THE INFLUENCE OF TRANSFORMATIONAL LEADERSHIP AND MANAGEMENT INFORMATION SYSTEMS ON QUALITY CULTURE ON VOCATIONAL HIGH SCHOOL STATE IN WEST LOMBOK REGENCY OF INDONESIA

Zaputri Purkanti
Educational Administration Master Program, Mataram University, Indonesia
zaputri27@gmail.com

Agus Ramdani
Educational Administration Master Program, Mataram University, Indonesia
aramdani07@unram.ac.id

Asrin
Educational Administration Master Program, Mataram University, Indonesia
bajangasrin@gmail.com

Abstract
This study aims to analyze the influence of transformational leadership on quality culture in West Lombok Regency Vocational High School State, the influence of management information systems on quality culture in West Lombok Regency Vocational High School State, and the influence of transformational leadership and management information systems simultaneously on quality culture in West Lombok Regency Vocational High School State. This study uses a quantitative approach, type ex post facto. Data analysis techniques used in this study are simple linear regression analysis and multiple linear regression analysis. The population in this study comprised of 73 civil servant teachers from three West Lombok Regency Vocational High School. Because the population is less than 100 people, so all the population become sampled in this study. The results of this study indicate that: 1) transformational leadership has a positive and significant influence to the quality culture in the West Lombok Regency Vocational High School State at 64.3% ; 2) the management information systems has a positive and significant
influence to the quality culture in West Lombok Regency Vocational High School State at 46.1%; and 3) transformational leadership and management information systems simultaneously have a positive and significant influence to the quality culture in West Lombok Regency Vocational High School State at 65.1%.

Keywords: Transformational Leadership, Management Information Systems, Quality Culture

INTRODUCTION

Quality achievement of Vocational High School State must be continuously improve, because State Vocational Schools are schools that prepared by the government as a place to foster quality middle-level Human Resources (HR). The Government of Indonesia through the School Quality Assurance System, wants to familiarize every public school in Indonesia to apply the quality culture in their respective schools. Quality culture is "an organizational value system that creates a conducive environment for the continuation of continuous quality improvement" (Rachman, 2013). In line with Malhi (2013) who said that quality culture is "a shared system of values, beliefs and norms that focus on customer satisfaction and continuously improve the quality of products and services ".

However, in reality the cultural conditions of school quality in Indonesia, especially in State Vocational Schools in West Lombok Regency, mostly need guidance. Based on data from the West Nusa Tenggara Province Education Quality Assurance Agency, there are still 11 State Vocational High Schools in the West Lombok regency that are impacted school status and there are only 3 State Vocational High Schools with a model school status. Impact schools are schools that still need help from model schools in terms of improve the quality of learning, school management, and empowerment of school community. This indicates that, there are still 11 State Vocational High Schools in West Lombok Regency that still need guidance in terms of apply quality culture in their schools.

On the other hand, based on Constitution No. 20 of 2003 Article 15, vocational education is secondary education that prepares students especially to work in certain fields. If the quality of the outcomes produced by Vocational High School State is not satisfy, then the graduates will find it difficult to compete globally, and vice versa. Damarjati (2016) said that, "Indonesia's competitiveness in facing competition between arithmeticities and free trade is largely determined by the outcome of its HR development". Based on the statement, the Vocational High School State needs to strengthen the quality culture of the school. One of them to find out what factors can strengthen the quality culture.
Based on observation at one of the Vocational High School State which is one of the model schools in West Lombok Regency, the quality culture at the school is fairly good, because in addition to implementing national quality standards, the school also implements international quality standards namely ISO 9001: 2015, obtained information that the role of the principal who motivates and inspires the entire school community is very important in the implementation of a quality culture at the Vocational High School State. Because at the beginning of the application of quality culture, the constraints commonly faced by the school community are there are still many teachers and employees who do not yet understand how to carry out a quality culture, so that the leadership of the principal is needed to motivate and inspire subordinates to continuously implement a quality culture. And transformational leadership is leadership that motivates its followers to work towards a goal, not for short-term personal interests, and to achieve the achievement and self-actualization, not for the sake of feeling secure (Ivancevich, et. al., 2005). Transformational principals are leaders who strive to make changes to their schools in order to achieve better quality education.

The next factor that is predicted to affect quality culture is the Management Information System (MIS). MIS is "a computer-based system that provides information for some users with similar needs" (McLeod and Schell, 2001). The users here can be in the form of educational units such as Vocational High School State, and carry out a quality culture with the help of a MIS it will be easier and faster. The use of information and communication technology of education has become a necessity. This matter has even been regulated in Permendikbud No. 65 of 2013 concerning Process Standards for Primary and Secondary Education explains that the use of information and communication technology in learning must be applied in order to achieve efficiency and Influenceiveness of learning in schools.

Based on the theories and problems above, and considering that quality culture is very necessary to be improved in order to achieve quality human resources. Thus, the purpose of this study was to determine the influence of transformational leadership and management information systems on quality culture in State Vocational Secondary Schools in West Lombok Regency.

**METHODOLOGY**
This research is a quantitative research that use ex post facto approach. This research implemented in three schools built by the West Nusa Tenggara Province Education Quality Assurance Agency in 2018, namely 1 Lingsar Vocational High School State, 2 Gerung Vocational High School State and 1 Gunung Sari Vocational High School State. The population in this study were 73 civil servants teachers from three public vocational schools in West
Lombok Regency. Because the population is less than 100 people, so all the population is sampled in this study. The research instrument used a questionnaire of Likert Scale models with 4 (four) answer choices to measure the three variables, the first one is transformational leadership, management information system, and quality culture. The statement on each instrument is arranged based on the indicators of each variable. Indicators Transformational leadership in this study is based on the theory put forward by Martin (2015), Ivancevik, et. al. (2005), and Sun and Leithwood (2012), namely: 1) charismatic; 2) visionary; 3) motivating and inspiring; 4) intellectual stimulation; and 5) individual considerations. For the indicator of management information systems in this study based on Lestari’s theory (2014) and Scott (1996) consists of: 1) data security; 2) time (speed and accuracy); 3) accuracy; 4) report variation; and 5) relevance. Meanwhile, indicator of quality culture in this study based on the theory according to Basri (2011) and Rachman (2013), namely: 1) the obsession with standardized continuous improvement; 2) comprehensive involvement of school residents in the task; 3) commitment to the task; 4) oriented towards stakeholder satisfaction. Data analysis techniques used in this study are simple linear regression analysis and multiple linear regression analysis.

ANALYSIS AND RESULTS
Transformational leadership, management information systems, and quality culture are measured use questionnaires that have been tested for validity and reliability. There are 20 valid statements with good reliability status used to measure transformational leadership, 28 valid statements with good reliability status used to measure management information systems, and 17 valid statements with good reliability status used to measure quality culture.

Based on the description of the data, it is known that: 1) transformational leadership in Vocational High School State in West Lombok Regency is categorized as "good enough", it is obtained from respondents opinions of the most dominant of transformational leadership that is equal to 53.42% of the 73 respondents to rate 65 to 79 to transformational leadership of the principal; 2) management information system in the West Lombok Regency Vocational School is categorized as "good enough", which is 67.12% of 73 respondents give grades between 65 to 79 to their school management information system; and 3) quality culture in the West Lombok Regency Vocational School is categorized as "good enough". This is because, the highest number of respondents is 47.95% of 73 respondents give grades between 65 to 79 to the quality culture in their schools.

Besides that, based on the results of the data description, each indicator of each variable is obtained and is presented in table 1.
From Table 1, it can be seen that the highest score is 82.19 obtained by the "visionary" indicator, and the lowest value is 76.19 obtained by the indicator "individual considerations".

Based on Table 2 above, it can be seen that the highest score obtained from the five indicators of management information systems measured is obtained by the indicator "data security" that is equal to 76.71, while the lowest score is 73.63 obtained by the indicator "variation report / output".

From Table 3 above, it can be seen that the quality culture indicator that gets the highest score is "an obsession with continuous standardized improvement" that is equal to 82.26, while the indicator "oriented to stakeholder satisfaction" gets the lowest score of 78.19.

Furthermore, the following results of hypothesis testing using simple linear regression analysis and multiple linear regression analysis.
Based on Table 4, it can be seen transformational leadership has a positive and significant impact to the quality culture, this is because $t_{\text{arithmetic}}$ value is higher than the $t_{\text{table}}$ value of 11.300>1.994, and significance value obtained is smaller than 0.05, that is 0.000. Then, from Table 4 the transformational leadership regression coefficient (b) is 0.626, and the transformational leadership regression (a) is 14.641. Thus, the form of regression equation influence transformational leadership ($X_1$) on quality culture ($Y$) is $\hat{Y}=14.641+0.626X_1$. This means that, a change in one unit of perception in the transformational leadership variable is followed by a change in quality culture of 0.626 units in the same direction as a constant of 14.641. $R^2$ value obtained for 0.643, mean that the Influence of transformational leadership by 64.3% to the quality culture, while the rest influenced by other factors.

Furthermore, the results of the analysis of the influence between management information systems on quality culture shows that there is a strong and significant influence between the two variables. This is evident from the acquisition of $t_{\text{arithmetic}}$ value higher than the $t_{\text{table}}$ value of 7.794>1.994, and the significance value obtained is also smaller than 0.05, which is 0.000. For the form of regression equation the influence of management information system ($X_2$) on quality culture ($Y$) can be seen in Table 4 above, namely $\hat{Y}=15.694+0.461X_2$. The meaning of the regression equation is that a change in one unit of perception in the management information system variable is followed by a change in quality culture of 0.461 units in the same direction as a constant of 15.694. $R^2$ value obtained at 0.461, meaning that the influence of management information systems by 46.1% to the quality culture, while the rest influenced by other factors.

Table 5: The Influence of Transformational Leadership and Management Information System Simultaneously on Quality Culture

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean Squared</th>
<th>$R^2$</th>
<th>$t_{\text{arithmetic}}$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2468.618</td>
<td>2</td>
<td>1234.309</td>
<td>0.651</td>
<td>65.276</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The $t_{\text{arithmetic}}$ value in Table 5 is 65.276 higher than $t_{\text{table}}$ that is 3.13, indicate that there is positive influence between transformational leadership ($X_1$) and management information system ($X_2$) simultaneously on quality culture ($Y$). The significance value was obtained at 0.000 less than 0.05 (Sig.<0.05), which means that there is a significant influence between transformational leadership and management information systems simultaneously on quality culture. The $R^2$ value obtained is 0.651, this means that influence of transformational leadership...
and management information systems simultaneously by 65.1% on quality culture, while the rest is influenced by other factors.

Multiple regression equations of the influence of transformational leadership and management information systems simultaneously on quality culture are obtained based on the results of the analysts that shown in Table 6.

Table 6: Multiple Regression Analysis Result Influence X1, X2, and X3 to Y.

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficient</th>
<th>t arithmetic</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Std. Error</td>
<td></td>
</tr>
<tr>
<td>Constants (a)</td>
<td>11.960</td>
<td>4.111</td>
<td>2.909</td>
</tr>
<tr>
<td>Transformational Leadership (b1)</td>
<td>0.539</td>
<td>0.087</td>
<td>6.171</td>
</tr>
<tr>
<td>Management Information System (b2)</td>
<td>0.098</td>
<td>0.076</td>
<td>1.289</td>
</tr>
</tbody>
</table>

Based on Table 6 obtained regression equation from the influence of transformational leadership and management information systems simultaneously to the quality culture is 

$$\hat{Y}=11.960+0.539X_1+0.098X_2.$$ 

This means that every increase in one unit of transformational leadership ($X_1$), then the quality culture ($Y$) will increase by 0.539 units at a constant of 11.960, assuming that the management information system ($X_2$) remains and every increase in one unit of management information system ($X_2$), then the quality culture ($Y$) will increase by 0.098 units at a constant of 11.960, assuming that transformational leadership ($X_1$) remains.

**DISCUSSION**

**Influence of Transformational Leadership on Quality Culture in West Lombok Regency Vocational High School State**

Transformational leadership is one of the leadership that is capable of being an activator in an organization, because transformational leadership motivates the followers to work towards a goal, not for short-term personal interests, and to achieve achievement and self-actualization, not for the sake of feeling safe (Ivancevich et al., 2005). So, if schools want to mobilize their entire school community for quality culture, then leaders who have transformational leadership styles are one solution so that the quality culture in schools can develop.

Based on the results of research on transformational leadership in the West Lombok Regency Vocational High School State, it is known that transformational leadership carried out by the headmaster is categorized as quite good. This is evidenced by 53.42% of 73 respondents giving grades between 65 to 79 to the principal's transformational leadership.
The good enough category obtained by the principal’s transformational leadership was also obtained by the quality culture in the West Lombok Regency Vocational High School State. This is evident from the dominant respondents giving grades between 65 to 79 to the quality culture in the school which is 47.95% of 73 respondents.

The acquisition of the same category indicates that transformational leadership influence the quality culture. Based on the results of a simple linear regression analysis, obtained evidence that transformational leadership has a positive and significant influence to the quality culture. Based on the results of the regression test of these two variables, a regression model was obtained which stated that a change in one unit of perception on transformational leadership would be followed by a change in quality culture in West Lombok Regency Vocational High School State of 0.626 units in the same direction as a constant of 14.641. This is in line with the research conducted by Riyanta (2016) on the development of a quality culture through transformational leadership, the conclusions that to overcome the problems of applying quality culture in schools, the application of transformational leadership is very important. So it can be said that, quality culture will be even better, if the principal applies a transformational leadership style, namely by implementing the indicators of transformational leadership appropriately.

Based on the data analysis on the acquisition value of each indicator transformational leadership in the West Lombok Regency Vocational High School State, information was obtained that the indicators that had been done well by the principal and had the highest score were “visionary” indicators, namely the ability of the principal to provide an interesting idea about the future of the school, setting high standards for the progress of the school, and emphasize the commitment to the vision and mission that he has made to improve the quality of the school. This is also consistent with the results of interviews with several teachers who said that the school principals in their schools were very visionary towards the development of quality schools, in addition with their school status as a model school to increase the enthusiasm of the school principal to continue to develop a vision towards quality improvement continuous. However, the principal is still not maximal in terms of develop indicators of the ability of his individual considerations, namely the ability to understand the work styles of his subordinates, as well as his ability to recognize and treat subordinates as individuals with different interests, skills, needs, abilities, and desires. This is evidenced by the results obtained from the individual consideration indicators with the lowest value of 76.19 with a fairly good category. Whereas in the opinion of EUA (2006) that: “The main issue in promoting quality culture is the relationship between leadership and academic and administrative staff. Leadership needs to create conditions that are beneficial to the quality culture and ensure
that staff members can do their best in their abilities in a way which is in line with organizational values. This involves good communication, motivation and provide opportunities for staff development."

Based on the opinion above it can be concluded that in order to improve the quality culture, principals must improve the indicators of transformational leadership related to their relationship with teachers and staff in their schools such as individual considerations, motivate and inspire, and intellectual stimulation.

**Influence of Management Information System on Quality Culture in West Lombok Regency Vocational High School**

Management information systems are a series of integrated information systems between people, hardware, software, communication networks, data sources, and organized policies and procedures, which provide convenience to all school citizens and stakeholders in receive the information they need about the school. and this information can be used to solve school problems so that school goals and school services can be carried out properly. Thus, it can be said that the management information system is an Influencing means to facilitate principal and school community in the decision-making that relates to the implementation of a quality culture and improve school quality.

Based on the results of the study, it was concluded that the management information system in the West Lombok Regency Vocational High School State was categorized quite well, as evidenced by the answers of the respondents give more values between 65 to 79, which is about 67.12% of 73 respondents. Same with the management information system, the quality culture in the West Lombok Regency Vocational High School State is categorized quite well. This indicates that there are influences between the two variables.

Based on simple linear regression analysis, obtained evidence of management information system has a positive and significant Influence on the quality culture. Based on the results of the regression test of these two variables, a regression model is obtained which states that a change in one unit of perception in the management information system variable is followed by a change in quality culture of 0.461 units in the same direction as a constant of 15.694. According to EUA (2006), an integrated management information system is useful in the quality process, namely in the stage of collecting data that is useful for measuring the quality of an institution. And according to Basri (2011), quality culture is part of the quality process. So it can be said that, quality culture will be even better, if the management information system is well available, that is in accordance with management information system indicators.
Based on the results of data analysis on the acquisition of the value of each indicator of management information systems in West Lombok Regency Vocational High School State, information was obtained that indicators that were well available and had the highest value were indicators of "data security" that is equal to 76.71 with good enough criteria. While the lowest score is 73.63 with a fairly good criterion obtained by the "report/output variation" indicator. Based on this, it can be interpreted that the management information system in West Lombok Regency Vocational High School State already has data security, that is information on management information systems can be accessed easily and safely, and always be checked against the compatibility between outputs and input to the school management information system so as not to there is an error. This is important for the quality culture, because when the management system is always accessible easily and safely by stakeholders and the data presented in the information system there is no error, then it indicates that the characteristics of the quality culture in terms of continuous improvement are standardized, commitment and involvement of school citizens in improving the quality of information in their school management information systems is carried out effectively.

However, the management information system at the West Lombok Regency Vocational High School State is still not maximal in terms of develop a variety of reports or outputs. This is evident from the lowest score obtained by the indicator variation report or output of 73.68 with a pretty good category. Whereas according to Mc. Leod (2001) states that information output is used by principals and non-principals (stakeholders) when they make decisions in solving problems, in this case the problem of education quality. Therefore, if the output produced is less variable, it can affect the satisfaction of people who need data about schools because it can hamper their activities in making decisions and solving problems. If stakeholder satisfaction is disrupted, the quality culture cannot work effectively.

Influence of Transformational Leadership and Management Information Systems on Quality Culture in West Lombok Regency Vocational High School State

Transformational leadership is able to mobilize the entire school community to achieve the goals and develop the school so that the culture of school quality can be carried out well. In addition to transformational leadership, a management information system (MIS) is one variable that is said to have an influence on quality culture. Considering the education world is currently faced with the era of information technology, all aspects of education can run and compete better if assisted by a good management information system. Likewise with the implementation of a quality culture, it will be even better if it is helped by the information system.
Quality culture in the West Lombok Regency Vocational School is categorized quite well. This can be seen from the respondent's most dominant percentage of 47.95% of 73 respondents give grades between 65 to 79 to the quality culture in their school.

The results of multiple regression analysis in this study also prove that transformational leadership and management information systems simultaneously have a positive influence on quality culture. Based on the results of multiple regression test against these three variables, obtained regression model which states that: 1) every increase of one unit of transformational leadership ($X_1$), then the culture of quality ($Y$) will increase by 0.539 units of the constants of 11.960, assuming that the system management information ($X_2$) remains; and 2) every increase in one unit of management information system ($X_2$), then the quality culture ($Y$) will increase by 0.098 units at a constant of 11.960, assuming that transformational leadership ($X_1$) remains. Based on the results of observations at the model school in the West Lombok Regency Vocational High School, it was concluded that the management information system is a tool that can be used to input, process, and provide results about school quality data so that it can help the work of principals and all school community in carrying out a quality culture. For example, in terms of achieve the results set in the goal, it will be easier, achieving school goals will be easier and faster, and implementing various improvements to school quality based on the evaluation / audit results data is achieved more precisely and better. So it can be said that, the culture of quality in West Lombok Regency State Vocational School will be even better, if transformational leadership and management information systems of West Lombok Regency Vocational School are also good, that is in accordance with the indicators of transformational leadership and management information systems.

From the two independent variables namely transformational leadership and management information systems, the higher contribution of influence on quality culture in West Lombok Regency Vocational High School is the transformational leadership variable of 64.3%, while the management information system contributes 46.1%. This proves that quality culture is more likely to increase if the transformational leadership are also increase. According with Choiri's (2015) opinion, that to build a strong quality culture requires a strong leader who has a strong vision and personality, because the leader is the first person to set an example of how to carry out a good quality culture to his subordinates.

Although the culture of quality in West Lombok Regency State Vocational High School is more influenced by transformational leadership factors than management information system factors, however the two factors can improve the quality culture in West Lombok Regency Vocational High School State simultaneously, so that transformational leadership and systems Management information is two important factors that must be considered in improve the quality
culture. This is evidenced by the contribution transformational leadership and information management systems to improve the quality culture in West Lombok Regency Vocational High School State simultaneously by 65.1%. This percentage shows although there are many factors that influence quality culture, transformational leadership and management information systems have a role in enhance the quality culture in the West Lombok Regency Vocational High School. In addition, based on the results of data analysis on the acquisition of the value of each quality culture indicator in West Lombok Regency Vocational High School State, it is known that the quality culture indicator that has the highest score is "obsession with continuous standardized improvement" that is equal to 82.26 with the criteria "good", while the indicator "oriented to stakeholder satisfaction" gets the lowest score, which is 78.19 with the criteria of "good enough". Based on this, it can be interpreted that the culture of quality in the West Lombok Regency Vocational High School State has developed well in increasing the obsession of the school community towards continuous improvement that is standardized for the achievement of better school quality. However, quality culture in West Lombok Regency Vocational High School State is still not maximal in terms of paying attention to stakeholder satisfaction.

Based on the previous facts, the principal’s transformational leadership and school management information systems in West Lombok Regency Vocational High Schools are expected to pay more attention to stakeholder satisfaction with school services and maintain an increase in school society’s obsession with continuous standardized improvement, for example by: 1) strengthening The mission is to continue to carry out continuous quality improvements based on existing standards, and to motivate and inspire subordinates to always work better in increasing stakeholder satisfaction and 2) continuously improving the quality of data produced by the school management information system both in terms of data security, time of data collection, accuracy of the data produced, variation of output / output, and relevance of the data produced. So that the culture of quality in the West Lombok District Vocational High School can be carried out effectively.

CONCLUSIONS AND SUGGESTIONS

Based on the results of the study, it was concluded that: 1) transformational leadership, management information system, and quality culture in Vocational High School State in West Lombok Regency are categorized as "good enough", 2) transformational leadership has a positive and significant influence on the quality culture of 64.3%; 3) the management information systems have a positive and significant influence on the quality culture that is equal to 46.1%; and 4) transformational leadership and management information systems simultaneously positive and significant impact on the quality culture that is equal to 65.1%.
The limitation of this study are: 1) the number of samples used is only 73 teachers, it would be even better if the number of samples was added and not only from the teachers; 2) the factors that influence the quality culture in this study consist of only two variables, namely transformational leadership and management information systems, while there are still many other factors that influence the quality culture; and 3) the indicators of each variable used to compile the instrument are limited by researchers, while there are many other indicators that can be used to measure the state of transformational leadership, management information systems, and quality culture, more deeply.

Suggestion from this study are: 1) For schools that want to improve the quality culture in schools, improve transformational leadership styles optimally and continuously update management information systems is a solution; 2) All school communities, from teachers, staff, and students need to be encouraged and introduced to the importance of cultivating a good quality culture so that the goals of education in schools are duly achieved. Therefore, factors that can improve the quality culture must receive attention; 3) The results of this study can be used as a reference for the further researchers to study transformational leadership, management information systems, and quality culture by taking into account other variables such as moderator variables, control variables and dependent variables that have not been discussed in this study.

REFERENCES


