

# The Influence of Motivation and Work Environment on Employee Performance at Batam's Hang Nadim International Airport

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## RESEARCH PAPER

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**Abstract.** Batam Hang Nadim International Airport is an international airport located in Batam City, Riau Archipelago. Currently managed by PT.BIB which houses 3 large companies, each company brings the best employees to achieve common goals. To achieve this company's goals, good employee performance is needed, many factors can influence this, namely motivation and work environment. The research design in this study is a quantitative study. This research method is a type of research whose specifications are systematic, structured and clearly planned from the start. This study aims to determine the effect of motivation and work environment on employee performance at Batam's Hang Nadim International Airport. With data collected by distributing questionnaires, namely 90 respondents who work at Hang Nadim International Airport, so it can be concluded that motivation and work environment affect the performance of employees at Hang Nadim airport, Batam. This is evidenced by the results of the f test obtaining a significance value of 0.000 less than 0.05 and R Square or the coefficient of determination Motivation and Work Environment together contribute to the influence of Employee Performance by 64.3% and the remaining 35.7% employee performance influenced by other variables not examined in this study.

**Keywords:** Airport, Employee Performance, Motivation, Work Environment.

## A. INTRODUCTION

Performance is a description of the level of achievement of the implementation of a program of activities or policies in realizing the goals, objectives, vision and mission of the organization which are poured through the strategic planning of an organization [1]. Based on the initial survey on employee performance, it was found that it was still not optimal, this was indicated by the presence of some employees who were unable to predict the risks that occurred. Motivation is a stimulant of desire and driving force of one's will to work because every motive has a goal to be achieved [2]. Based on the initial survey on motivation, it was found that there was no willingness to achieve maximum work as indicated by previous performance. In addition, there are several employees who are less interested in taking further studies that are specifically beneficial (in themselves) to achieve maximum performance [3]. Other factors that affect performance include the work environment according to Hasibuan in Sutrisno [4].

According to Suparjo et al., the work environment is everything that exists around the workforce and can influence him in carrying out the tasks assigned to him [5]. To move people to match what the organization wants, it is necessary to understand the motivation of the people working in the organization, because it is this motivation that determines the behavior of people to work, or in other words, behavior is the simplest reflection of motivation. Batam Hang Nadim International Airport is an international airport located in Batam Besar Village, Nonsa District, Batam City, Riau Archipelago. The airport is named after the famous Admiral Hangnadim from the Kingdom of Malacca [6]. With a runway length of 4,025 meters, this airport is the owner of the longest runway in Indonesia and the second longest airport in Southeast Asia after Kuala Lumpur International Airport in Malaysia, this airport proved to be very effective and was initially developed

as an alternative to Singapore Changi International Airport in Singapore. Hang Nadim International Airport is a business unit owned by the Batam Concession Agency (BP Batam) which has many employees operating this airport.

The initial survey on the work environment found the phenomenon of a place of work that was not well organized, which resulted in an ineffective job. The work environment influences comfort and enthusiasm at work so that it can improve employee performance. Because each company under PT.BIB brings employees who are experts in their respective fields so they have to work in the new company, this company has different goals and ways of working from the previous company which also affects performance. one of the factors is the occurrence of differences in motivation and work environment to achieve a new company goal.

## B. METHOD

The research design in this study is a quantitative study. In this study, there are 3 variables discussed, namely motivation, work environment and employee performance. Instrument test is a tool used by researchers to collect the necessary data. The instruments used in research depend on the method chosen by the researcher. According to Sugiyono a research instrument is a tool used to measure the value of the variable under study [7]. The research instrument used in this study was a questionnaire (questionnaire). This tool must be selected according to the type of data desired in a study, researchers must first understand the variables or relationships between variables in a study.

Validity test is a measurement that shows the level of validity or reliability of a measuring instrument [8]. A measuring instrument that is valid or valid has a high level of validity, while a measuring instrument that is less valid has a low level of validity. Validity test is done by comparing  $r$  count  $r$  table, in this case  $n$  is the number of samples. If  $r$  count  $>$   $r$  table, then the question is said to be valid which is calculated using SPSS. Reliability test is the level of accuracy, thoroughness, or certainty of a tool. A questionnaire is considered reliable or reliable if a person's response to a statement remains the same or is stable over time. A variable is said to be reliable if it gives a cronbach alpha ( $\alpha$ ) value  $>$  0.60 [9]. Reliability testing in this study used SPSS with the cronbach alpha ( $\alpha$ ) statistical test.

## C. RESULT AND DISCUSSION

### Characteristics of Hang Nadim Airport Service Users

This study aims to analyze the effect of motivation and work environment on employee performance at Batam's Hang Nadim International Airport. With that objective in mind, data was collected using a questionnaire of 90 respondents who work at Hang Nadim International Airport. Questionnaires were distributed in private using a Likert scale of 1-5. Details of passenger characteristics based on demographic aspects (gender, age, education, occupation). This study uses 3 independent variables consisting of motivation (X1), work environment (X2), and independent variables.

**Table 1 Respondents by Gender**

| No | Gender       | Number of Respondents | Percentage |
|----|--------------|-----------------------|------------|
| 1. | Man          | 40                    | 44%        |
| 2. | Woman        | 51                    | 56%        |
|    | <b>Total</b> | 91                    | 100%       |

Based on table 1, it is known that the number of respondents in this study differed, namely 40 male members or 44% and 51 female respondents or 56%.

**Table 2 Respondents by Age**

| No | Age   | Number of Respondents | Percentage |
|----|-------|-----------------------|------------|
| 1. | 20-29 | 32                    | 35, 2%     |
| 2. | 30-39 | 36                    | 39, 6%     |

|              |       |           |             |
|--------------|-------|-----------|-------------|
| 3.           | 40-49 | 17        | 18,7%       |
| 4.           | >=50  | 6         | 6,5%        |
| <b>Total</b> |       | <b>86</b> | <b>100%</b> |

Based on table 2 it is known that respondents aged 20-29 with a total of 32 respondents or 35.2% are fewer than respondents aged 30-39 with a total of 36 respondents or 39.6% then aged 40-49 there are 17 respondents or 18.7% and the last age >= 50 with 6 respondents or 6.5%.

**Table 3 Respondents by Education**

| No           | Education          | Number of Respondents | Percentage  |
|--------------|--------------------|-----------------------|-------------|
| 1            | junior high school | 4                     | 4,3%        |
| 2            | Diploma            | 24                    | 26,1%       |
| 3            | high school        | 15                    | 16,3%       |
| 4            | Bachelor           | 40                    | 43,5%       |
| 5            | Etc                | 9                     | 9,8%        |
| <b>Total</b> |                    | <b>91</b>             | <b>100%</b> |

Based on table 3 it is known that the most respondents are Bachelor respondents with a total of 40 respondents or 43.5%.

**Table 4 Respondents by Occupation**

| No           | Work              | Number of Respondents | Percentage  |
|--------------|-------------------|-----------------------|-------------|
| 1.           | Student / Student | 10                    | 10,9%       |
| 2.           | Private           | 63                    | 68,5%       |
| 3.           | civil servant     | 17                    | 18,5%       |
| 4.           | Etc               | 2                     | 2,2%        |
| <b>Total</b> |                   | <b>86</b>             | <b>100%</b> |

Based on table 4 it is known that the most respondents are private with a total of 63 respondents or 68.5% and the fewest respondents are others with a total of 2 respondents or 2.2%.

### Instrument Test Results

Validity testing is carried out to determine whether a questionnaire is valid or not for each of these variables. The validity test that has been carried out in this study is shown in the following table:

**Table 5 Validity Test Results**

| No | Variable         | Items | Criteria for Significance Test <0.05 | Evidence  |
|----|------------------|-------|--------------------------------------|-----------|
| 1  | Motivation       | M1    | 0,001                                | authentic |
|    |                  | M2    | 0,000                                | authentic |
|    |                  | M3    | 0,000                                | authentic |
|    |                  | M4    | 0,000                                | authentic |
|    |                  | M5    | 0,000                                | authentic |
|    |                  | M6    | 0,000                                | authentic |
|    |                  | M7    | 0,002                                | authentic |
|    |                  | M8    | 0,001                                | authentic |
|    |                  | M9    | 0,000                                | authentic |
|    |                  | M10   | 0,001                                | authentic |
| 2  | Work Environment | L13   | 0,000                                | authentic |
|    |                  | L14   | 0,000                                | authentic |
|    |                  | L15   | 0,000                                | authentic |
|    |                  | L16   | 0,000                                | authentic |
|    |                  | L17   | 0,000                                | authentic |
|    |                  | L18   | 0,000                                | authentic |

|   |                  |     |       |           |
|---|------------------|-----|-------|-----------|
| 3 | Work Performance | K1  | 0,000 | authentic |
|   |                  | K2  | 0,000 | authentic |
|   |                  | K3  | 0,000 | authentic |
|   |                  | K4  | 0,000 | authentic |
|   |                  | K5  | 0,000 | authentic |
|   |                  | K6  | 0,000 | authentic |
|   |                  | K7  | 0,000 | authentic |
|   |                  | K8  | 0,000 | authentic |
|   |                  | K9  | 0,000 | authentic |
|   |                  | K10 | 0,000 | authentic |

From table 5 which was analyzed with SPSS, the validity test results were obtained which showed that all statements contained in the Motivation variable (X1) were declared valid. This is evident from a value that is less than 0.05 and has positive properties. From the table above which was analyzed with SPSS, the validity test results were obtained which showed that all statements contained in the Work Environment variable (X2) were stated to be valid. This is evident from the value which is less than 0.05 and has positive properties. Also from the table, it was found that all statements contained in the Employee Performance variable (Y) were declared valid. This is evident from a value that is less than 0.05 and has positive properties.

### Discussion

From the results of the research above, it can be concluded from the results of multiple linear regression that the regression coefficient is positive, so it can be said that the direction of the influence of variables X1 and X2 on variable Y is positive. While the results of the T test show that the variables of motivation and work environment have a significant value. The significant value of the motivational variable is 0.000 which is less than the probability value of 0.05 so it can be concluded that H1 is accepted or the motivational variable (X1) has an effect on employee performance (Y) and Ho is rejected.

So it can be concluded that motivation is one of the important things in order to improve employee performance in accordance with the questionnaire that has been distributed and has been filled in by employees of the Hang Nadim Batam international airport, namely a very important indicator in the motivational variable is the Opportunity to Advance where they do their best to achieve company goals, for example they try to win the company's tender and an indicator that is still lacking in the motivational variable in this study is Recognition of Performance where the average employee chooses options with small numbers for example lack of appreciation for employees who make a good contribution to the company [3], [3], [10], [11].

### D. CONCLUSION

Based on the results of research on the Effect of Motivation and Work Environment on Employee Performance at Batam's Hang Nadim International Airport, it can be concluded that the motivation given and obtained by employees at Batam's Hang Nadim International Airport is very good with evidence of employee performance results to date. The results obtained were based on the responses given by 90 respondents regarding the motivation given to advance Batam's Hang Nadim Airport.

This is evidenced by the significance value of the t test of 0.000 which is less than 0.05 and the value of the regression coefficient of motivation which shows a positive effect. According to the results of the research, the respondents answered agreeing and strongly agreeing to the questions contained in the motivational variable. From the physical evidence that can be seen from the results of motivation, namely employees are more creative and innovative towards the progress of Batam Hang Nadim airport which makes this airport better and organized.

It is hoped that future researchers can conduct research with other independent variables that can affect performance, as well as a means of information for future researchers and if there are deficiencies, hopefully in the future it can be evaluated for the better. As well as using other research methods and increasing the number of respondents

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### Author declaration

#### Author contributions and responsibilities

The authors made major contributions to the conception and design of the study. The authors took responsibility for data analysis, interpretation and discussion of results. The authors read and approved the final manuscript.

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The authors declare no competing interests.

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