Linking Leadership Styles and Organizational Culture to Organizational Commitment in the Industry of Automotive Components (The Mediating Role of Procedural Justice)

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Abstract—The commitment of employees in an organization is one of the key factors to create competitiveness in doing business for automotive components. This research was aimed to reveal the direct and indirect effects of leadership styles and organizational culture on organizational commitment of employees. Procedural justice has been used as a mediating variable. The instruments used to measure the variables are Leadership Styles (LS), Organizational Culture (OCu), Procedural Justice (PJ) and Organizational Commitment (OCo). Those instruments have been tested for their validity and reliability. Data were collected from the all-155 employees of the automotive component industry, PT. Nadya Karya Perkasa. The Collected data were scrutinized by path analyses. This research has found out that there is a direct and significant effect of leadership styles (ρ= 0.125) and organizational culture (ρ= 0.680) on procedural justice, a direct and significant effect of leadership styles (ρ= 0.191) and organizational culture (ρ= 0.310) on organizational commitment, a direct and significant effect of procedural justice (ρ= 0.352) on the organizational commitment. There is indirect effect of leadership styles to organizational commitment (ρ= 0.044), and indirect effect of organizational culture on organizational commitment (ρ= 0.236) By this study hopefully the automotive component industry will be able to compete with other industries in the world market by improving the values of employee’s commitment.

Keywords: leadership styles, organizational culture, procedural justice.

I. INTRODUCTION

The economic growth of Indonesia in 2017 was 5.07 percent and the growth of industrial sector was 4.27 percent in the same year. The value-added growth of transportation sector was 3.68 percent in 2017. Since the economic growth has increased higher than that of industrial sector, the role of the industrial sector has been going down. The role of industrial sector value added was 20.68 percent in 2017, compared to the role of the sector in 2014 of 24 percent. One of the causes was the decreasing global competition of industrial sector in the world, including the decreasing competitiveness in the automotive industry. It was indicated by the Revealed Competitive Advantage of Indonesia that was lower than that of any other countries in Asean. The Government of Indonesia has prioritized automotive industries and its components by policies that support the industries. The government policies of automotive industries should be supported by industries by improving its management of human resources and its organization. Because of a business that manages its organization better will accelerate its profit. There are many problems faced by automotive industries such as commitment of workers, job performance, employee’s motivation, justice of incomes, ethics in organization, styles of leadership, and organizational culture. Colquitt, LePine and Wesson [1] , present the integrative model of the relationship among those problems. This study refers to the model taking the variable of organizational commitment as an endogenous variable and the variables of leadership types and organizational culture as exogeneous variables, whereas procedural justice is put into a mediating variable. This study takes samples of all-155 employees of the automotive component industry, PT. Nadya Karya Perkasa.

II. THEORETICAL FRAME WORK

Colquitt , Le Pine and Wesson [1] define commitment of employees in an institution as an employee that would like to be an element of the institution because of financial , obligation and emotional reasons. Luthans [2] also describe an organizational commitment as a tough desire of employees to stay in an organization, accepting values and the goal of the organization. Schermerhorn , Hunt and Osborn [3] talk about commitment of employees as the faithfulness of an employee feels about the organization. Based on those definitions, the organizational commitment can be synthesized as a strong desire of an employee to stay working in an institution, no desire to move on to other institutions for the reasons of financial needs, emotional and obligational feeling.

Procedural justice refers to an employee who perceives the fairness to make regulation, Colquitt, LePine, Wesson [1]. Each member of an institution should be involved in the process of making regulation. Ivancevich and Matteson [4] describe organizational justice when an individual has
perception of fair treatment in the workplace. The definition of procedural justice in this study is the fairness of how every individual feel within an organization relating to policy and decision-making process that has been approved by all members in the organization.

Leadership is defined by Colquitt, LePine dan Wesson [1] as using an authority to direct members of an organization to achieve the common goal of the organization. Slocum and Hellriegel [5] leadership styles is a process to develop a vision, to encourage people, to take hard decisions for achieving the goal of the organization. Shermerhorn, Hunt and Osborn [3] have a similar understanding to depict leadership as a process to influence and to facilitate members of an organization for achieving the objectives of the organization. It is also rather similar to the definitions by Ivancevich, Konopaske dan Matteson [4], Robbins dan Judge [6] Kinicki dan Fugate [7]. Newstrom [8] defines leadership styles as the ways of a leader to take action. It involves philosophy, knowledge, skill and attitudes. So, the leadership style is the individual’s behavior to direct, to guide, to motivate, to inspire, and to influence employees for achieving goal’s organization.

As said by Colquitt, LePine and Wesson [1], organizational culture as a common knowledge about the rules and values in an organization that forms the behavior of the members of the organization. Just alike the definition that is presented by Slocum and Hellriegel [5] George and Jones [9], Newstrom [8], Kinicki and Kreitner [7], a culture in an organization is basically the supposition of the members of an organization that affects internal and external settings. Robbins and Judge [6], organizational culture refers to a system of common meaning held by the members of an organization to differentiate the organization from others. By those definitions we may interpret that organizational culture as values, norms, beliefs, and how people think, feel and act for achieving the goals of organization.

Theoretical frame work can be summarized into the model as seen in figure 1.

![Theoretical Model](image)

Source: Based on The Integrative Model of Organizational Behavior. Colquitt, LePine and Wesson [1].

Organizational commitment is one of the products of organization that can be directly influenced by procedural justice, leadership styles and organizational culture. It can also be influenced by organizational values and leadership style directly through procedural justice. Organizational commitment that is willing to stay in an organization for long-run working life, has several reasons of finance, emotion and obligation. Procedural justice is one of the dimensions of organizational justice besides income distribution, interpersonal relation and information. Leadership style may go from laissez faire to transaction and transformation, from initiating to considering structure and from delegative to autocratic styles. Organizational culture represents values, norms, beliefs of employees in an organization.

### III. HYPOTETHICAL MODEL

The relationship between research variables are hypothesized as: (1) There is a direct and significant effect of leadership styles (X₁) on procedural justice (X₃), (2) There is a direct and significant effect of organizational culture (X₂) on procedural justice (X₃), (3) There is a direct and significant effect of leadership styles (X₁) on organizational commitment (X₄), (4) There is a direct and significant effect of organizational culture (X₂) on organizational commitment (X₄), (5) There is a direct and significant effect of procedural justice (X₃) on organizational commitment (X₄), (6) There is an indirect effect of leadership style (X₁) on organizational commitment (X₄) through procedural justice (X₃), (7) There is an indirect effect of organizational culture (X₂) on organizational commitment (X₄) through procedural justice (X₃). The hypothethical model can be illustrated as the figures 2.
IV. RESEARCH METHODOLOGY

The population of this research is the employees of the industry producing automotive components. The number of populations is 175 employees and all members of the population were taken as a sample after deducting 20 members for validity and reliability tests. Validity test used correlation of Pearson and reliability test used Cronbach alpha. The survey used four instruments for measuring variables of leadership styles (LS), Organizational Culture (OCu), Procedural Justice (PJ) and Organizational Commitment (OCo).

The operational definition for Organizational Commitment (OCo) as the desire of an employee to have a willingness to work in the industry, and not having desire to move on to other industries, by the reasons of finance, emotion and obligation. The indicators for those reasons are sense of belongings, a sense of protecting, a sense of wandering not to be accepted in other industries, a sense of thankfulness of the existing salary (financial reasons), a sense of guilty to the boss, a shame of not knowing himself, a desire to reciprocation (emotional reasons).

For the purpose of this research the procedural justice (PJ) can be defined as the employees’ evaluation of the fairness of how every employee feels within the industry relating to policy and the process of decision making. The indicators used to measure the procedural justice are an equal treatment, an opportunity to improve, a procedure for evaluation, an open and clear procedure, taking into account for all group needs, using accurate information.

The Leadership styles is the employees’ assessment of leader’s behavior in directing, guiding, motivating, inspiring, and influencing subordinates for achieving the goals of business. The dimensions for the Leadership Styles (LS), as Colquitt, LePine and Wesson [1], are great influences, creative motivation, educated simulation, personal consideration, needy reward, active management by exemption, passive management by exemption and laissez faire. The indicators for each dimension of 1) great influence : showing the proud in the industry, delivering business objectives, presenting great ideas, getting trust from employees, 2) creative motivation: motivating employees, respecting employees’ achievement, building creative ideas to spur business, 3) educated simulation: to encourage employees to think, asking for employees to discuss each other, to encourage employees to think creatively, make a challenge for employees to finish a task, 4) personal consideration: paying attention the psychological employees, giving a consultation with employees, sharing experiences with employees, 5) needy reward: giving rewards, appreciating employees’ achievement, 6) Active management by exception: controlling employees’ job, controlling work’s progress, to do corrections for employees, looking deviation of rules for employees, 7) passive management by exception : give a warning, take a correction, 8) laissez faire : to let employees looking for problem’s solving, to trust employees doing their selves.

To operate the definition of this study, organizational culture is the assessment of norms, values, beliefs and the way of employees to think, to have feeling, to do acting for achieving the goals of the industry they work for. There are some indicators for organizational culture: a guidance for employees, a familiar relationship, a good environment for working, innovation, output oriented, team oriented, and aggressiveness.

Path model used to investigate the relationship between those variables. The assumptions for using path model are normality, linearity and homogeneity. Based on the Kolmogorov-Smirnov test, the data for each variable are distributed approximately to normal with the coefficients of 0.844 (LS), 0.904 (PJ), 0.990 (OCo) and 0.752 (OCu). Relationships between X1 and X3, X1 and X4, X2 and X3, X2 and X4, X3 and X4 are linear based on the criteria for comparing between t-calculated and t-criteria (table), and comparing between value of Sig. and the value of alpha. The calculations for t-students are 6.64; 13.6; 4.62; 5.24 and 4.62 consecutively. Using Barlett test the variables of X1, X2 and X3 has homogeneous data that is indicated by the $\chi^2$ calculated of 135.65. It is lower than $\chi^2$table of 183.96 by the alpha of 0.05. The data of X1X2, X4 have $\chi^2$ calculated as 198.53 and the $\chi^2$ table of 202.95 By the alpha 0.005 means the data is homogeneous. Also, the data X3X4 have $\chi^2$ calculated as 14.51 and $\chi^2$table = 183.96. If the alpha is 0.05, the data was also homogeneous. The path model can be used for analyzing the effects of exogeneous variables to endogenous variables in the industry.

V. RESULTS AND DISCUSSIONS

The effect of exogeneous variables on the endogenous variables can be shown in three structures. The first structure can be formulated by an equation: $X_3 = 0.127X_1 + 0.675X_2$. It can be seen in the following figure 3:
Leadership styles has a direct effect on Procedural Justice ($\rho=0.127$) significantly and Organizational Culture has also a direct effect on Procedural Justice ($\rho=0.675$) significantly. This can be seen from comparison between $t$-crit and $t$ table. The $t$-calculated and $t$-table for the relationship between leadership styles and organizational culture are 2.02 and 1.98. Since the $t$-calculated is greater than $t$-table, there is significant effect of leadership styles on procedural justice. The same thing is the effect of organizational culture on procedural justice is significant at $\alpha = 0.05$, which $t$-calculated is 10.76 compared to 1.96 of $t$-table. Simultaneously both leadership styles and organizational culture have significant effect on procedural justice. $F$-calculated (96.52) greater than $F$-table 3.06.

The second structure has an equation: $\hat{X}_4 = 0.191X_1 + 0.310X_2$, that can be seen in the following figure 4:

Leadership style has a direct effect on organizational commitment ($\rho = 0.191$) and organizational commitment has also a direct effect on organizational commitment ($\rho=0.350$). The values of $t$-calculated for both are 2.24 and 3.65, those are greater than $t$-table of 1.96. Both leadership style and organizational culture together have an effect to organizational commitment, which $F$-calculated of 18.18 compared to $F$-table of 2.67.

The third structure is the effect of procedural justice on organizational commitment which is denoted by equation: $\hat{X}_4 = 0.350X_3$. It is depicted as figure 3 below.

The procedural justice has a significantly direct effect on Organizational Commitment ($\rho=0.350$). It can be proved by the of $t$ table that is lower than $t$ calculated, $1.96 < 12.64$.

Putting together the above structure, we have a full model for the effect of the variables of leadership and organizational commitment on procedural justice, the effect of leadership styles and organizational culture on organizational commitment, as seen in the figure 6 as follow.

The coefficients of the path between those variables can be summarized in the following table:

| The Coefficients of Path Between Exogeneous Variables and Endogenous Variables. |
|---------------------------------|----------------|--------|--------|
| Variables                        | Direct effect | Indirect effect | Total effect |
| Leadership styles to Procedural Justice | 0.127         | -       | 0.127   |
| Organizational Commitment to Procedural justice | 0.675         | -       | 0.675   |
| Leadership Styles to Organizational Commitment | 0.191         | -       | 0.191   |
| Organizational culture to Organizational commitment | 0.310         | -       | 0.310   |
| Leadership Styles to Organizational Commitment through procedural justice | 0.127         | 0.350   | 0.444   |
| Organizational Culture to organizational commitment through procedural justice | 0.675         | 0.350   | 0.236   |

Leadership Styles has an indirect effect on Organizational Commitment through procedural justice ($\rho=0.127 x 0.350=0.045$). Organizational Culture has an indirect effect on Organizational Commitment through procedural justice ($\rho = 0.675 x 0.350=0.236$). The standardized coefficients can indicate the role of every exogeneous variable to the endogenous variable. Organizational Culture has a bigger role on procedural justice than the role of leadership styles. The Organizational culture has also played a bigger role on organizational commitment than the role of other variables. The coefficient determinant ($R^2$) of 0.565 for the variable procedural justice means 56.5 percent of the procedural variation depends on the variations of leadership styles and organizational culture, the other 43.5 percent of the variation depends on other variables that are not in the model. The coefficient determinant of organizational commitment is 0.193 which means only 19.3 percent the variation of organizational commitment is determined by the variables of leadership styles; organizational commitment and the other 81.5 percent is determined by other factors. The role of procedural justice is 12.4 percent to the organizational commitment.

The unstandardized coefficients of regression are 0.057; 0.677 for $X_1$ and $X_2$ as independent variables whereas the dependent variable is $X_3$. It means that if the leadership style is getting better for one scale then the procedural justice will also be improved by 0.057 scale if there are no changes in organizational culture. The same thing is when organizational culture enlarged by one unit then procedural justice will be also improved by 0.677 scale, assuming no changing on leadership styles.

Many researchers have studied about the relationship between leadership styles, procedural justice and organizational commitment. This study shows the positive correlation between leadership styles and organizational commitment ($r=0.350$). The other studies support this finding are Wang [10] Shrestha and...
Mishra [11] , Khumalo [12] , Kim [13]. Wang exposed the relation between leadership style and the commitment of employees. Similar to Wang, Shrestha and Mishara also found significant relationship between leadership styles and commitment of members of organization. Kim showed the relationship between transformational leadership and organizational commitment. Khumalo detected that leadership style correlated to commitment of employees.

The path coefficient between leadership styles (X1) and organizational commitment (X4) is 0.191 (t-cal. = 2.244; t-crit. = 1.96). Since t-cal. > t-crit., the effect of leadership styles on organizational commitment is direct and significant. This finding is comparable to the result studies of Jackson, Meyer and Hua [14]; Busra, Usman and Naveed [15]; Acar [16]; Oztekin [17]; Luo, Marnburg and Law [18]. Meyer and Hua stated that transformational leadership has positively related to affective commitment which coefficient of ρ= 0.451 and to normative commitment which coefficient of ρ= 0.337. Contingent reward and actively-manangement by exception are positively related to affective commitment which is ρ=0.369 and ρ = 0.083 respectively. Laiizzes faire leadership is negatively related to affective commitment by ρ = -0.296. Jackson, Geneviciute and Endriulaitiene revealed that affective commitment was the most positive element of organizational commitment, while continuance commitment has negative aspects for organization. Bushra, Usman and Naveed also concluded that transformational leadership has positively affected organizational commitment of employees. Oztekin said that leadership has positively affected organizational commitment in the middle magnitude. Acar did supporting that leadership and organizational culture have positively affected on organizational commitment in the area of logistic industries. Luo, Marnburg and Law showed that transformational leadership and procedural justice are good predictors for organizational commitment of employees.

The correlation between leadership styles (X1) and procedural justice (X3) in this study is 0.474, and the coefficients of regression and path are 0.057 and 0.125 respectively. Since t-calculation (2.004) is greater than t-criteria (1.96), so there is a significant effect of leadership styles on procedural justice. This is consistent with the research findings by Amazu, Nwatu, Ome, and Uzuegbu [19]. They found the correlation between the styles of transactional leadership and procedural justice (r = 0.09), the correlation between transformational leadership and procedural justice (r = - 0.34), Armagan and Erzen [20] claimed that leadership has positively affected organizational justice by medium magnitude. Furthermore, Luo [18] presented a result study that transactional, transformational, and dynamic leadership has positively impact on justice of distribution, procedure, and interaction. Furthermore, the style of leadership has indirect effect on organizational justice through participation of employees.

Organizational culture (X2) has a significant and direct effect on procedural justice (X3). The two variables have a correlation of 0.744 that is a relatively high magnitude. The coefficients of the regression and path are 0.677 and 0.262 respectively. The calculation of t-value is 10.909 that is higher than that of t-table (1.96), using alpha 0.05. It is still in line with the results that is investigated by Maymand, Safaei, and Kamkar [21] that organizational culture has a direct effect on procedural justice (P=0.74) and a direct effect on organizational commitment (P=0.41).

Organizational culture (X2) has also a significant and direct effect on organizational commitment (X4). The correlation for both variables is 0.408 and the coefficients of regression and path are 0.226 and 0.310 consecutively. It is similar to the findings of Wambui and Gichanga [22], Sinisa Jelena, Edit, Bojana and Katarina [23]; Yavuz [24]. Wambui and Gichanga declared that organizational culture is a factor that contributes positively the relationship between organizational commitment, satisfaction and employee’s performance. Sinisa, Jelena, Edit, Bojana and Katarina showed the relationship between the dimensions of organizational culture and organizational commitment. The result is statistically significant. Also, the dimension of organizational culture could be used significantly as predictor for organizational commitment. The most dimensions of organizational culture are positively and significantly correlated to the dimensions of organizational commitment. Some dimensions of the culture also made contribution to predict organizational commitment significantly. Additionally, Yavuz exposed in the education field that organizational culture and organizational justice affected affective commitment, continuance commitment and normative commitment for teachers.

Final relationship between each research variable is the relationship between procedural justice (X3) and Organizational Commitment (X4). The correlation coefficient for both variables is 0.352. The coefficients for regression and path are 0.258 and 0.352. The values of t-student using level of significance of 0.05 are 1.96 (t-criteria) and 0.4.647 (t-calculation). Therefore, procedural justice has also direct and significant effect on organizational commitment. Along with this finding, it is consistent with other researchers, such as Rahman, Mustafa, Khan, Qurashi [25]; Zhang [26]; Ghauri [27]; Cabarcos and Jawad [28]; Rahman, Mustafa, Khan and Qurashi have shown that justice of distribution and procedure have positive effects on the organizational commitment. It is positively related to procedural justice but it is not significant. Organizational commitment is positively related to leadership for transformation. Zhang has found that organizational culture and justice has a direct effect on organizational commitment positively. Ghauri has found that procedural justice is statistically

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Blue Eyes Intelligence Engineering & Sciences Publication
significant for predicting organizational commitment. Cabarcos asserted that procedural justice has a relation to all elements of organizational commitment, but distributive justice has no relation to the elements. The interactional justice has no relation to affective commitment and it is contrary related to normative and continuance negatively. Jawad perceived the fairness in distributive, procedural justice and interactional justice have affected on organizational commitment.

VI. CONCLUSIONS AND IMPLICATIONS

Based on this study it can be concluded that : 1) the leadership styles have a directly significant effect on procedural justice, 2) the organizational culture has a directly significant effect on procedural justice , 3) the leadership styles have a directly significant effect on organizational commitment, 4) the organizational culture has a directly significant effect on organizational commitment, 5) the procedural justice has also a directly-significant effect on organizational commitment, 6) the leadership styles have an indirectly significant effect on organizational commitment but it is lower than the direct effect, 7) the organizational culture has an indirectly significant effect on organizational commitment, but it is also lower that of the direct effect.

So, this study has supported the integrative model of Colquitt, LePine and Wesson. Furthermore, the policy implication for the business unit of automotive components has to focus more on the organizational culture rather than the other three variables in this study. It does not mean that the other variables are not important. The industry should focus on how to empower values, beliefs and norms to the industry. Besides, the industry has also to change the styles of leadership towards justice for decision making.

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