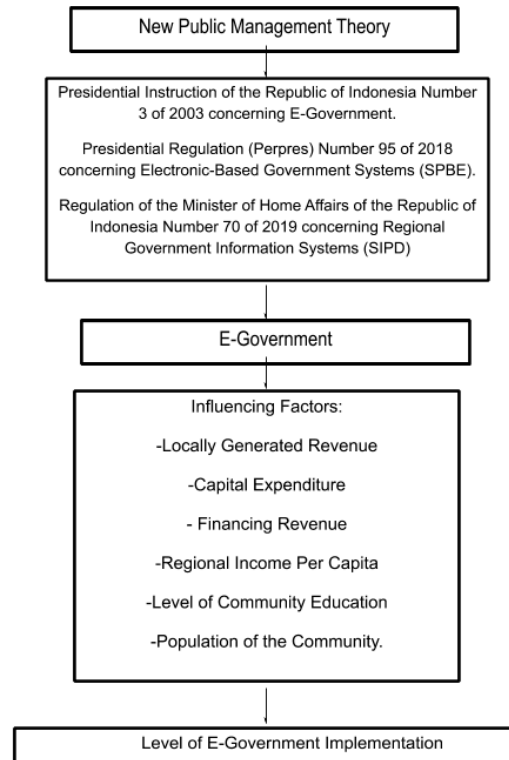
Picture 1. Research Framework
Source: data was processed by the researcher (2019)

METHODS

The analytical method used in this study is Linear Regression Analysis, namely by using the Ordinary Least Square (OLS). OLS is an estimate of a regression line by minimizing the sum of the squares of the error for each observation against this line to measure the strength and show the direction of the relationship between the dependent variable and the independent variable (Sekaran & Bougie, 2016).

Based on the objective, this research is associative research. "Associative research is research that aims to determine the effect or

relationship between two or more variables." (Sugiyono, 2016)

Based on the type of data, this research is quantitative. "The quantitative method can be interpreted as a research method based on the philosophy of positivism, used to research on certain populations or samples, data collection using research instruments, quantitative/statistical data analysis, to test predetermined hypotheses. " (Sugiyono, 2016).

Based on data collection techniques, this study uses secondary data, namely local

government financial reports and statistical central agency reports.

This research was conducted in all District / City Governments in West Java in December 2020

Testing the hypothesis in this study using linear regression analysis. Hypothesis testing is used to see how much the factors can influence the level of accrual basis application in government accounting partially using the zero-order value compared to the value of the r table.

Operational Variable:

Table. 1 Operational Variable

Variable	Indicator
Locally Generated Revenue	Realization of Local Revenue in 2019
Capital Expenditure	Realization of Capital Expenditure in 2019
Financing Revenue	Realization of Financing Revenue in 2019
Regional Income Per Capita	GRDP Per Capita Based on 2019 Constant Prices
Level of Community Education	School Participation Rate Ages 19-24 2019
The population of Community	Total Population of Regency / City 2019
Level of E-Government Implementation	2019 Electronic Based Government System Index Value

Source: data was processed by the researcher (2019

RESULTS AND DISCUSSION

Financial and non-financial data used in this study as variable x and variable y in this study can be seen in Table 1 below:

Table. 2 Regional Government Financial and Non-Financial Data in West Java

	Realization of Local Revenue in 2019	Realization of Capital Expenditure in 2019	Realization of Financing Revenue in 2019	GRDP Per Capita Based on 2019 Constant Prices	School Participation Rate Ages 19-24 2019	Total Population 2019	SPBE Index Value	SPBE Predicate
Kab. Bogor	2.451.753.202	1.200.805.909	0	26.296.550	25,76	5.965.410	2,58	Sufficient
Kab.	556.744.295	544.637.937	89.807.991	18.922.739	14,78	2.466.272	0,00	N/A

Sukabumi

Kab. Cianjur	602.556.114	585.378.364	45.892.730	14.128.884	8,21	2.263.072	2,75	Good
Kab. Bandung	849.284.377	810.096.933	698.763.578	21.809.417	18,51	3.775.279	2,85	Good
Kab. Garut	472.939.892	701.584.667	91.911.752	14.907.060	11,42	2.622.425	2,61	Good
Kab. Tasikmalaya	257.296.743	335.689.638	92.945.542	14.016.644	18,09	1.754.128	0,00	N/A
Kab. Ciamis	238.094.915	291.187.767	48.999.789	18.431.492	47,07	1.195.176	2,35	Sufficient
Kab. Kuningan	331.071.737	151.571.312	0	15.599.976	13,84	1.080.804	2,11	Sufficient
Kab. Cirebon	597.481.096	350.844.163	95.000.000	15.378.654	19,92	2.192.903	2,89	Good
Kab. Majalengka	473.450.000	845.613.153	42.270.522	17.724.742	10,26	1.205.034	2,19	Sufficient
Kab. Sumedang	530.215.807	336.461.624	5.855.752	20.773.420	18,57	1.152.400	2,51	Sufficient
Kab. Indramayu	439.593.641	1.039.413.698	13.200.000	34.802.101	10,55	1.728.469	2,70	Good
Kab. Subang	473.715.728	329.025.208	113.000.000	17.904.497	9,41	1.595.825	3,01	Good
Kab. Purwakarta	464.858.009	350.837.123	67.000.000	48.071.784	18,39	962.893	3,14	Good
Kab. Karawang	1.414.407.023	670.513.813	186.310.981	69.563.075	15,11	2.353.915	3,39	Good
Kab. Bekasi	2.183.381.401	1.040.687.329	662.321.928	66.965.638	28,48	3.763.886	0,00	N/A
Kab. Bandung Barat	581.055.645	475.637.909	0	18.470.749	9,77	1.699.896	2,41	Sufficient
Kab. Pangandaran	144.933.724	363.435.217	66.887.106	19.412.058	11,71	399.284	2,37	Sufficient
Kota Bogor	944.394.651	481.846.388	268.697.704	29.000.138	29,74	1.112.081	2,97	Good
Kota Sukabumi	376.146.457	186.796.853	35.246.020	26.346.398	28,37	328.680	2,48	Sufficient
Kota	3.055.014.614	1.128.631.620	779.006.054	78.808.426	39,12	2.507.888	3,72	Very Good

Bandung								
Kota Cirebon	478.150.076	185.578.360	87.601.350	52.653.543	17,19	319.312	2,27	Sufficient
Kota Bekasi	3.273.595.338	1.536.128.399	41.855.773	23.104.660	37,11	3.003.923	3,43	Good
Kota Depok	1.114.036.195	855.236.568	654.365.450	20.390.600	35,13	2.406.826	3,17	Good
Kota Cimahi	444.244.273	403.050.193	295.137.835	36.857.695	30,78	614.304	3,16	Good
Kota Tasikmalaya	298.057.366	241.448.588	81.953.412	23.731.278	19,46	663.517	2,13	Sufficient
Kota Banjar	131.881.763	140.167.246	83.060.542	17.589.170	19,85	183.110	1,93	Sufficient

Source: BPS West Java 2019 Financial and Non-Financial Statistic Report. (Badan Pusat Statistik Provinsi Jawa Barat, 2020)

From the table above, it can be seen that all the data used for this study are secondary data collected from BPS West Java and the SPBE website. It can be seen that Bandung City is the best index recipient compared to other cities with the predicate Very Good. In line with that, the highest GRDP and Financing Revenue were in Bandung City. While the largest population is in the Kab. Bogor and the highest APS are Kab. Ciamis. Furthermore, the highest capital expenditure and PAD are in Bekasi City. From the data above, it is processed using SPSS Software with Linear Regression Analysis method to test the hypothesis so that the data below is obtained:

Table. 3 Linear Regression Analysis Test Results

Variable X	Value of Regression Test Results (Zero-Order)	R-Value Table	R Count> R Table then the Hypothesis is Accepted
PAD	0.742	0.4329	Accepted
EXPEND	0.588	0.4329	Accepted
FIN	0.536	0.4329	Accepted
GRDP	0.531	0.4329	Accepted
APS	0.335	0.4329	Rejected
POP	0.597	0.4329	Accepted

Source: data was processed by the researcher (2019)

From the results of linear regression analysis using SPSS software, the results of the table above are obtained. It can be seen that Local Own Revenue, Capital Expenditure, Funding Revenue, GRDP, and Population have a positive effect on the SPBE Index Value. This means that the higher the Regional Original Income, Capital Expenditure, Funding Revenue, GRDP, and Population, the higher the SPBE Index value. Meanwhile, the School Participation Rate does not affect the SPBE Index Value.

Governance can be defined as a way of managing public affairs. The United Nations Development Program (UNDP) defines good governance as "the exercise of political, economic, and administrative authority to manage a nation's affairs at all levels". Governance includes all mechanisms, processes and institutions in which citizens and community groups prioritize their interests, exercise legal rights, fulfil obligations and bridge differences between them (Mardiasmo, 2018).

From this understanding, it can be seen that UNDP places more emphasis on political, economic, and administrative aspects of governance at all levels. Political governance refers to the policymaking process (policy/strategy formulation). Economic governance refers to the process of making decisions in the economic sector which have implications for the problem of equity, reducing poverty and improving the quality of life. Administrative governance refers to a system of implementing policies.

Referring to this conception, good governance has several key attributes such as being effective, participatory, transparent, accountable, productive, and equal and able to promote law enforcement. Above all, the main attribute of good governance is how to use power and authority in solving various public problems.

Meanwhile, the World Bank in defines good governance as "the way state power is used in managing economic and social resources for the development of society". In this case, the World Bank places more emphasis on the way the government manages social and economic resources for the benefit of community development. Referring to the World Bank and UNDP programs, the orientation of public sector development is to create good governance (Mardiasmo, 2018).

From this it is by the results of this study, namely in implementing e-government with the aim of good governance, the emphasis is on how local governments manage their resources for the benefit of community development. It can be seen from the results of the hypothesis testing that the factors of Regional Original Income, Capital Expenditures, Funding Revenue, GRDP, and Population have a positive effect on the SPBE Index Value. This means that the higher the Regional Original Income, Capital Expenditure, Funding Revenue, GRDP, and Population, the higher the SPBE Index value. From this, it can be concluded that Regional Governments that have good resources are managed in a good way for the benefit of community development resulting in good governance.

CONCLUSION

This study aims to examine the influence of the PAD, capital expenditure, financing revenue, GRDP, APS, and population factors on the e-government index value. Data analysis used linear regression analysis with quantitative research methods. The results of the study based on linear regression indicate that the PAD, capital expenditure, financing revenue,

GRDP, and population factors have a positive effect on the e-government index value in district/city governments in West Java. This means that the higher the Regional Original Income, Capital Expenditure, Financing Revenue, GRDP, and Population, the higher the SPBE Index value. Meanwhile, the APS factor or School Participation Rate does not affect this study. This becomes interesting to study for other researchers to prove again how the APS factor is in other areas.

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