Bunyamin - The Relationship between Leadership, Persistence, and Innovativeness with Total Quality Management

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The Relationship between Leadership, Persistence, and Innovativeness with Total Quality Management

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This research has the aim to find out: 1) Leadership and Total Quality Management have a relationship; 2) the relationship between Persistence with Total Quality Management of West Jakarta mayor employees; 3) Correlated Innovativeness with Total Quality Management of West Jakarta Mayor employees; and 4) the relationship between Leadership, Persistence and Innovativeness with Total Quality Management of West Jakarta Mayor employees. Research has been carried out in West Jakarta, Jakarta province by 90 people. Random multi-stage sampling was used for sampling in the study. The result of the study showed that: (1) between Leadership with Total Quality Management has a positive correlation with Linear Regression Y over X1 for Regression equation $\hat{Y} = 23.757 + 0.552 X1$ with F count = 66.487; (2) there was a positive correlation Persistence with Total Quality Management of West Jakarta Mayor employees linear regression equation $\hat{Y} = 31.487 + 0.726 X2$ with F count = 22.377; (3) there was a positive correlation between Innovativeness with Total Quality Management of West Jakarta Mayor employees linear regression equation $\hat{Y} = 35.993 + 0.448 X3$ with F count = 56.715; and (4) there was a positive correlation between Leadership, Persistence and Innovativeness with Total Quality Management of West Jakarta Mayor employees. It can be concluded that Leadership, Persistence and Innovativeness can increase the Total Quality Management of employees linear regression equation $\hat{Y} = 13.648 + 0.336 X1 + 0.402 X2 + 0.214 X3$ with 36.670.

Key words: *Total Quality Management, Leadership, Persistence, Innovativeness.*

Introduction

Total Quality Management (TQM) has a thought that a leader must be able to provide satisfactory services to customers with the aim of maintaining the survival of a company. Over the past two decades an increase in the quality of performance and innovation is the impact of good TQM. A company can succeed with TQM by: exercising high control over cost efficiency; good financial management; and improving product quality so that customer satisfaction will greatly increase. Competitive advantage is obtained when implementing TQM properly and correctly (Prjogo D.I., Sohal U.S. 2001). Organisational results and TQM have a positive impact that we can see from some expert research.

The TQM of West Jakarta Mayor employees who are linked to Leadership, Perseverance and Innovation are discussed in this article.

From some of the above studies, we have found that there has been no research with the correlation method about TQM which is linked by leadership, presistence and innovativness.

Total Quality Management

The most popular management concept is TQM, where in the past two decades the quality improvement approach has been used by many organisations and many scholars to conduct research on TQM (Rahman S., & Bullock P., 2005).

The eight dimensions that were the focus of the research conducted by Prajogo consisted of: leadership, process management, supplier management, systems approaches to management, continuous improvment, employees management, focus on customer and factual approaches to decision making. Some dimensions are built by TQM. Various activities that define TQM: leadership of management, data reporting, human resource management, supplier quality management, product service design, quality department roles, training, employee relations, focus of customer, management of process, strategic planning, and technology information are often used in several studies (Prajogo DI, Sohal AS 2003).

Many scholars have conducted research on TQM and performance. The types of performance that have been studied are quality performance, financial performance, operational quality and innovative. They have a strong and positive relationship with TQM (Sarph, J. V., Benson P., G., Schroeder R. G., 1989). High quality products can be realised by implementing TQM that is in accordance with the standards. According to business

competition can be determined by the quality of a product. The activities of companies that create good products and services in winning fierce competition are definitions of quality management (Melgo N. P., Poen-Monters J.M, & Ordas-Vazquez C. J. 2009). TQM is very closely related to TQM. TQM is used as an indicator of the performance of quality we take from a statement from Kaynak (2003). Productivity, scrap and rework costs, delivery time for materials purchased, product/service quality and delivery time for finished products to customers are indicators of quality performance. Adaptation of the changing environment so that a quality system based on employee involvement is urgently needed in accordance with the objectives of TQM implementation (Mielgo N. P., et.al., 2009). The main factor that is highly considered is the satisfaction of a customer (Pajogo D.I., Sohal U.S. 2004). Wilkinson (Wilkiinson A., Redman T., Snape E., & Marchingtons M., 1998), stated that requirements of customer desires, namely quality, so that TQM in the process is seen in more detail from specific goods so that customers feel satisfied, this is realised from the production stage (Sadıkoğlu E., Zehir C., 2010). Quality employees can be positively related to product quality so that leadership and presence have an impact on TQM.

Innovation becomes an advantage in winning fierce business competition (Prajogo D.I., Brown A., 2004). The market, rapid changes to unstable conditions that make companies required to innovate on products, and finding ways to increase profits from market share, makes TQM acceptable to many companies that are considered to accelerate the innovation process (Costa M. M., Lorente A. R., 2008).

The results of high quality achievements can be seen as an input including viewing TQM as an input interaction consisting of instruments, methods and individuals, , this policy is explained by Al Ali (2008). The successful implementation of TQM can be seen from a comprehensive set of tools and methods of management. Flynn et al. (1994) stated that several studies using various instruments regarding the application of the quality management principles of several companies that make the determinant of the success of TQM. Employee engagement, customer focus, strategic quality management, leadership, fact-based management, continuous improvement, process management and supplier involvement are all criteria of TQM.

Leadership

Interaction patterns, role relationships, traits, behaviours, influences and transformational relationships of leaders and staff are interrelated with leadership. An employee's performance can be seen from the achievements and desires of individuals who are driven by good collaboration between leaders and staff. This can be seen from the integration model of Colquit et al., (2011).

Organisational success and effectiveness is influenced by a leader who has the ability to motivate, influence and allow others to contribute (Yukl, 2010). The process of influencing others to achieve company goals is a definition of leadership according to Ivancevich et al., (2014). Characteristics of a leader are: (1) efforts to carry out development in terms of trust; (2) giving employees understanding; (3) activities that affect the company's activities and dare to take risks; and (4) giving optimistic expectations for employees in completing tasks.

Mullins (2010) defines leadership as a relationship through which one person influences the behaviour or actions of other people. Leadership is always present in every group of people related to work. Leadership is not always interpreted as a command or supervision (control), but rather on the concept of group, relationships with people that inspire and build a vision that others can know. An institutional leader must focus on the movement of people and the progress of the institution by developing staff competency and teamwork in order to develop the institution. So leaders interpret relationships with subordinates and provide clear organisational vision and mission information to other employees for organisational purposes.

Persistence

Strength comes from within and outside the human self that affects the work of the individual. Actually perseverance has similarities with motivation because they both originate from within and outside the self of the individual.

Napollion (2009) also explained perseverance is an important factor which means that in the procedure of changing desires into their equivalent in the form of money. The basic strength of the presence is the strength of a strong will to realise the desire to achieve a goal so that the foundation of a person experiences an increase in the presistence.

Absence of special knowledge. Not being able to make decisions, the habit of "giving up responsibility for the circumstances of others", rather than confronting directly. The habit of relying on reason, rather than creating definite plans to solve existing problems. Satisfied with yourself just to entertain yourself, and there is no hope for those who experience it. In dealing with differences of opinion, then we can see the readiness of individuals seen from the knowledge possessed and the ability of the discussions. Unpleasant circumstances if someone easily mistreats others but is difficult to accept when blamed by others. Motivation is driven by individual desires seen from a well-planned plan or not. the desire for discussion in dealing with problems, criticism, ambitious high or low, and failure to make plans to be done because of what others will think, do, and say.

Clear goals are also supported by a burning desire to fulfill them. a closed mind when discussing the negative effects of both positive and negative suggestions from coworkers and continuing plans for action. A fellowship that is familiar with one or more people who will encourage us to move forward with plans and goals.

Persistence is one of the strengths of character proposed by which defines persistence as a continuation of voluntary actions taken to achieve a goal despite obstacles, difficulties or despair.
Hill also suggested that persistence was an important factor in turning desire into reality.

Innovativeness

Innovativeness or often known as innovation is originated and sourced from innovation. An innovation is an idea, practice or object that is perceived as new by an individual or other unit of adoption. The process of innovation in a person occurs because of the adoption process so that there is innovation (innovativeness).

While innovation according to Everett M. Rogers is a system where the initial level of ability to adopt new ideas from co-workers.

Thus innovativeness is the degree or extent to which individuals or other adoption units are relatively early in the social system can take and practice from new ideas from other members. Innovation shows more real change in behaviour which is perubahan sikap dan kognitif merupakan tujuan utama program difusi. So innovativeness is the main behaviour in the process of innovation diffusion.

Barbara Mróz-Gorgoń (1983) explains the terms and meanings of the following words of innovation:
"The term innovation is derived from the Latin word innovates, which means to renew, to change, to improve". Today, this word is commonly associated only with totally new inventions, products and services. It is difficult to agree with such an approach to innovation. With reference to the above quoted genesis, the role of innovation as the process of improving and finding new applications for the existing ideas, concepts, goods and services should be emphasised.

In O 'Sullivan (2008) the following is parsed:
"Innovation is often used in conjunction with terms such as creativity, design, invention and exploitation. It is also closely associated with terms such as growth and change. Let's explore these relationships in more detail in order to get a deeper understanding of what we mean by innovation. Related concepts include invention, growth, creativity, design, exploitation, change, failure, entrepreneurship, customers, knowledge and society ".

In the initial explanation, O'Sullivan explained that innovation from organisational issues, knowledge, product quality and services is measured from the management aspect, down to the individual level. According to him, efficiency, quality, experience and knowledge that helps the growth of the organisation is seen from the profit than the essence of innovation. As this explanation describes:

"Innovation is about helping organisations grow. Growth is often measured in terms of turnover and profit, but can also occur in knowledge, in human experience and in efficiency and quality. Innovation is the process of making changes to something established by introducing something new. As such, it can be radical or incremental, and it can be applied to products, processes or services and in any organisation. It can happen at all levels in an organisation, from management teams to departments and even to the level of the individual (Xue Bai, Daniel W. L., Lai & Nelson W. S., Chow, 2010).

Associated with the above innovation concept, innovation is an idea that is found to facilitate the delivery of something that can be observed or felt by the community or individual. Individuals as part of a social system are recipients (adopters) of innovations obtained through diffusion. From this an individual can be described as a system based on their innovativeness.

The diffusion process of innovation depends on the ability of individuals to absorb ideas or new ideas so as to facilitate the work on a system.

Research Methods

The research method used is a survey method to uncover the effects of leadership, persistence and innovation with TQM variables. In accordance with the existing title and problem, the research is carried out through the correlational method with the problem constellation as shown in Figure 1.

Figure 1: Constellation of problems
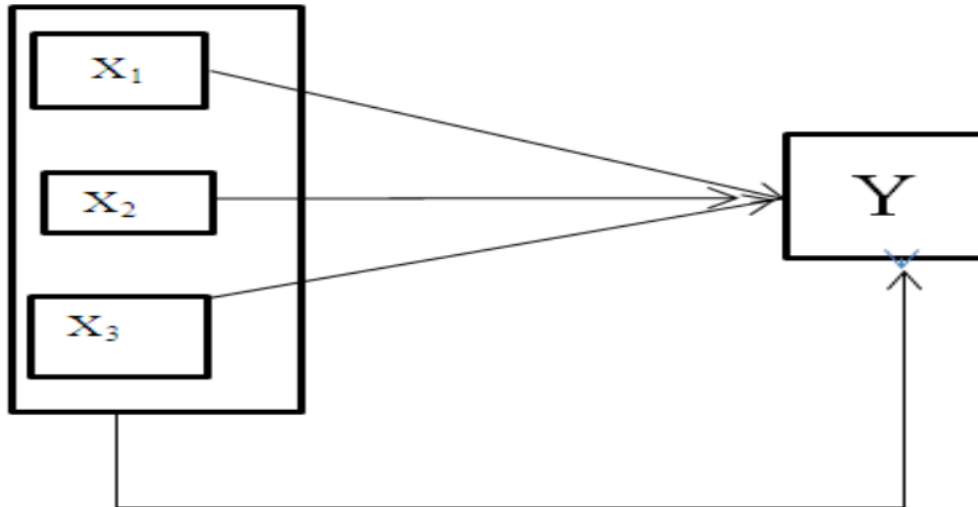
Information:
Y = total quality management
X_1 = leadership
X_2 = persistence
X_3 = innovativeness

Results and Discussion
The Relationship between Leadership and Total Quality Management

Based on data processing to find the correlated dependent variables (Y) and independent variable (X1) variable Y through simple linear regression analysis techniques obtained the results in Table 1.

Table 1: Constant Values a and constant b Regression Equation Y on X_1

Model		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	23.757	3.898		6.095	0
	X1	0.552	0.068	0.656	8.154	0

Based on the table above a simple linear regression equation can be arranged $\hat{Y} = 23.757 + 0.552\ X1$. Furthermore, based on data processing obtained table test mean and linear regression Y over X1 for regression equation $\hat{Y} = 23.757 + 0.552\ X1$, as follows in Table 2.

Table 2: Significance and Linear Regression Test of Y for X1 for Regression Equation $\hat{Y} = 23.757 + 0.552\ X1$

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	928.382	1	928.382	66.487	0.000[b]
1	Residual	1228.774	88	13.963		
	Total	2157.156	89			

Table 3: Constant Values a and constant b correlation Y for X_1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,656[a]	0,43	0,424	3,737

The result of simple regression equation to obtain F count of 66.487 is greater than F table of 3.949 ($\alpha = 0.05$) and F table of 6.932 ($\alpha = 0.01$), thus H_1 is accepted, simple regression equation model for Y above X1 proved to be significant.

In the R_{count} test obtained by 65.6% with a determination test of 43. So it can be said that the leadership gives a relationship of 65.6% to total quality management and the remaining 34.4% is influenced by other variables.

The Relationship between Presence and Total Quality Management

Based on data processing for Y and X_2 has correlated through simple linear regression analysis techniques as seen in Table 4.

Table 4: Constant Values a and constant b Regression Equation Y on X_2

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	31.487	5.072		6.208	0
	X2	0.726	0.153	0.45	4.73	0

Based on Table 4 a simple linear regression equation can be arranged $\hat{Y} = 31{,}487 + 0.726\ X_2$. Furthermore, based on data processing obtained table test mean and linear regression Y over X1 for regression equation $\hat{Y} = 31{,}487 + 0.726\ X_2$, as see in Table 5.

Table 5: Significance and Linear Regression Test of Y for X_2 for
Regression Equation $\hat{Y} = 31{,}487 + 0.726\ X_2$

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	437.327	1	437.327	22.377	0.000[b]
1	Residual	1719.829	88	19.544		
	Total	2157.156	89			

Table 6: Constant Values a and constant b correlation Y for X_2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,450[a]	0,203	0,194	4,421

The result of simple regression equation to obtain F count of 22.37 is greater than F table of 3.949 ($\alpha = 0.05$) and F table of 6.932 ($\alpha = 0.01$). This result means hypothesis 1 is accepted, a simple regression equation model for Y above X_2 proved to be significant.

In the R_{count} test obtained by 45.0% with a determination test of 20.3. So it can be said that the persistence gives a relationship of 45% to total quality management and the remaining 55% is influenced by other variables.

*The Relationship between **Innovativness** with **Total Quality Management***

Based on data processing for X_3 and Y was correlated through simple linear regression analysis techniques to obtain Table 7.

Table 7. Constant Values a and constant b Regression Equation Y on X_3

Models		Unstandardized Coefficient		Standardized Coefficient	T count	Sig.
		B	Std. Error	Beta		
1	(Constant)	35.993	2.606		13.812	0.000
	X3	0.448	0.059	0.626	7.531	0.000

Based on Table 7 a simple linear regression equation can be arranged $\hat{Y} = 35.993 + 0.448\ X_3$. Furthermore, based on data processing obtained table test mean and linear regression Y over X_3 for regression equation $\hat{Y} = 35{,}993 + 0.448\ X_3$, as follows in Table 8.

Table 8: Significance and Linear Regression Test of Y for X_3 for
Regression Equation $35,993 + 0.448 X_3$

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	845.407	1	845.407	56.715	0.000^b
	Residual	1311.748	88	14.906		
	Total	2157.156	89			

Table 9: Constant Values a and constant b correlation Y on X_3

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.626^a	0.392	0.385	3.861

The result of simple regression equation to obtain F count of 56.715 is greater than F table of 3.949 ($\alpha = 0.05$) and F table of 6.932 ($\alpha = 0.01$), thus H_0 is rejected and H1 is accepted, which means a simple regression equation model for Y above X_3 proved to be significant.

In the R_{count} test obtained by 62.6% with a determination test of 39,2. So it can be said that the leadership gives a relationship of 62.6% to total quality management and the remaining 37.4% is influenced by other variables.

The Relationship between Leadership, Persistence and Innovation Together with Total Quality Management

Based on data processing for the relationship between the independent variable X_1, X_2 and X_3 with the dependent variable Y through simple linear regression analysis techniques results are obtained in Table 10.

Table 10: Constant Values a and constant b Regression Equation Y on X_1, X_2, and X_3

Model		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.648	4.575		2.983	0.004
	X1	0.336	0.078	0.399	4.314	0.000
	X2	0.402	0.122	0.249	3.306	0.001
	X3	0.214	0.067	0.299	3.199	0.002

Based on Table 10 a simple linear regression equation can be arranged $\hat{Y} = 13.648 + 0.336 X_1 + 0.402 X_2 + 0.214 X_3$. Furthermore, based on data processing obtained table test mean and linear regression Y over X_3 for regression equation $\hat{Y} = 13.648 + 0.336 X_1 + 0.402 X_2 + 0.214 X_3$, as follows in Table 11.

Table 11: Significance and Linear Regression Test of Y for X_1, X_2, and X_3 for Regression Equation $\hat{Y} = 13{,}648 + 0{,}336\,X_1 + 0{,}402\,X_2 + 0.214\,X_3$

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1210.693	3	403.564	36.670	0.000[b]
	Residual	946.463	86	11.005		
	Total	2157.156	89			

Table 12: Constant Values a and constant b correlation Y for X_1, X_2, and X_3

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.749[a]	0.561	0.546	3.317

The result of simple regression equation to obtain F count of 36.670 is greater than F table of 3.949 ($\alpha = 0.05$) and F table of 6.932 ($\alpha = 0.01$), thus H_0 is rejected and H1 is accepted, which means a simple regression equation model for Y above X_3 proved to be significant.

In the R_{count} test obtained by 74.9% with a determination test of 56.1. So it can be said that the leadership gives a relationship of 74.9% to total quality management and the remaining 25.1% is influenced by other variables.

Leadership can only be carried out by a leader. A leader is someone who has the ability to lead, has the ability to influence the opinion of a person or group of people. A leader is someone who is active in making plans, coordinating, conducting experiments and leading the work to achieve goals together. At first the leadership theory focused on the different qualities between leaders and subordinates. At present, according to Wagner (2008), many leadership theories emerge and can be grouped into eight main types.

Great leadership was born open created so that the capacity to lead was found in this individual based on the assumption of the Great Man Theory. Leadership depends on the character or nature possessed by someone, this is mentioned in the theory of nature contingency (Wagner, 2008).

First, the Great Man Theory assumes that the capacity of leaders is inherent - great leaders are born, not made. Second, the Theory of Nature, often shows certain personality or characteristics. Third, Situational Theory, the leader chooses the right action according to the situation variables. Fourth, Behavioural Theory, leadership theory based on the belief that great leaders are made, not born. (Wagner, 2008).

Leadership literally comes from the word leader. The word leader means understanding directing, fostering or regulating, guiding and also showing or influencing. Influence activity is the core of leadership, so that a person can be an effective leader if they are able to

influence others to want to carry out requests, support and implement policies. Steven L., McShane& Marry Ann Von Ginow defines leadership as about influencing, motivating and enabling others to contribute towards the effectiveness and success of the organisations of which they are members (McShane & Glinow, 2013). Leadership is an activity that influences, motivates and enables others to contribute to a successful and effective organisation for its members. Here is a path-goal theory that explains the impact of leader behaviour on the motivation of followers satisfaction and performance, so that the explanation is thought so leadership and total quality management has relationship.

Whereas Jamma's research (2016) found that to improve teacher's work ethic it can be done through increasing teacher job satisfaction together with improving the leadership style of the Principal of the school. It can be said that leadership style determines teacher performance. In line with these findings, Ramadoni & Arifin (2016) found that in improving teacher performance, among others by giving rewards to teachers who excel through teacher rapport assessments given at the beginning of each semester to be filled in by themselves and at the end of the semester it will be deposited to the principal through level coordinator.
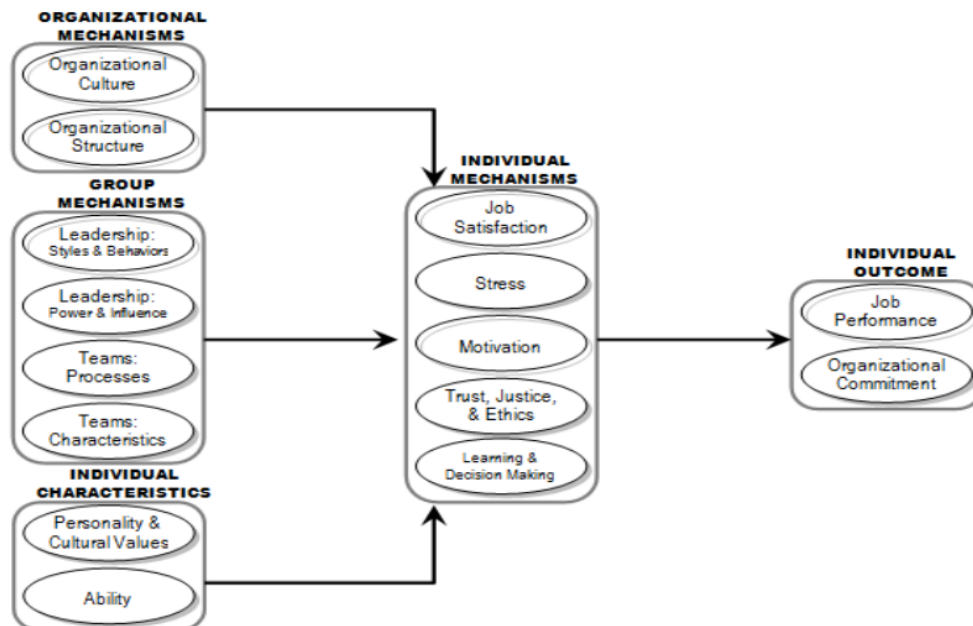
Conclusion

Leadership does not alone influence TQM, but also depends on Persistence and innovation, so there is a significant relationship between Leadership Persistence and Innovation with TQM.

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