UDC 331

THE MEDIATING ROLE OF E-GOVERNMENT IN THE RELATIONSHIP BETWEEN LEADERSHIP AND CIVIL SERVANTS' PERFORMANCE IN WAKATOBI REGENCY, INDONESIA

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ABSTRACT

The study intends to examine the effects of leadership on e-government and ASN performance, and that of e-government on civil servants' performance, exploring the mediating role of e-government on the relationship between leadership and civil servants' performance in Wakatobi regency. The population is all civil servants at 40 regional government agencies in Wakatobi regency, Indonesia, covering 1,109 people. The sampling follows slovin formula that results in 261 with 5% accuracy rate. Questionnaires are distributed on-line. The results confirm that: (1) leadership has a positive and significant effect on e-government. (2) E-government application has a positive and significant effect on civil servants' performance. (3) Leadership has a positive and significant effect on civil servants' performance. (4) E-government mediates relationship between leadership and civil servants' performance at regional government agencies in Wakatobi Regency. It implies that e-government can mediate the effect leadership on civil servants' performance and that a leader would quickly achieve organizational objectives by means of information system.

KEY WORDS

Leadership, e-government, civil servants, performance.

Leadership plays important role for any organization that under the siege of changes is in attempts to maintain its existence and pave the way for progress achievement. With its inspiring power, leadership can uplift employee performance with its subsequent increase in productivity. Leadership, and its leadership style, determine organizational culture and ways to manage organization. Accordingly it sets the course organization will take, and its future destiny it would harvest. In information era, where service is provided in timely basis with transparent principle, government needs reliable information technology to make sure of accountability and integrated service. It warrants its internal stakeholders to move forward in the same manner, gearing organization to state-of-the art-advance, and its external stakeholders to tract its services and prospective growth. It also allows for two-way interactions that opens interaction through review, judgment and feedback.

The so-called e-government has been common practice among public organizations to support their governance that covers effectiveness, efficiency and transparency. It promotes interaction between organizations and their stakeholders that enable for integrated service, assure easy access and convenience, and open the chance for voice participation instrumental for service improvement and checks that all grasp service quality. National policy regarding regional autonomy through the passage of Act No. 32 of 2004 encourages regional governments to promote their regional image and governance quality to express the successful results of the policy. One way to do this is through the application of e-government. Government serves the interests of society, private organizations and businesses, and best services can be provided by means of e-government application.

With this as background, it is logical to assume that there is should be an interrelationship between leadership, e-government application, and employee performance

in public organizations, especially it would be of great importance in exploring the mediating role of e-government in the relationship between leadership and employee performance. The importance of exploration is based on several reasons. First, research on the effect ofe-government and leadership on the increase of employee performance provides mixed results. Second, it is also the case for research on the effect of E-government on performance. It all brings up the question on the significant role of e-government application in employee performance in public organization.

For leadershipe-government case, Kifleand Cheng (2009) showed that leadership only had little effect on e-government. As regards the effect of e-government on performance, Heryana (2013) confirmed that application of e-governmentstronglysupported governance. Khanand Vijayashree (2015) instead showed that e-government had an insignificantly positive effect on performance.

Several researchhas examined the effect of leadershipon employee performance. For example, Pradeep and Prabhu (2011), which highlighted the role leadership, could play to increase employee performance. Along with monetary and monetary considerations, recognition of employee contribution also plays a part in encouraging employees to increase their performance. The inconsistent research results concerning relationship between of e-government and leadership and that between e-government andemployee further researches for confirmation. They serve as a base for the present research that explores the mediating roleof e-government in the relationship between leadership and performance at public organizations in Wakatobi regency. The research results concerning the mediating role of e-government in relationship between leadership and employee performance would enrich management literature, especially regarding leadership, e-government and employee performance relationship.

It is important as public organizations in Wakatobi regency nowadays concern with goals of providing excellent services ranging from increased access to information, to integrated services, emphasizing transparency and easiness, as ways to achieve accountability in the forms of effectiveness and efficiency. Therefore, this study aims to test and analyze the influence of leadership and role of e-government on the performance of civil state apparatus in Wakatobi Regency, Indonesia.

LITERATURE REVIEW

Leadership is a continuous process of affecting organizational purposes, motivating other behaviors to achieve those purposes, and driving others to improve their behaviour with a better culture and ethics. Leadership also plays a part in shaping interpretation on certain events, in coordinating works, maintaining internal and external relationship, and drawingsupports (Rivaiand Mulyadi 2012).

Handoko (2003) held that leadership is capability to affect others to concertedly achieve organizational purposes and objectives. Leadership is a pivotal element in engendering work moral and satisfaction, security, quality of work environment, and level of achievement.

Bowersand Seashore (1964) cited four dimensions for leadership. They include (1). Support that is behaviours that uplift individuals' self esteem and sense of importance (2).Ease of interaction that is those that encourage others to develop a pleasant relationship (3). Purpose priority that is those that encourage enthusiasm of great achievement, and (4). Purpose achievement by means of coordination, resource procurement, and supervision.

There are several definitions that apply for E-*Government*. According to World Bank (2004), *e-government*refers to information technology application by public institutions that change the way they interact with their citizens, corporations, and other public institions. It enables them for providing better service to society, making more intensive interaction with business and industry, that all support more efficient government management. It would lead to decreased corruption, increased transparency and ease, larger income, and depleted costs.

E-Government is a service provision that benefits organization and stakeholders. At organization side, service provision can be made in a more efficient and effective manner. Open communication can be a valuable input for more improved service and a means for an evidence of good governance. At stakeholder side, people can evade waiting in line for getting service, unnecessary protocol which is common in any bureaucracy, and enjoy comfort at getting the service whenever and wherever possible, not to mention equal position where people can voice their opinion for service improvement.

Performance refers to results obtained for the interests of organizational purposes in line with job descriptions without violating any rules or norms (Prawirosentono 1999). Employee performance refers to achievement in quantity and quality terms obtained by an employee as a result of his or her work performance (Mangkunegara 2005).

It is conceivable that employee performance and organizational performance is intertwined, suggesting that the achievement of organizational purposes requires optimalisation of internal human resources managed and directed to it.In essence, employee performance concerns with judgment of an employee's work outcomes in terms of organizational purposes in line with his or her obligations in the organization.
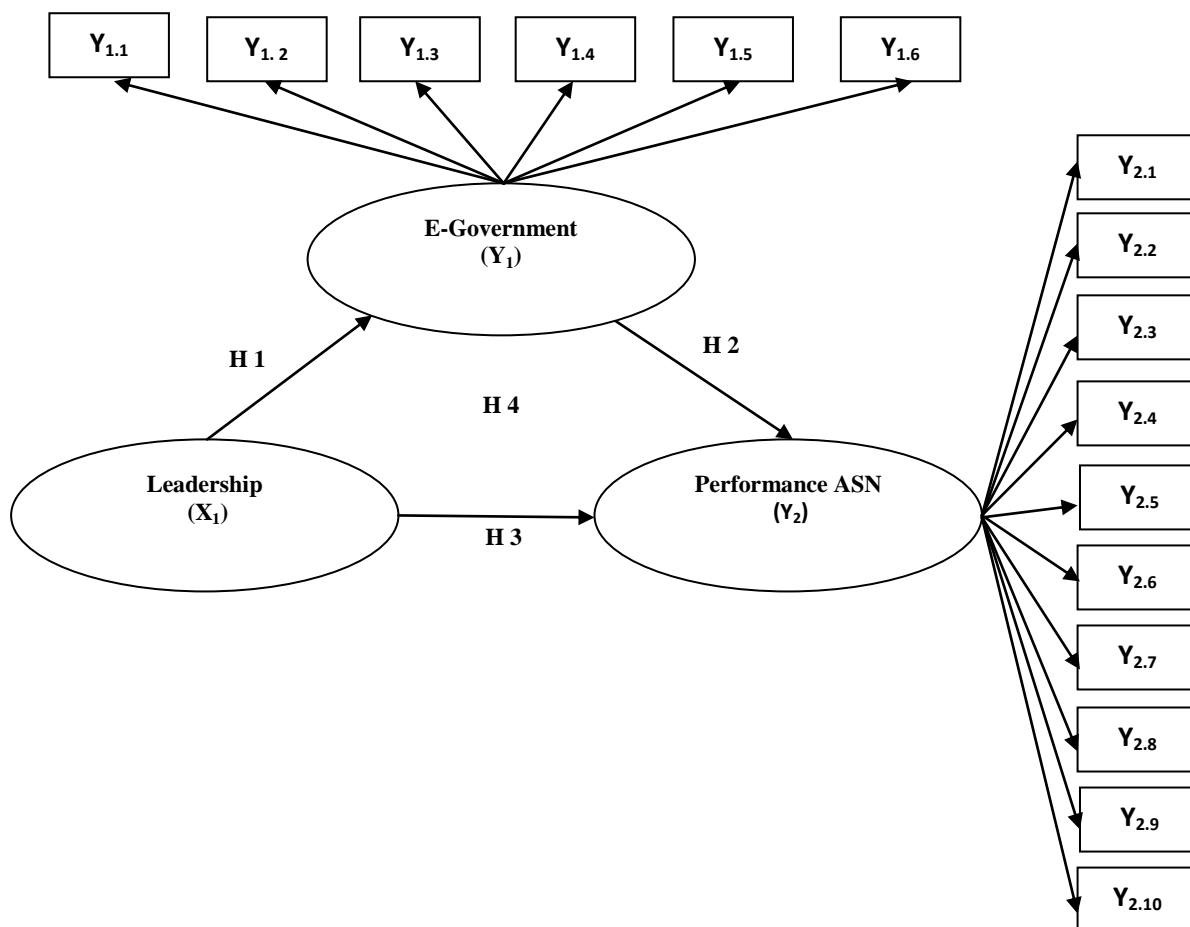

Figure 1 – Conceptual Framework

Indonesian government has set 10 indicatorsas ruled in Government regulations Number 46 of 2011 on civil servant performance. They include: (1) Work quality. (2) Work quantity. (3) Time. (4) Cost. (5) Service Orientation. (6) Integrity. (7) Commitment. (8) Discipline. (9) Cooperation. (10) Employee Leadership.

Leadership should play a pivotal role in bringing about change and new culture that is more suitable to changing conditions that require a quick response. Leadership holds responsibility in making its organization adaptable to its environment that keeps changing, especially in the era of information technology. Thus, it puts forward the following hypothesis:

H1. Leadership has a significant effect on E-Government application.

The application of technology information enables consumers or users to express their opinions important for further improvement in service. It means that organization is in all ears to consider what best to serve the interests of consumers or users. It all can lead to qualified service and increased performance. Kumarand Best (2006) argued that employee performance can be increased by applying e-government system that allows for increased communication for better services. Khanand Vijayashre (2015) proved that e-governancehas a positive effect on employee performance, eventhough significantly.Thus, it proposes the following hypothesis:

H2. E-government application has a significant effect on public servant performance

Leadership determines the extent of effort employees exert in performing their works. Capability of leadership in motivating employees to give their best is unquestionable. Leaders not only give orders to follow, but inspiration to have the same spirit, motivation, and direction. Its policies and procedures might serve as drivers or else disencouragement for employees to make some progress. Pradeep and Prabhu (2011), for example, proved that leadership has a significant effect on performance outcome that is effectiveness in job performance. So, it proposes the following hypothesis:

H3. Leadership has a significant effect on public servant performance.

With logical grounds behind relationship between leadership and e-government application and that between e-government application and public servant performance, so it is conceivable that e-government serves mediator in the relationship between leadership and public servant performance. It means that employee performance can be affected by leadership and e-government application, which simoultaneously mediates relationship between leadership and employee performance. Thus, it proposes the following hypothesis:

H4. E-Government application mediates relationship between leadership and public servant performance.

METHODS OF RESEARCH

The study applies quantitative approach to examine causal relationships between construct by means of hypothesis tests (Sekaran and Bougie 2013). By this approach, it is expected to reveal direct and indirect effects, as well as mediating effect. To achieve its purpose, questionnaire design and statisctic tool application are instrumental.

At first stage, it is important to make sure the adequacy of items and indicators in every constructs. It is ascertained by checking the matching between those based on theories and previous reseach and those in actual condition of research setting that is public institutions, that is Wakatobi regency, Indonesia. Pilot test is followed, on which it applies SPSS test to make sure of their validity and reliability. Sample size and sampling techniqueare the next issue to consider.

For data analysis, required to confirm research hypotheses, it applies Smart PLS. By doing so, the mediating role which is the concern of the study can be revealed.

The study conducts its research in regional government of Wakatobi Regency. The population is all civil servants working at 40 public organizations of Regency government in Wakatobi. Their number amounts to 1.109 people. For sample size, it follows Yamane and Slovin formula that results in 261 respondents. For sampling technique, it applies purposive sampling targeting respondents with characteristics suitable to study's purposes. They should cover leadership, *e-governance* implementors, and *e-governance* information users.

For secondary data collection, it conducts *library research* hrough: (1). Manual searching, that is compiling archives and documents available in public organizations of Regency government in Wakatobi, (2). Online searching, that is compiling published files in the forms of articles, journals, and researches from database with relevant contents.

For data analysis, it applies smart PLS for its predictive nature. The application of smart PLS is also appropriate considering that its complex model. It also can handle the sample of 261 respondents.

For mediation test, it applies Sobel test. By means of this test, it intends to find out the nature of mediation. It can be partial or full mediation or even no mediation at all. The result of course would enrich literature concerning the mediating role of e-government application in the relationship between leadership and civil servant performance. The formula is as follows:

$$Z = \frac{a \; x \; b}{\sqrt{b^2 \; x \; s_a^2 + a^2 \; x \; s_b^2 + s_a^2 \; x \; s_b^2}}$$

Where: a, b = path coefficient value; sa and sb = error standards for a and b (Source: Latan and Temalagi, 2013).

RESULTS OF STUDY

For validity and reliability tests, it applies cross loading values to measure validity and composite reliability values to measure reliability. Table 1 presents the calculation results of cross loading values. The criterium for validity is that the value of each instrument should be over 0.50. It is obvious that all indicators of latent variables have a value that isover 0.50 and are significant at 0.05. It implies that all cross loading values of indicators of leadership, e-government and civil servant performance is over cross loading values of other constructs. It can be concluded that they are all valid.

For clearer review, cross leading values of all indicators are represented as follows:

Table 1 – Cross Loading Values

Symbol	Leadership (X_1)	*e-governance* (Y_1)	Performance ASN (Y_2)
$X_{1.1}$	0.892	0.754	0.773
$X_{1.2}$	0.925	0.813	0.824
$X_{1.3}$	0.899	0.828	0.830
$X_{1.4}$	0.920	0.819	0.839
$Y_{1.1}$	0.827	0.847	0.808
$Y_{1.2}$	0.729	0.825	0.769
$Y_{1.3}$	0.757	0.890	0.838
$Y_{1.4}$	0.739	0.866	0.808
$Y_{1.5}$	0.762	0.885	0.861
$Y_{2.1}$	0.738	0.767	0.849
$Y_{2.2}$	0.759	0.773	0.879
$Y_{2.3}$	0.844	0.852	0.901
$Y_{2.4}$	0.767	0.837	0.870
$Y_{2.5}$	0.769	0.781	0.845
$Y_{2.6}$	0.800	0.848	0.872
$Y_{2.7}$	0.770	0.824	0.854
$Y_{2.8}$	0.758	0.832	0.842
$Y_{2.9}$	0.793	0.839	0.865
$Y_{2.10}$	0.771	0.826	0.869

Source: Results of Partial Least Square (PLS), 2018.

For reliability, it conducts composite reliability. The criterium for reliability is that the value of each instrument should be over 0.50.The calculation resultsof composite reliability for leadership, e-governement and civil servant performance indicate the fulfilment of reliability as their values are over 0.50.

Table 2 – The Results of Reliability Tests

Variable	Composite Reliabilty	Results
Leadership(X_1.)	0.950	Reliable
E-government (Y_1.)	0.936	Reliabble
Civil Servant Performance(Y_2.)	0.943	Reliable

Source: Result of Partial Least Square (PLS), 2018.

The evaluation of structural model is conducted by accounting on explained variance percentage that is by looking to R^2 value for dependent latent variables by means of predictive *relavance* (Q^2) value. The value of Q^2 is within range of $0 < Q^2 < 1$, where the closer the model to 1, the better the model it would mean. The more the model is away from 1 to 0 (zero), it would mean that the model lacks of *predictiverelevance*.

The measurement of structural model by means of Smart PLS results in 0.705 predictive relevance (Q^2) or 70.5%. It means that the accuracy of research model in explaining variety of leadership construct on e-government and civil servant performance is 70.5%. The rest (29.5%) is explained by other variables not included in the model. It leads to conclude that the model has a good accuracy since its predictive relevance is above 60%. R^2 (determination coefficient) of endogenousvariablesis presented at Table 3 as follows:

Table 3 – Evaluaion of Structural Model

Structural Model	Composite Reliability	Results
1	E-government (Y1)	0.783
2	Performance ASN (Y2)	0.914

Source: Result of Partial Least Square (PLS), 2018.

The research results reveal that all relationships between variables as hypothesized are significant. Their probability values (p-value) are less than alpha value of 0.05. It means that all hypotheses put forward by the research are supported. Their values are presented at Table 4 as follows:

Table4 – Direct Path Coefficients

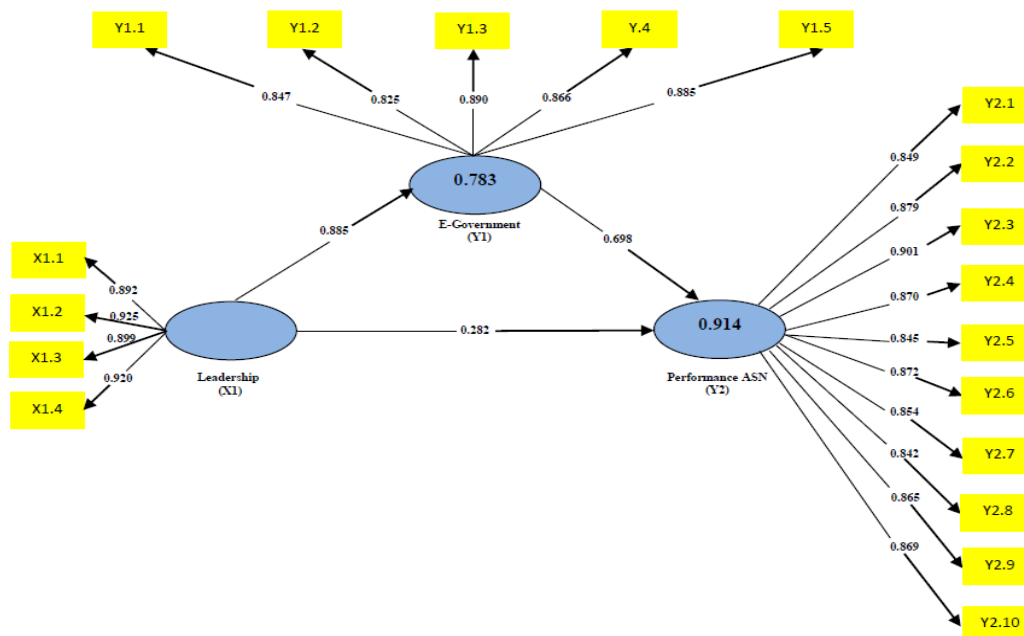| Hypotheses	Direct Effects	Path Coefficients	p-*value*	Results	
H1	Leaderships --->e-government	0.885	0.000	Significant	Support
H2	E-government -->Public servant performance	0.528	0.000	Significant	Support
H3	Leadership --->Public servant performance	0.325	0.039	Significant	Support

Source: Result of Partial Least Square (PLS), 2018.

Figure 2 - Diagramof DirectPath Coefficients (Source: Result of Partial Least Square, 2018)

By means of z-statistic developed by Sobel, the result reveals that e-government can mediate the effect of leadership on civil servant performance. P-value of e-government is 0. 0003 which is less than 0.005 alpha values. It suggests the mediating role of e-government

in the relationship between leadership and civil servant performance. Thus, hypothesis concerning the mediating role of e-government in leadership-civil servant performance relationship is supported.

	Input:		Test statistic:	Std. Error:	p-value:
a	0.885	Sobel test:	3.60442076	0.1296408	0.00031285
b	0.528	Aroian test:	3.60350681	0.12967368	0.00031395
s_a	0.020	Goodman test:	3.6053354	0.12960791	0.00031175
s_b	0.146	Reset all		Calculate	

Figure 3 – Sobel Calculation for Mediation

DISCUSSION OF RESULTS

From outer loading analysis, it is obvious that ease of interaction has a greatest contribution on leadership construct. It means that civil servants consider ease of interaction as important for leadership, and leaders should prioritize it in directing and organizaing their people.

Goal achievement through coordination is the most dominant factor in contributing leadership construct but the weakest in its implementation. Leaders should make significant improvement in goal achievement through coordination. One important improvement is to build interaction by repairing communication gap in such way that encourages employees to express ideas and problems encountered and appreciate any input from them. Leaders should orient people on the shared organizational goal.

Regarding the significant effect of leadership on e-government application, some studies have already supported the relationship. An effective and smart leadership significantly contributes to E-Governance application which widely affects the conduct of public policy and requires knowledge and skill. Kifleand Cheng (2009) proved that leadership increased e-government application, even though the extent of the effect is not as expected. It is alledgedly due to organizations under research are not professionally managed.

Another result of outer loading analysis shows that transparency, control, and accountability are the most dominant factors in contributing e-government application. In practice, respondents perceive that the three factors have been well implemented by organizations. Another important factor is cost efficiency. Respondents also see some progress made by public organizations in cost-efficiency. It implies that public organizations have made some achievements in e-government application, even though still not optimal.

The significant effect of e-government on public servant performance is supported by several studies. Heryana (2013) found that e-government application has a positive effect on organizational performance. Khan and Vijayashree (2015) also provided the same results, that e-government has a positive effect on performance. The difference is that the effect is not significant.

The result of significant effect of leadership on civil servant performance is in line with Pradeep and Prabhu (2011), which found that appreciation to achievement by employees, can lead to increased performance. Timothy and Okwu (2011) revealed that leadership styles have a positive effect on employee performance. However the effect is not significant.

The study also confirms the mediating role oleh e-government in the relationship between leadership and civil servant performance. An effective leader with ability in e-government has a bigger chance to increase civil servant performance. By means of technology information media, leaders can maintain intense interaction that enables for continuous coordination and information which move all people to the shared goals and clarifies what are important to the organizations. This would lead people to heighetened performance in terms of a better service, and higher integrity and commitment. It is in line with Alaaraj and Ibrahim (2014) who found that e-government can mediate the effect of leadership on employee performance.Their study implied that leaders could not only rely on

giving direction and driving motivation to uplift performance. They also should turn on information technology to support their effort. The implementation of e-government can increase efficiency and effectiveness in organizational management.

CONCLUSION

In the era of information era, not only private organization that should make adaptation to the use of information technology. Public organizations also should keep abreast with the most recent development in order to maintain best service. The success of the optimal use of technology information in public organization depends on several factors, however. Among others, culture and employee acceptance of change are most important factors, to mention the few. They are related to leadership, human resources, the nature of recruitment, and compensation system.

For optimal application, a more comprehensive view is required to make a sweeping change. Partial change e-government implementionserves in the relationship between leadership and employee performance unfolds the fact that organizational management and operation so far do not completely rely on information technology media. It could be so, but society as the final users of government service might have a different view regarding organizational performance.

Khan and Vijayashree (2015) showed that e-government does not have a significant effect on performance. One alleged reason for this insignificance is small sample. The present study replicates the relationship with large sample, and the result reveals significant effect of e-government on civil servant performance.

The novelty of present study lies on research setting. It conducts its research in developing country. The research of Alaaraj and Ibrahim (2014) is conducted in advanced country. However, different regions in the same developing country could bring up different results.

As e-government involves human resources and knowledge, future research could conside the inclusion of human resource development and knowledge management in the research model. They could be put as mediator or moderator depending on certain considerations and context.

Future research also could take into account the nature of mediation served by e-government in the relationship between leadership and employee performance. The present study pinpoints partial mediation. It is necessary to find out when the mediation served by e-government is partial or complete for example by making comparison between organizations in terms of developed, under-developed or developing regions or others. A more detailed study is also important to find out which departments that experience increase in employee performance by the use of e-government.

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