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## **LEADERSHIP STYLE ANALYSIS IN ORGANIZATION BASED ON SNI ISO 9001:2015**

**Abstract:** *The latest version of ISO 9001: 2015 covers additional organizational requirements such as leadership engagement. The purpose of this study was to measure the effect of leadership style based on ISO 9001:2015 on the performance of a company or organization. The sample was 139 individuals in various companies both private and government. The analysis technique uses multiple linear regression. The result is that not all indicators of leadership style have a significant effect on company performance. There are four indicators of leadership style that have a significant or significant effect on the performance of a company because it has a sig value. or  $p$ -value  $< .05$ . The four indicators that have a significant effect are commitment, sense of responsibility and authority, organizational knowledge, and competence. The indicator that has the highest contribution or level of importance is commitment, followed by a sense of responsibility and authority, organizational knowledge and competence.*

**Keywords:** *leadership, standard, organization, SNI ISO 9001:2015.*

### **1. Introduction**

Management development in this globalization era could not be avoided, so it has become a distinctive challenge in both private and government enterprises to organize their organization or enterprises suitable to the applicable management system. Standards related to management quality are more applied not only by private enterprises but also by government institutions to increase public service quality. The newest management standard system, which has been stated, is ISO 9001:2015. ISO 9001 standard integration can ensure quality in an organization (Ikram et al., 2020). ISO 9001 standard is a medium to achieve the expected quality capable of

responding to this globalization challenge to reach organizations' effectiveness and efficiency. A positive correlation between taking part in quality management activity and job satisfaction in hospitals has been approved; better participation in quality management causes more increase the service satisfaction (Wardhani et al., 2009). ISO 9001 standard is widely applied worldwide, and certification demand is increasing yearly. End of 2016, 1.106.356 enterprises worldwide, or around 7%, are certified by ISO 9001. Countries with the most certified enterprises are China, Italy, Germany, and Japan (ISO, 2018). ISO 9001 implementation is not apart from its advantages both internally and externally. External advantages of management quality

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standards implementation are not limited to consumer satisfaction rate but also an increase in enterprises competitiveness, organization profile quality increase, market extension, and review preparation. Meanwhile, the internal advantage is to build quality awareness in the organization, better documentation, cost reduction, etcetera. (Ikram et al., 2020).

ISO 9001 standard went through many renewals and the newest version is ISO 9001:2015 of the earlier version, which is ISO 9001:2008. ISO 9001:2015 standard has similarities and dissimilarities with ISO 9001:2008. ISO 9001:2008 has several updates. This standard version includes the organization's additional needs, including leadership involvement, risk evaluation, safety management system integration, and environment. A massive transformation, especially regarding risk-based thinking implementation in an organization but within ISO 9001:2008, does not consider the risk (Farhana, et al., 2016). Enterprises or organizations to apply the requirement must consider the risk during the stage of risk assessment, so it is necessary to improve existing operational standard procedures suitable to ISO 9001:2015. The similarity between ISO 9001:2015 and ISO 9001:2008 is that both the ISO are management systems that build the quality standards in planning, improving, handling, and development simultaneously (Mattotoran & Rahardjo, 2017). Management quality system ISO 9001:2015 has seven principal which is used as a foundation in its implementation, namely Customer Focus, Leadership, Engagement of People, Process Approach, Improvement, Evidence-based Decision Making, and Relationship Management (Wiguno, 2017).

Using ISO 9001:2015 has brought many benefits, and many enterprises have succeeded in applying this ISO. Nevertheless, failure in the process of implementation might happen. Failure frequently occurs caused by the organization only focusing on fulfilling the requirement

of external certification without any organization's sufficient shift (Heras-Saizarbitoria & Boiral, 2015). Several factors which are possibly causing the barrier to the implementation process also include employee involvement (Allur et al., 2014), team commitment (Heras-Saizarbitoria & Boiral, 2015), and highest management commitment (Huo et al., 2014). ISO 9001 standards implementation is influenced by human resources, which is the most important internal factor and establishes an organization's success in achieving its purposes. Participating personnel must also fulfill the certification demand, such as product design increase and product flow management (Huo et al., 2014). Human resources skill increase is even required in developing and innovating new products, increasing effective communication between employees and company routine systematic refinement. Those activities can be held through training which includes clarifying the strategic direction and enterprises' business goals with clarity increase and every employee involvement.

The advantages of applying ISO 9001 in an organization create a culture change that allows every employee in an organization to have optimal performance. Human resources management must be effective and efficient; that will succeed with the existence of a responsible and skilled leader (Tampubolon, 2007). A leader is one of the most essential support factors in managing an enterprise. A great leader will be able to run the management process nicely, and employees will be enthusiastic about performing their duties (Hasibuan, 1996). According to Psomas et al. (2005), the top management commitment stage is related to support given by management during the implementation process. The top management is also responsible for increasing employees' both spirit and motivation and being responsible for providing clear instruction. The leadership factor as well as an indispensable role in entire efforts to increase performance,

not only in a group stage but in every organization stage. Performance is not only highlighting the implementer staff's point of view, which mostly tends to be technical but also based on teamwork and management (Notoadmojo, 2003). Quality management system implementation ISO 9001:2015 within an organization will be reflected through the applied leadership style. The implementation process cannot be started without the right planning, which also includes the leader's responsibility to determine a team and its implementation with clear authority so that they can invent effective employee integration within an organization.

Leadership style analysis towards the employee performance was done by Tampubolon in 2007; his research results that the leadership style relatively major contributes to employee's performance increasement. Research's limitation, as mentioned previously, was used the standard SNI 19-9001-2001, while the quality management system standard has through many alterations. Research that discussed leadership roles within the organization was conducted by Walaszczyk & Polak-Sopinska (2020), yet this research is restricted to food industries. Evaluation of ISO 9001:2015 standard implementation is still a must; thus, analyzing leadership style based on ISO 9001:2015 is necessary whether in private or government enterprises or organizations. In Indonesia, the applied management system standard is SNI ISO 9001:2015. This standard is identically adopted from the international standard version so that standards have not changed.

## **2. Literature review**

### **2.1. Quality management system**

The quality management system ISO 9001 standard is a standard that tends to be generic and can be implemented in many organizations. ISO 9001 standard aims to increase an enterprise's operation and relieve

limitations and problems linked to quality (Ikram et al., 2020). The newest standard related to the quality management system, which is applied internationally, is ISO 9001:2015. ISO 9001:2015 has many renewals of the previous three standards: ISO 9001:2008, ISO 9001:2000, and ISO 9001:1994. ISO 9001:2015 promotes the implementation of approach process while developing, implementing, and increasing the quality management system effectiveness; certainly, those are aims to increase the customers' satisfaction with fulfilling several customers' requirements (Fonseca & Domingues, 2017). ISO 9001:2015 updates have two purposes, flexibility, and reliability. Flexibility means that the standard will be suitable and appropriate to nowadays business environment, which consists of many demands, complexity, and dynamics. At the same time, reliability defines this standard as being able to fulfill requirements set consistently and providing services and products that satisfy the expectations and needs of their customers (Domingues et al., 2019). As the SNI, ISO 9001:2015 standard has been adopted of ISO 9001:2015.

### **2.2. Leadership**

The definition of leadership extensively includes a process that affects deciding an organization's purpose, motivates followers' behavior to achieve goals, and influences to improve group and its culture. Hasibuan (2016) said that the existence of leadership means the management process is well functioning, and employees will be passionate while doing their duties; then, it is mentioned that leadership is the prime aspect of management. The leadership factor has an essential role in entire efforts to increase performance, whether in group or organization stages. It was said so because the performance was not highlighted only from the implementer staff's point of view, which, in general, tends to be technical, but also both teamwork and managerial

(Notoadmojo, 2003).

A great leader must have four main quality such as competency, honesty, foresight, and the ability to inspire followers. A great leader must have competency while running the duties and responsibilities. A dishonest leader will not be trusted by subordinates. The leader has foresight means that this leader has a clear vision and mission in a better direction, and a great leader must inspire the followers with high optimism and enthusiasm. Every leader has typical leadership and differs from the other. Leadership style has three basic patterns: attach the importance to collaboration linkage, duties implementation, and outcome which is possible to achieve (Tampubolon, 2007). A leader has a substantial role in ISO 9001 standard implementation, and it is a must for the leader to recognize and motivates involved individuals in ISO 9001 implementation. Leadership and employee motivation are importantly caused by implementation, results can be reached gradually, and motivation will help to maintain the process.

### 2.3. Organization performance

Organization performance is a goal that an organization has achieved in a certain period, whether related to input, output, outcome, benefit, or impact (Sobandi, 2006). According to Hyde et al. (2008), an organization's performance is defined as the values of resulting advantages. Byremo (2015) declared that an organization's performance is related to the outcome achieved in financial market performance, operational performance, and employee performance. An organization's performance is needed to understand and increase the goal achievement and an optimal organizational purpose. Each organization or enterprise tries to achieve goals by considering constraints and competitors. The final goals are continuity, profits, satisfaction and employee training, efficiency, social responsibility, product quality or services to

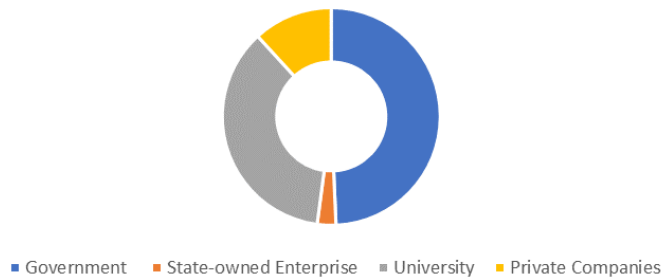
customers, etcetera. (Suryani & Foeh, 2018). To achieve an optimal work result, every organization has to try fulfilling the purpose by utilizing the owned resources; it means that the organization's performance is achieved if duties and assignments function effectively, efficiently, and are relevant to stakeholders so as it can be declared that organization performance is seen as the result of a process which is conducted by individuals within the success and failure. According to Suryani and Foeh (2018), there are several factors that affect the organization's performance, namely human resources management, manager line support, organization fairness, organization effectiveness, and mediator variable. Use Word program Equations editor to type all formulas (size 10pt). Mathematical formulas should be centred on one empty line before and after formula.

### 3. Methodology

The ISO 9001 standard has undergone several updates, and the latest version is ISO 9001:2015. This version of the standard covers additional organizational requirements such as leadership engagement. The purpose of this study was to measure the effect of leadership style based on ISO 9001:2015 on the performance of a company or organization. The research sample was 139 individuals in various companies or organizations, both private and government (Fig.1). The analysis technique uses multiple linear regression. The result is that not all indicators of leadership style have a significant effect on organizational or company performance. There are four indicators of leadership style that have a significant or significant effect on the performance of a company or organization because it has a sig value. or p-value < .05 The four indicators that have a significant effect are commitment, sense of responsibility and authority, organizational knowledge, and competence. The indicator that has the highest contribution or level of

importance is commitment, followed by a sense of responsibility and authority,

organizational knowledge, and competence.



**Figure 1.** Respondent's category

#### 4. Result and discussion

Leaders are parties who are fully responsible and highly committed to the organization they lead. In the implementation of ISO 9001:2015, the top leadership plays a major role for the successful implementation of ISO 9001:2015 (Hernawan et al., 2018). In this study, identification and evaluation of the application of leadership styles based on ISO 9001:2015 was carried out on the

performance of a company or organization. Data processing is carried out using multiple regression analysis with the dependent variable in the form of company or organization performance and the independent variable being an indicator of leadership style that applies the quality management principles of ISO 9001:2015. A total of 12 indicators were tested for validity and reliability.

**Table 1.** Validity and reliability test

Variable	Number of Items	Range of Values (r-count)*	Cronbach Alpha	Desc
Performance (Y)	19	.684 - .837	.962	Valid and Reliable
Leadership (X1)	4	.821 - .849	.846	Valid and Reliable
Commitment (X2)	6	.698 - .833	.858	Valid and Reliable
Customer Focus (X3)	3	.873 - .921	.881	Valid and Reliable
Establishing the Quality Policy (X4)	4	.874 - .923	.921	Valid and Reliable
Communicating the Quality Policy (X5)	3	.840 - .906	.841	Valid and Reliable
Responsibilities and Authorities (X6)	5	.809 - .894	.910	Valid and Reliable
Resources Needed (X7)	2	.834 - .898	.721	Valid and Reliable
Operating Environment (X8)	2	.910 - .911	.785	Valid and Reliable
Organizational Knowledge (X9)	2	.883 - .891	.728	Valid and Reliable
Competence (X10)	2	.949 - .951	.893	Valid and Reliable
Improvement and Implement (X11)	2	.914 - .932	.824	Valid and Reliable
Corrective Action (X12)	2	.764 - .821	.724	Valid and Reliable

\*r-table = 0.139 (N=139)

A validity test is conducted to measure how carefully a test performs its function. Based on the results of the validity and reliability tests in Table 1, it is known that all

instruments representing each indicator or independent variable, and the dependent variable are all declared valid. This can be known based on the value of r from the

calculation results which is greater than the value of  $r$  table. A reliability test is conducted to find out whether the resulting data is reliable or tough or not. In the reliability test, all variables were declared reliable based on standard provisions referring to Ghazali (2013), namely Cronbach's alpha value was greater than the established standard of .60, meaning that all the instruments tested had high reliability.

The initial analysis was conducted to identify the relationship between each variable, namely between the independent variable and the dependent variable used in the study. Based on Table 2, all independent variables, namely indicators of leadership style, have a positive and relatively strong relationship ( $r > .5$ ) to the dependent variable, namely company or organizational

performance. The indicator of leadership style that has the highest correlation value is commitment ( $r = .846$ ), then a sense of responsibility and authority ( $r = .842$ ), and communication on quality policy ( $r = .826$ ). Although the correlation value of each indicator of leadership style with performance is not much different, the range is .707-.846. In general, these relationships or associations indicate that the implementation of ISO 9001:2015 in a company or organization is beneficial in a positive direction toward optimal performance. The existence of leaders who are responsible and skilled in resource management so that the company's performance can be effective and efficient (Tampubolon, 2007).

**Table 2.** Descriptive analysis and correlation of each variable

Variable	M	SD	Y	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11
Performance (Y)	84.641	13.043												
Leadership (X1)	20.494	2.839	.747**											
Commitment (X2)	27.577	4.095	.846**	.820**										
Customer Focus (X3)	12.871	2.460	.751**	.715**	.785**									
Establishing the Quality Policy (X4)	19.146	3.157	.792**	.762**	.804**	.825**								
Communicating the Quality Policy (X5)	13.744	2.324	.826**	.712**	.794**	.764**	.832**							
Responsibilities and Authorities (X6)	23.063	3.810	.842**	.727**	.814**	.812**	.839**	.881**						
Resources Needed (X7)	4.406	0.914	.731**	.622**	.694**	.707**	.690**	.774**	.829**					
Operating Environment (X8)	7.573	1.667	.707**	.631**	.664**	.685**	.703**	.696**	.778**	.701**				
Organizational Knowledge (X9)	9.338	1.592	.785**	.622**	.739**	.711**	.723**	.737**	.771**	.694**	.788**			
Competence (X10)	8.573	1.706	.790**	.637**	.729**	.689**	.681**	.742**	.746**	.713**	.775**	.823**		
Improvement and Implement (X11)	8.626	1.634	.811**	.668**	.759**	.718**	.741**	.807**	.836**	.746**	.756**	.811**	.842**	
Corrective Action (X12)	4.786	.886	.743**	.636**	.706**	.679**	.720**	.748**	.775**	.695**	.602**	.648**	.705**	.706**

\*\* $p < .05$ .

Correlation analysis only describes the linkage between variables without discovering how powerful the variable's impact is. The impact of leadership style indicators on performance is analysed using multivariate linear regression analysis. Parameter estimation or regression coefficient determination uses an approach known as the ordinary least square (OLS) method. The best model in that approach must fulfill several assumptions, such as

normality, none of the multicollinearity, and none of the heteroscedasticity (Ghozali, 2013). The assumptions aim to result in coefficient values in the regression that are able to be interpreted, unbiased, and consistent. The best regression model was obtained from samples of 139 individuals. The model is also qualified for the classic regression assumption test, which can be seen in Table 3.

**Table 3.** Multivariate regression analysis assumptions test

R Square	Normality*	Range of VIF	Heteroskedasticity**
.877	.231	2.981 - 9.678	.852

\*Skewness/Kurtosis tests for Normality \*\*Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

The effect of leadership style indicators on performance was analyzed by multiple linear regression analysis. Estimation of parameters or regression coefficients using the method of least squares or ordinary least squares (OLS) approach. The best model in this approach must meet several assumptions, namely normality, no multicollinearity, and no heteroscedasticity (Ghozali, 2013). This is so that the coefficient values in the

regression can be interpreted, unbiased and consistent. Based on the assumption test of multiple regression analysis, the value of the coefficient of determination or R-Square is obtained, which is .877. This means that as many as 12 indicators of leadership style based on ISO 9001:2015, 87.7% can explain the performance of a company or organization, while the remaining 13.3% is influenced by factors outside the model.

**Table 4.** The result of multivariate regression analysis

Variable	Coefficients	Std. Error	t	Sig.
(Constant)	2.701	3.157	.856	.394
Leadership (X1)	.346	.270	1.279	.203
Commitment (X2)	.808	.226	3.569	.001*
Customer Focus (X3)	-.008	.341	-.024	.981
Establishing the Quality Policy (X4)	.188	.317	.592	.555
Communicating the Quality Policy (X5)	.470	.430	1.094	.276
Responsibilities and Authorities (X6)	.684	.326	2.096	.038*
Resources Needed (X7)	-.147	.842	-.175	.862
Operating Environment (X8)	-.653	.469	-1.393	.166
Organizational Knowledge (X9)	1.562	.539	2.899	.004*
Competence (X10)	1.155	.538	2.147	.034*
Improvement and Implement (X11)	.327	.602	.544	.588
Corrective Action (X12)	1.034	.776	1.333	.185

\* $p < .05$ .

Before modeling, Likert data which has an ordinal scale is transformed into an interval scale using the Method of Successive Interval (MSI) approach. This step is a

prerequisite for regression analysis. In searching for the best regression model, the independent variable was not selected because the purpose of this modeling was to obtain a model that could be interpreted to

explain the influence of leadership style indicators on the performance of the company or organization. The coefficient value measures how much influence the independent variable has, a positive or negative sign indicates the direction of the relationship. There are four indicators of leadership style that have a significant or significant effect on the performance of a company or organization because of the sig value. or  $p\text{-value} < .05$  (Ghozali, 2013). The four indicators are commitment, sense of responsibility and authority, organizational knowledge, and competence (Table 4). The four indicators have a positive coefficient or the direction of the relationship with the company's performance is in line, the better the indicators, the better the company's performance will be.

The coefficient value on the commitment indicator is .808, meaning that for every increase in the leader's commitment score by one unit, the company's performance score will increase by .808 units. It is the same as what Siagian (2002) said that commitment affects organizational performance. The level of employee commitment to the organization will determine the performance to be achieved by the organization. Employees who have a high commitment will make maximum efforts and have a strong desire to achieve organizational goals. On the other hand, employees who have low commitment will make efforts that are not optimal and in forced circumstances. Poor commitment will not result in high organizational performance. Based on the indicators of a sense of responsibility and authority, with each increase in the indicator score by one unit, the company's performance score will increase by .684 units. This means that a sense of responsibility and authority has a significant effect on company performance. An employee who has a sense of responsibility and authority based on his reasons and motivation will improve the performance of the company or organization. The employee will try to complete his duties and

responsibilities as part of the company's achievements.

For every increase in the organizational knowledge and competence indicator score by one unit, the company's performance score will increase by 1,562 and 1,155 respectively. Organizational knowledge or organizational management needs to be developed to adapt to changes in environmental progress, both internally and externally. Organizational knowledge is one of the determining factors for organizational success. To obtain good organizational performance, a good system is needed that involves human resources as intellectual capital (Arfati, 2018). Meanwhile, the last indicator that influences performance is competence. Competence describes the characteristics of knowledge, skills, and experience to perform a particular job or role effectively. Companies or organizations can optimize organizational performance through the competence of their human resources. This competency emphasizes more on productive behavior that must be possessed by an employee in doing his job.

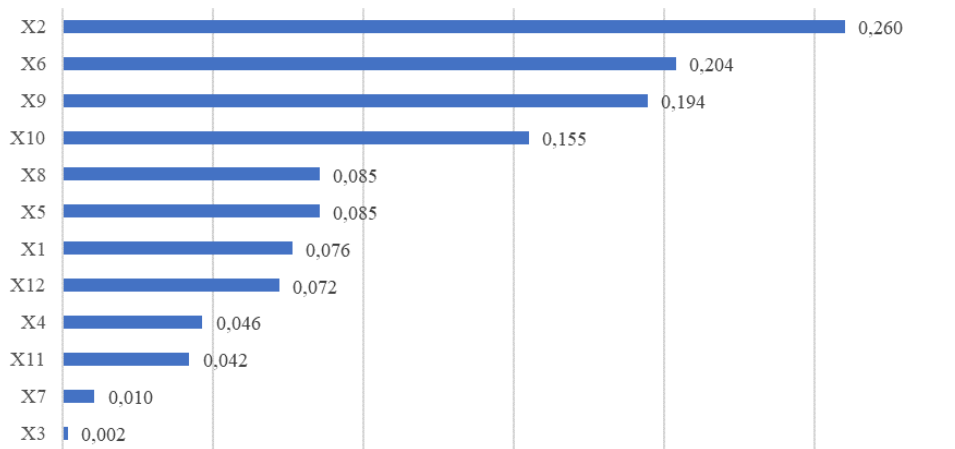
The value of the coefficient does not indicate the order of contribution or the level of importance of each indicator. The importance level of each indicator can be seen in Figure 2. The level of importance is obtained from standardized and absolute coefficient values. The number of instruments for each indicator is different, so the total score for each indicator is also different. The process of standardizing the coefficients serves to equalize each indicator. Then the absolute value of the standard coefficient because the positive or negative sign does not state the magnitude of the influence, only the direction of the relationship so that it is also balanced can be sorted. Four indicators with significant influence occupy the top four positions. The first position or indicator with the highest contribution is commitment. In the opinion of Riwayadi et al. (2022), if a company or organization wants to run and be certified by ISO 9001:2015 then leadership commitment



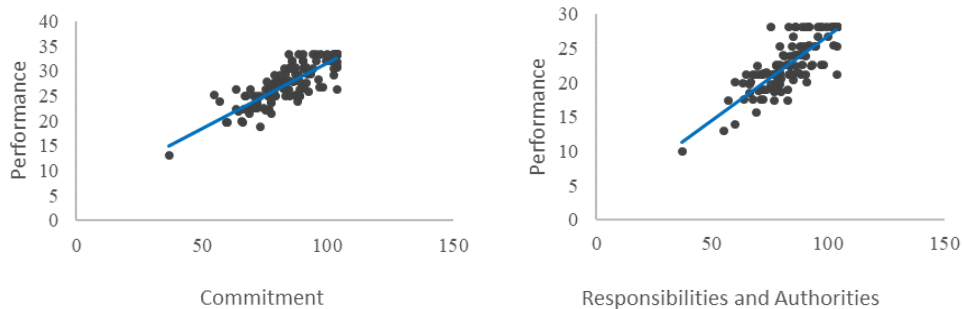
is a top priority. The next sequence is a sense of responsibility and authority, followed by organizational knowledge and competence.

Figure 3 illustrates the relationship between indicators of commitment and a sense of responsibility and authority to company performance. Based on the distribution of the

data, a regression line can be drawn which shows that the direction of the relationship between the commitment indicators has a positive relationship to the company's performance, as well as the indicators of a sense of responsibility and authority.



**Figure 2.** The orders of each indicator's importance level



**Figure 3.** Regression line of commitment indicator, responsibilities, and authorities towards enterprise's performance

The higher the commitment of a leader, the performance of an organization or company will also increase. Likewise, the higher the sense of responsibility and authority of a leader, the better the performance of an organization or company. Regarding the indicators of commitment, it agrees with the research of Riwayadi et al. (2022), if a company or organization wants to run and be certified by ISO 9001:2015 then the

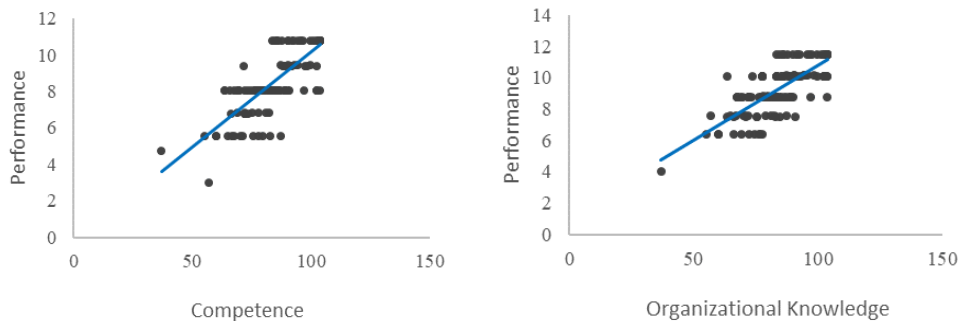
leadership commitment is a top priority. However, this is different from the research of Asbari et al. (2019), he found that commitment did not affect the performance of implementing ISO 9001:2015. But leadership and work culture have a positive effect on company performance. This difference occurs because of the research context of Asbari et al. (2019) emphasizes on evaluating employees rather than on

leaders.

In this study, the main focus is the assessment of employees regarding the leadership style in their respective companies. A committed leader means dedicating time and energy to the organization and company he leads. A sense of responsibility and authority also has important meaning for a leader. In determining organizational steps, controlling budgets, and setting company priorities, it is the responsibility and authority of the leader.

Many times we often witness leaders who are not responsible for the company or organization and even act dishonestly by taking advantage of their position or power to gain personal gain. So that it is detrimental to the company and the employees in it.

The relationship between indicators of organizational knowledge and leadership competence on company performance is shown in Figure 4.



**Figure 4.** Regression line of organizational knowledge and competence towards enterprise's performance

Similar to the previous indicators, the direction of the relationship between organizational knowledge and competence indicators has a positive relationship with company performance. The higher the organizational knowledge and competence of a leader, the performance of an organization or company will also increase. Leaders must have good organizational knowledge. The quality of leadership is determined by its leadership style, which of course must be equipped with superior organizational knowledge. Leaders must know what they do and the role they take in the organization. For example, leaders play roles such as innovators, mentors, or facilitators, depending on the conditions and circumstances that occur (Krogh et al., 2012). According to Yang (2007), a leadership style that involves strict policies and procedures will be less supportive of knowledge sharing than a style that

emphasizes human interaction, affiliation, morale, cohesion, and workplace harmony. Leader competencies should not be underestimated to maintain company performance. Competencies describe certain personal traits, behaviors, skills, values, and knowledge. Generally, the selection of competencies that are relevant to the dimensions of the company or company has a positive impact (Jokinen, 2005). Competencies can be aligned more closely with the needs of current leaders and companies and the future. Today's business requires a mix of generalist and specialist leadership competencies. Leaders need to solve very specific problems and tasks, and at the same time, they need leaders who can see the big picture of the business both intrinsically and extrinsically. Specialists thrive in a more predictable environment, whereas generalists thrive in an unpredictable environment because they are

more resilient in supporting a changing environment (Soomro & Hanafiah, 2022). Leaders must have the desire to continue to grow and develop and be adaptive to the times. All indicators of leadership style ranging from commitment, sense of responsibility and authority, organizational knowledge, and competence are interrelated in determining company performance, even indicators that do not have a real effect also have a special contribution, not to company performance directly but to other indicators that have a direct real effect.

## 5. Conclusion

The impact of the leadership style indicator based on ISO 9001:2015 is analysed by a multivariate linear regression approach. A multivariate linear regression approach analyses the impact of the leadership style

indicator based on ISO 9001:2015. Not all leadership style indicators affect the organization or enterprise's performance. There are only four indicators that are significantly affecting such as commitment, responsibilities and authority, organizational knowledge, and competence. The four indicators of leadership style have a positive impact on an enterprise's performance. The highest contribution or high importance level is commitment, followed continuously by responsibilities and authorities, organizational knowledge, and competence. This research's limitation is that there is no measurement related to the interaction between indicators, so direct and indirect effects cannot be determined.

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