The Effect of Supply Chain Planning and Operations on Employee Performance through Employee Job Satisfaction

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Abstract—The purpose of this paper is to determine the effect of the work environment and supply chain planning and operations on job satisfaction and its implication toward the performance of the job satisfaction, job satisfaction on performance and work environment and leadership through job satisfaction on performance. The sample size in this study using Slovin formula with large α used is 5%, thus the sample size is 80 people. Research used a quantitative analysis method, using path analysis, followed by determination analysis (R Square), partial hypothesis testing (t-test) and simultaneous (F test) with alpha 5 percent (0.05). The analytical tool uses SPSS version 21.0 for windows. The results of this study show that leadership and work environment have a positive and significant effect on employee performance and satisfaction as well as job satisfaction, have an influence on the performance of employees.

Keywords—Leadership, Work Environment, Job Satisfaction, Employee Performance, Supply chain planning and operations, Employee Satisfaction, and Path Analysis.

1. Introduction

Performance is a measurement of the success of an organization, either production organization or service provider organization by considering the supply chain strategy. A bank is one of the organizations which run in the field of services which also requires “performance” for its benchmark of success. Desplaces argues that the changes that occur in organizations often bring a follow-up impact that is always unprofitable [1-5]. Even further Abrahamson says the change will lead to a "dramatic" event that all citizens of the organization must confront [6]. Desplaces identifies that a change in the organization is focused on human resources, functional resources, technological capabilities, and organizational capabilities. If it is concluded that an important role in the change of an organization or company is owned by the human resources factor [7].

The Employee is a vital asset in supporting the progress of an organization whether it is a company, department or institution. Without a qualified workforce, it will be difficult for an organization to develop itself and compete with the times. One of the important factors in the national development framework is related to human resources (HR). An organization cannot run by itself without human resources; thus reliable and qualified human resources are needed to support the survival of an organization [8-12].

The role of leaders in organizations today has changed and organizational success depends on the leadership style practiced by leaders. This is in line with the opinion expressed by Mintzberg that true leaders are those involving others with consideration and humility because a person involves himself not solely for the benefit of the individual but rather the interests of the company or organization [13, 14]. In some previous researches result revealed that transformational leadership has a positive relationship with job satisfaction work [15, 16]. Then come with the results of research Masoomajaved and Balouch, R which suggests that job satisfaction gives impact on employee performance. Departure from two previous types of research that can be concluded that the implementation of a leadership model related to employee job satisfaction and employee job satisfaction will give impact on the work of employees [17-21].

Other factors that also encourage employee performance improvement in addition to leadership is the work environment factor. The working environment is theoretically revealed by Nitiseem has that is around the workers who can influence himself in carrying out the tasks charged. Conducive working environment will support the success of employees in carrying out their work [22]. This is also supported by previous research
written by Raziqa, A., and Maulabakhsha, R which suggests that there is a positive relationship between work environment and employee job satisfaction [20, 23]. The study concludes with some short prospects that businesses need to realize the importance of a good work environment to maximize the level of job satisfaction. Employee job satisfaction that formed will impact on the work of employees such as previous research revealed by Javed, M., and Balouch, R who argued that job satisfaction has an impact on employee performance [24].

Departing from several descriptions put forward in the above background, the authors are interested to discuss and further analyze the variables of leadership, and the work environment associated with employee performance through employee job satisfaction Bank BTN District I, Bekasi.

Based on the background and problems, the objectives of this research are: (1) Analyzing the influence of leadership on job satisfaction; (2) Analyze the influence of the work environment on job satisfaction; (3) Analyzing the influence of leadership on performance; (4) Analyze the influence of the work environment on performance; (5) Analyze the effect of job satisfaction on performance; (6) Analyzing the indirect effect of leadership through job satisfaction on performance; (7) Analyzing the indirect influence of work environment through job satisfaction on performance.

2. Literature Review

2.1 Leadership

Soekarso reveals that leadership has a very important and strategic role in the life aspects of groups, organizations, and countries [25]. Here are some excerpts from experts quoted, namely:

a) Courtois argues: Leadless groups such as headless bodies, easily become err, panic, chaotic anarchy. A leaderless organization is like a ship without a captain.

b) Some of the importance of leadership in the aspects of life, among others, as

Follow: Leaders establish and develop the vision and mission of the organization of the future. Leaders coordinate people's activities and work effectively and efficiently. Leaders mobilize, empower, direct resources in an integrated, controlled manner. Leaders determine strategy and decision making (decision making). Leaders manage change (change) and growth (growth). Leaders achieve successful organizational goals.

According to Soekarso there are several indicators in measuring leadership, namely: 1) Direction, 2) Communication, 3) Decision-making, and 4) Motivation [24].

2.2 Work Environment

Sedarmayanti "work environment is the whole tooling tools and materials encountered, the environment around which a person works, the method works, as well as the arrangement of work both as individuals and as a group. According to Sedarmayanti the factors that affect the physical work environment include: 1) Hygiene, 2) Color selection, 3) Lighting level, 4) Sound, 5) Temperature air, 6) Security guarantee, 7) Personal relationships, 8) supervision and 9) Regulations and policies. The indicator used by the author to measure the working environment using the indicator put forward by Sedarmayanti among others as follows: 1) Lighting, 2) Temperature, 3) Noise, 4) Use of color, and 5) Job security [26].

2.3 Job Satisfaction

Job satisfaction is also defined as the emotional experience felt after assessing a job can also be interpreted as a reaction to feelings experienced by a person towards his work. This definition also states that job satisfaction is an attitude that is evaluated from the evaluation of affection, trust, and behavior. This means that the attitudes a person has for his work will affect how his or her beliefs and work behaviors are shown. The indicators used to measure job satisfaction by Smith, Kendall & Hulin identify five aspects of job satisfaction [27]:

1) The work itself (Work Itself), is employee evaluation of the level of difficulty that must be faced by an employee when completing the task of his work.

2) Supervision (Supervision) is a form of employee evaluation of the attitude shown by employers to the employee.

3) Workmates (Coworkers) are employees’ evaluations of other employees, either the same or different types of work.
4) Promotion (Promotion) is the evaluation of employees on the presence or absence of opportunities to obtain career improvement during work.

5) Salary / Wages (Pay) is an evaluation of employees against the fulfillment of life needs of employees and the suitability between the amount of salary with work done

2.4 Employee performance

According to Minner in Sutrisno, E suggests performance is "how a person is expected to function and behave in accordance with the tasks that have been charged to him" [28, 29]. John Minner in Sudarmanto revealed dimensions or performance indicators are aspects that become measures in assessing performance [30]. Measures serve as a benchmark in assessing performance. Dimensions or measures of performance are necessary because it will be beneficial to many parties. Dimensions or sizes that can be used as benchmarks in assessing employee performance are as follows:

1. Quality of work, namely the level of error, damage, accuracy.
2. The quantity of work is the amount of work produced.
3. Use of time in work is absence rate, delay, effective working time/hours lost work.
4. Cooperating with others in work.

2.5 Conceptual Framework

As a comprehensive overview of the interrelationships between variables used in the research model, the following is presented in the conceptual framework of the study. Where the framework of the study can be described in (figure 1) as follow:

Source: authors’ own illustration

Based on research objectives and theoretical reviews, the research hypothesis is: (1) Leadership affects job satisfaction; (2) Work environment affects job satisfaction; (3) Leadership affects performance; (4) Work environment affects performance; (5) Job satisfaction affects performance; (6) Leadership indirectly through job satisfaction affects employee performance; (7) The work environment indirectly through job satisfaction affects employee performance

3 Methodology and Data

3.1 Method

The object of this research is Bank BTN District I, Bekasi. The unit of analysis is employees of Bank BTN District I, Bekasi. The method of this study is by survey method to examine the perception of respondents. The research population is all employees of Bank BTN District I, Bekasi with 420 employees. Determination of the sample is determined by Slovin technique with the value of e 10% so that the number of samples (n) as much as 80 respondents. The instrument used in this research is a questionnaire. Data is sourced from secondary data and primary data. Before the data collected through the respondents, the questionnaire has been tested the validity and reliability, until all the questionnaires valid and reliable.

Research approach used in this research is quantitative approach by using path analysis. This analysis is the development of the regression equation, which is an option in studying the dependence of a number of variables within the model. This analysis is a good method to explain if there is a large set of data to analyze and look for causal relationships. Path analysis is one of the analytical tools developed by Ali & Limakrisna [4]. Wright developed a method for knowing the direct and indirect effects of a variable, in which there are exogenous variables and endogenous variables. Prior to further analysis, the first classic assumption test is done through normality, Multicollinearity, and Heteroscedasticity test.
4 Empirical Results and Discussion

4.1 Normality test

The normality test method used is to use the analysis of the histogram graph, namely by looking at the histogram graph that compares the distribution of observation data with near-normal distribution [31-33]. Basically, a normality test with graphics can be misleading if not careful visually looks normal, whereas statistically, it could be otherwise. From the normality test performed statistically, the value is obtained. Sig. 2-tailed is greater than 0.05, there are Leadership variable of 0.206, work environment 0.244, job satisfaction 0.406, and performance of 0.419.

4.2 Multicollinearity test

A good regression model should not be correlated among independent variables. If independent variables are correlated, these variables are not orthogonal [6]. To detect the presence of Multicollinearity, it can be seen from the Value Inflation Factor (VIF). If the value of VIF>10 occurs multicollinearity. Conversely, if VIF <10, there is no multicollinearity [3]. From the test results obtained VIF value is smaller than from 10, there are Leadership variable of 1.467, work environment 1.696, and job satisfaction of 1.210.

4.3 Heteroscedasticity test

The basis of the analysis (1) if there is a certain pattern, such as the existing dots form a certain pattern that is regular (wavy, widened then narrowed) then indicates there has been Heteroscedasticity, (2) if there is no clear pattern and spreading points above and below the number 0 on the Y axis, hence there is no Heteroscedasticity [6]. From the results of tests conducted it is known that there is no Heteroscedasticity because there is no clear pattern and the spots spread above and below the number 0 on the Y axis so that it can be said Heteroscedasticity test is met.

4.4 Path Analyze

To answer the objectives of this study, the main structure in the research model was broken into five sub-structures. The following is the SPSS output of the five substructures summarized in the following table. There is no fixed recipe for presenting the findings of a study. We will, therefore, first consider general guidelines and then turn our attention to options for reporting descriptive statistics and the results of a hypothesis test.

<table>
<thead>
<tr>
<th>Table1. SPSS Output Five Sub Structures.</th>
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<tbody>
<tr>
<td>Model</td>
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<tr>
<td>X1 – Y</td>
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<tr>
<td>X2 – Y</td>
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<tr>
<td>X1 – Z</td>
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<tr>
<td>X2 – Z</td>
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<tr>
<td>Y - Z</td>
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</tbody>
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Source: Data is processed from SPSS output

The results as follows:

a) The effect of leadership on job satisfaction, from the output of SPSS, as shown in Table 1, we get R square value on the partial influence of leadership variable on job satisfaction that is 0.743. This value can be interpreted that variation of change of job satisfaction variable can be explained by the variation of change of leadership variable equal to 74.3% while the rest that is equal to 25.7% influenced by other variables outside of leadership. The result of t arithmetic is 11,880 when compared with t table (alpha = 0.05 DF = 2; 78), hence t table value equal to 1,1990. From the results, t arithmetic and t table obtained when compared can be concluded that the value of t arithmetic greater than
b) The Effect of Work Environment on Job Satisfaction. From the result of the output of SPSS just as seen in Table 1 that got obtained value of $R^2$ on the partial influence of work environment variable to job satisfaction that is equal to 0.717. This value can be interpreted that variation of change of job satisfaction variable can be explained by the variation of change of work environment variable equal to 71.7% while the rest that is equal to 28.3% influenced by other variables outside the work environment. The result of $t$ arithmetic is 4.031 when compared with $t$ table (alpha = 0.05 DF = 2; 78), then $t$ table value equal to 1.990. From the results, $t$ arithmetic and $t$ table obtained when compared can be concluded that the value of $t$ arithmetic greater than $t$ table, which explains that the partial working environment variables positively affect job satisfaction.

c) The effect of Leadership on Employee Performance. From the output of SPSS, as shown in Table 1, we get $R^2$ value on the partial influence of leadership variable on employee performance that is equal to 0.854. This value can be interpreted that variation of employee performance variable change can be explained by the variation of change of leadership variable equal to 85.4% while the rest that is equal to 14.6% influenced by other variables outside of leadership. The result of $t$ arithmetic is 21.366 when compared with $t$ table (alpha = 0.05 DF = 2; 78), then $t$ value equal to 1.990. From the results, $t$ arithmetic and $t$ table obtained when compared can be concluded that the value of $t$ arithmetic greater than $t$ table, which explains that the partial leadership variables positively affect employee performance.

d) The Effect of Work Environment on Employee Performance. From the output of SPSS, as shown in Table 1, we get $R^2$ value on the partial influence of work environment variable to employee performance that is 0.402. This value can be interpreted that variation of employee performance variable change can be explained by the variation of change of work environment variable equal to 40.2% while the rest that is equal to 59.8% influenced by other variables outside the work environment. The result of $t$ arithmetic is 7.234 when compared with $t$ table (alpha = 0.05 DF = 2; 78), then $t$ value equal to 1.990. From the results, $t$ arithmetic and $t$ table obtained when compared can be concluded that the value of $t$ arithmetic greater than $t$ table, which explains that the partial working environment variables positively affect employee performance.

e) The Effect of Job Satisfaction on Employee Performance. From the output of SPSS, as shown in Table 1, we get $R^2$ value on the partial influence of job satisfaction variable on employee performance that is 0.704. This value can be interpreted that variation of employee performance variable change can be explained by the variation of change of job satisfaction variable equal to 70.4% while the rest that is equal to 29.6% influenced by other variables outside of job satisfaction. The result of $t$ arithmetic is 11.864 when compared with $t$ table (alpha = 0.05 DF = 2; 78), then $t$ value equal to 1.990. From the results, $t$ arithmetic and $t$ table obtained when compared can be concluded that the value of $t$ arithmetic greater than $t$ table, which explains that the partial job satisfaction variable positive effect on employee performance.

f) The indirect effects of leadership on employee performance through job satisfaction. The immediate effects that can be composed are $Y=0.924.X1$. The indirect effects of leadership on employee performance that can be prepared are: $(0.208) (0.206) = 0.428$. From the direct and indirect influence described can be explained that the magnitude of direct influence of leadership on employee performance that is equal to 0.924, while the magnitude of indirect influence of leadership on employee performance through job satisfaction of 0.428. From the above description can be concluded that the value of direct influence is greater than the value of indirect influence which gives the meaning that the variable of job satisfaction is not able to mediate leadership on employee performance. With the proving of this value, the hypothesis states that "there is an indirect influence of leadership on employee performance through employee job satisfaction at Bank BTN District I, Bekasi "cannot be proven and the hypothesis is rejected.

g) Indirect Effect of Work Environment on Employee Performance through Job Satisfaction. The immediate effects that can be composed are $Y=0.634.X2$. The indirect effects of leadership on
employee performance that can be prepared are: 
\[(0,415) \times (0,206) = 0,854\].

5. Discussion

Leadership proved to show a positive and significant impact on employee job satisfaction. The results of this study in accordance with research conducted by Saleem, H, where the results of his research show leadership style has a positive and significant impact on job satisfaction [22].

Work environment directly affects employee job satisfaction at Bank BTN District I, Bekasi. This is in accordance with research conducted by Raziq, A., and Maulabakhsh, R that the work environment has a positive and significant effect directly on employee job satisfaction [20].

Leadership proved to show a positive and significant impact on employee performance. The results of this study are in accordance with research conducted by Hamid Reza Rezaei Kelidbari, Mehdi Fadaei, and Pejman Ebrahimi, where his research results show leadership ethics have a positive and significant impact on employee performance [12].

Work environment directly affects employee performance at Bank BTN District I, Bekasi. This is in accordance with research conducted by Christabella P. Bushiri that the work environment has a positive and significant effect directly on employee performance [13].

Job satisfaction has a direct effect on employee performance at Bank BTN District I, Bekasi. This is in accordance with research that has been done by Javed, M., Balouch, R., and Hassan, F that job satisfaction has a positive and significant effect directly on employee performance [8].

From the direct and indirect influence described can be explained that the value of direct influence is less than the value of indirect influence which gives the meaning that the variable of job satisfaction is able to mediate the work environment to the performance of employees. With the proving of this value, the hypothesis states that "there is an indirect influence of work environment through job satisfaction on employee performance of Bank BTN District I, Bekasi "can be proven and hypothesis accepted.

This research discussed leadership. It is also supported by previous research, there are ; Maida, Suahyono, and Paijan [10, 16, 26]. This research discussed work environment supported by previous research, there are ; Purba and Riyanto [19, 21]. And This research discussed employee performance supported by previous research ; Prayetno, Agussalim, Aima and Riyanto [2, 11, 18, 21].

6. Conclusion and Suggestion

Supply chain management is the main factor economy development and management has a positive and significant effect on employee job satisfaction. To improve employee job satisfaction through leadership, what must be done by the leader among others is in good direction, good communication, wise decision making, and give motivation. The better leadership possessed by a leader, it will have a positive impact on employee job satisfaction.

Work environment has a positive and significant effect on employee job satisfaction. To improve employee job satisfaction through work environment, the management must do by considering lighting, air temperature, noise, proper color usage, and job security. The better the working environment within a company, it will have a positive impact on employee job satisfaction.

Leadership has a positive and significant impact on employee performance. To improve employee's performance through leadership, the leader must do by good leadership, good communication, wise decision making, and motivation. The better leadership possessed by a leader, it will have a positive impact on employee performance.
Work environment has a positive and significant impact on employee performance. To improve the performance of employees through the work environment, what should be done by the company's management is to pay attention to lighting, air temperature, noise, the use of appropriate colors, and job security. The better the work environment within a company, it will have a positive impact on employee performance.

Job satisfaction has a positive and significant effect on employee performance. To improve employee performance through job satisfaction hence that must be done by company management among others is to pay attention to the work itself, supervisor, colleague, promotion and salary/promotion. The higher job satisfaction of employees in carrying out their work, it will have a positive impact on employee performance.

Leadership indirectly through job satisfaction has no effect on employee performance. This means that job satisfaction is not able to mediate leadership on employee performance. The work environment indirectly through job satisfaction has an effect on employee performance. This means that job satisfaction can mediate leadership on employee performance.

Based on the results of the questionnaire research, the overall level of employee performance is at a good level of performance, but it would be good for the leader to continuously evaluate, especially on indicators that need to be improved, including the ability to motivate subordinates, communication skills with subordinates and the ability to control subordinates.

In producing maximum performance expected by the company through the leadership can design the working environment conditions for the job to provide inner satisfaction for the workers. This effort can be done by reviewing the working environment conditions in accordance with the desired employee. This can be seen from several indicators inherent in the working environment that is the security of work security, especially the security facilities and infrastructure must be improved.

Although the level of employee satisfaction at Bank BTN District I, Bekasi is very high but it does not mean not needed attention, because job satisfaction if not handled properly and will precisely hinder the company to grow and become a permanent dynamics facing the company in the future.

For further research that wants to raise employee performance variable, it should be able to relate other variables that are assumed can influence the improvement of employee performance outside the leadership variable, work environment, and job satisfaction such as organizational culture, compensation, placement and selection and can pay more attention especially with the use of measurement at each variable used on the indicator that has the answer is less precise or less agree. So it is expected to pay attention to the variables and measurements of each variable is expected to enrich the research in the field of human resource management, especially in this case is related to employee performance variables.

References


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