

## Research article

# The Determinant Factors that Affecting Performance Employee in Jakarta Smart City Unit

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### Abstract.

Public demand for a new paradigm of government administration based on bureaucratic professionalism is getting sharper, therefore good performance is needed in order to provide good service to the community. In this case, the DKI Jakarta government formed a team, namely Technical Implementing Service Unit (UPT) Jakarta Smart City (JSC), to handle public complaints. Therefore, it is important to analyze the performance of the employees of the UPT JSC as a service to the community. This study aims to determine the effect of work facilities, work environment, and leadership style on employee performance and develop strategy that has improvement effect on the service. This study uses qualitative and quantitative methods, with a sample of 100 respondents from of Technical Implementing Service Unit (UPT) Jakarta Smart City (JSC) employees using the convenience method. The data obtained were analyzed using the PLS (Partial Least Square) analysis technique. The results showed that work facilities, work environment, and leadership style had a significant positive effect on employee performance.

**Keywords:** Work Facilities; Work Environment; Leadership Style; Employee Performance; Partial Least Square

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## 1. Introduction

Community satisfaction is the main goal of public organizations, therefore it needs to be based on professionalism like a business organization by prioritizing efficiency, effectiveness, cheap, fast, and quality (1). Since the issuance of Presidential Instruction No. 3 of 2003 concerning National Policies and Strategies for the Development of E-government, the government both at the central and regional levels began to realize the importance of internet technology in government (e-government), and the needs to continually improve public services performances both in terms of effectiveness and efficiency by upholding the principles of accountability and transparency (2), (3). Local governments develop public services by providing information through websites

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that can be accessed directly by the public. Utilization of internet technology in the form of a website is the first step in developing future service innovations. The DKI Jakarta Provincial Government through the Regulation of the Governor of the Special Capital Region of Jakarta Number 234 of 2014 concerning the Organization and Work Procedures of the Department of Communication, Informatics, and Public Relations were then formed a special team to handle the provision of ICT-based information. The team is the Jakarta Smart City (JSC) Management Unit under the Department of Communication, Informatics, and Public Relations which aims to improve the quality of public services based on the internet and mobile towards Jakarta as a smart city.

In terms of providing public services, the people of Jakarta in general demand fast, precise and economical services for every public service. When the community does not get what they are entitled to, then the community's satisfaction with local government services will be reduced which indirectly shows that the local government has not been able to perform its duties properly (5), (6). Community satisfaction with the performance of local governments will continue to decline when the increasing needs of people's lives in all aspects of life are not matched by increased performance of local government services in all its aspects. As one of its main service, JSC manages 9 (nine) public complaint channels; from DKI Jakarta Facebook and Twitter account, direct email to dki@jakarta.go.id, Balai Warga menu of www.jakarta.go.id, LAPOR 1708, direct to special Short Messaging Services (SMS) number, JAKI (Jakarta Kini) Application, Governor's personal social media accounts, and offline complaint channel. All public complaints received are immediately dispatched to the relevant department within DKI Jakarta Provincial Government. As a standard operation procedure (SOP), public complaints received by JSC must be followed up within 0-14 days for simple or light complaints. Complaint which needs complex handling from one or more departments are categorized as heavy. The followed up time of these are unlimited (7), (8), (9).

Ombudsman, a public state agency whose job to oversight public services by government bodies, reported that DKI Jakarta Province in terms of implementing compliance with service standards and service standard competencies occupies the yellow zone and gets a score of 74.64 (10). In addition, the increasing number of public reports originating from non-location reports (Facebook, twitter, email, BalaiWarga Jakarta.go.id, LAPOR 1708, SMS Center, Governor's personal social media accounts, and 5 offline complaint channels) from 2016 amounted to 112,140 complaints, increased by 28,970 complaints to 141,100 in 2020. Based on a number of data that have been described previously, the researchers assumed that the performance of UP JSC employees need to be improved in optimizing excellent service. This aim to improve the completion of

each public complaint, which would lead to a better evaluation in public information service satisfaction conducted annually by Ombudsman. This research was conducted to find out what factors are the main roles to improve the performance of UP JSC employees, namely; Facilities, Work Environment, and Leadership Style. Survey was conducted during November and December of 2020.

### **1.1. Employee Performance**

Performance is a set of value from employee behaviours that contribute, either positively or negatively, to the accomplishment of organizational goals (11), (12). Employee's performance is important to business or organization since it will lead to organization's success. Moreover it is also important to employee as an individual because a well performed task is a source of personal satisfaction (13). According to Mangkunegara, indicators in performance can be divided into two aspects, namely: 1). Quantitative indicators, including: Work processes and working conditions, Time at work, Number of errors in carrying out work and Number and type of work 2). Qualitative indicators, including: Quality of Work, Punctuality, Ability to work and Ability to evaluate (14).

### **1.2. Work Facilities**

Work facilities are very important for companies, because they can support employee performance, mainly in completing jobs assigned to them (15), (16). The work facilities variables are including work equipment and work appliances. Work equipment defined as goods or objects that function as tools that are directly used by employees in production. Work appliance are objects or goods that are used in work but not directly to produce, but serve as a facilitator and refresher in work (17), (18).

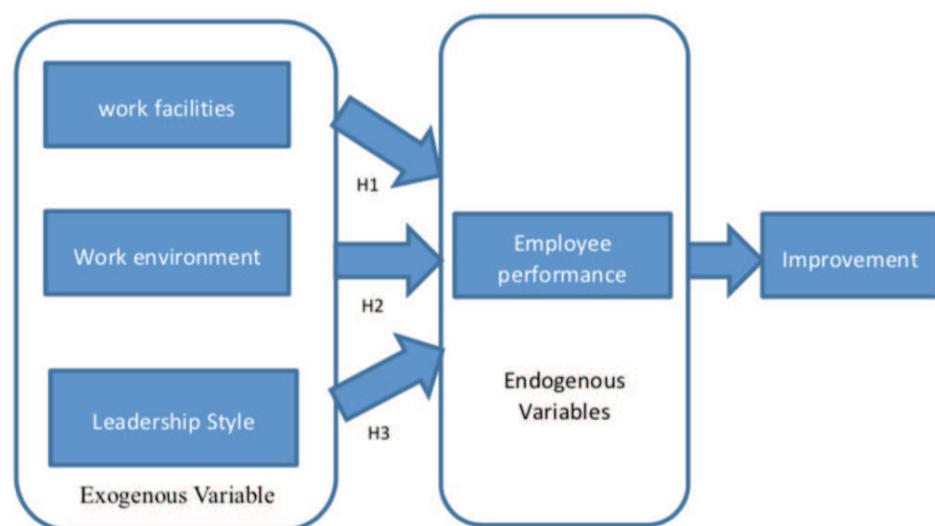
### **1.3. Work Environment**

The work environment can help organizations to improve their self-efficacy and enable employees to benefit from collective knowledge. Work environment can increase employee motivation and performance (13), (19). According Sedarmayanti work environment include physical and non-physical work environments. The physical work environment is all physical conditions that exist around the workplace that can affect employees either directly or indirectly, meanwhile The non-physical work environment are conditions that occur related to work relationships, both relationships with superiors

and relationships with subordinates as well as with fellow co-workers (20). The SEM showed that the main factors affecting students' future intention to enroll in chemistry-related courses are autonomy and affective behavior (21).

#### 1.4. Leadership Style

Figure of a leader is one of the principles of Human Resource Management (HRM) in which the figure can create an innovative atmosphere; it is also related to employee performance (21), (22). Exceptional leaders are people who has the ability to see opportunities as well as threats, they are also capable to influence people to collectively achieve great things that initially seemed impossible (23). Leadership Style has a very significant influence on Employee Performance (24), (25). According to Harbani, leadership style consists of skills in managing groups of people and charismatic leadership (26).



**Figure 1:** Conceptual Framework.

#### 1.5. The following research hypotheses are proposed:

H1: Work facilities affect employee performance

H2: Work environment affect employee performance

H3: Leadership style affect employee performance

## 2. Methodology

This research uses explanatory research in a field survey research. This study aims to test empirically, that quantitative study using statistics analysis is more suitable. Additionally, the study examines and explains the influences between variables of employee performance. Running quantitative approach, the survey conducted using questionnaires to obtain primary data from Jakarta Smart City employees. In addition, qualitative methods were used to develop improvement strategies using PDCA (Plan-Do-Check-Action) Model. The data were generated from individual perspective of Jakarta Smart City employees. First part of questionnaires focused on respondent identity such as age, gender, education and length of work. There were 8 questions to measure employee performance, 9 questions on work facilities, 11 questions on work environment and 9 questions on leadership style. This research samples were 100 respondents referring to Hair which stated that the sample size was 100-200 (27). Likert scale were the used to measure the responses using 5 levels from strongly disagree to strongly agree. Data analysis was carried out using Structural Equation Modelling based on variants with smartpls software to test the research hypothesis.

## 3. Result and Discussion

### 3.1. Respondent data

Respondents in this study were dominated by male by 62% with ages between 20 – <30 years by 57%. From the level of education, 96% has bachelor's degree with 78% of them has a working period of less than 5.

### 3.2. Data Analysis

This research uses Structural Equation Modelling (SEM) using SmartPLS software. Data analysis consisted of two stages, model measurement (testing reliability and validity) and structural measurement (testing hypotheses).

### 3.3. Measurement Model

#### 1. Loading Factor

TABLE 1: Characteristic Respondent.

| Characteristic         | Frequency  | (%)        |
|------------------------|------------|------------|
| <b>Gender</b>          |            |            |
| Female                 | 38         | 38.0       |
| Male                   | 62         | 62.0       |
| <b>Age</b>             |            |            |
| 20 - <30 Yo            | 57         | 57.0       |
| 30 - <40 Yo            | 39         | 39.0       |
| 40 - <50 Yo            | 3          | 3.0        |
| >50 Yo                 | 1          | 1.0        |
| <b>Level Education</b> |            |            |
| Diploma                | 4          | 4.0        |
| Bachelor               | 96         | 96.0       |
| <b>Length of work</b>  |            |            |
| 1 - <5 Years           | 78         | 78.0       |
| 5 - <10 Years          | 18         | 18.0       |
| 10 - <15 Years         | 4          | 4.0        |
| <b>Total</b>           | <b>100</b> | <b>100</b> |

All outer loading values show that the value is greater than 0.7, this indicates that the indicator is considered valid and acceptable.

### 1. Reliability and Validity

AVE is used to measure the value of validity, with the recommended limit  $> 0.5$ . Cronbach alpha and composite reliability (CR) were used to measure reliability with a recommended limit of 0.7 (28). In Table 2, it is known that all variables are valid (have an AVE value of more than 0.5) and reliable (the Ronbach alpha and composite reliability value are more than 0.7).

TABLE 2: Construct Reliability and Validity.

| Construct            | Cronbach's Alpha | Composite Reliability | AVE   |
|----------------------|------------------|-----------------------|-------|
| Employee Performance | 0.923            | 0.937                 | 0.652 |
| Work Facilities      | 0.919            | 0.936                 | 0.627 |
| Work Environment     | 0.951            | 0.958                 | 0.696 |
| Leadership Style     | 0.957            | 0.963                 | 0.701 |

### 3.4. Structural Model

This study examined the effect work facilities, work environment and leadership style on employee performance in UPT Jakarta Smart City. Overall, the independent variables explained 97,3% variance in employee performance included in the substantial category.

TABLE 3: Structural Model.

| Hypothesis                            | Path Coefficient | T-Statistics | Sig.Level   |
|---------------------------------------|------------------|--------------|-------------|
| Work Facilities Employee Performance  | 0,782            | 7.337        | Significant |
| Work Environment Employee Performance | 0,748            | 6.415        | Significant |
| Leadership Style Employee Performance | 0,629            | 8.438        | Significant |

Based on Table 3, all hypothesis accepted. Work facilities has a significant and positive effect on employee performance. If the work facilities in a company or organization are more adequate and appropriate, then the employee's performance will be better. Results of this research are accordance with these prior researchers which stated there is positive relationship between work facilities and employee performance because existence of adequate work facilities will improve employee performance so that they can work well and use all abilities to the maximum to produce optimal work results (29), (15). Work environment has significant positive influence to employee performance. If the work environment in a company or organization is getting better; as in good air circulation, adequate lighting, conducive space arrangement, and good relations between superiors and co-workers; performance of each employee tend to show the expected results. The good work environment can improve employee behaviour and productivity as well as employee's health (30). Leadership style has a significant and positive effect on employee performance. It means the better the leadership; as in the leader has expertise, vision, mission, goals, ability to influence, and is able to bring his colleagues onward and productive; then the performance of each employee will improve. Good relations between a leader and employees can also improve employee performance, thus the quality of the company (25), In addition, leaders also need to maintain communication because it has a positive effect to face risks (31)

From the results obtained, writers then made an improvement strategy using PDCA (Plan-Do-Check-Action) in the strategy implementation process. At the planning stage, to improve public information service satisfaction, external and internal improvements are needed. External factors include: 1). Improve the speed of complaints service completion time and the accuracy of officers to forward or hand over complaints to the appropriate

department, 2). Improve the accuracy of information provided to the public, 3). Lower the error rate of the officer or application, 4). Develop comfortable communication with the community, 5). Prioritize the needs of the community, and 6). Receive criticism and suggestions from the public well. Internal factors include: 1). Improve work facilities for employees, 2). Improve the quality of work environment for employees and 3). Create effective and visionary leadership patterns and create environment that support new leaders to emerge.

In the strategy implementation process, including: 1). Develop employee training programs related to excellent service and short leadership training, 2). Improvements of work facilities by repairing or adjusting the work space and updating computer update facilities (PC/Laptop) and 3). Improve air circulation and lighting of working environment. In the check process by measuring the results, it was found that: 1). There is a time acceleration in resolving in the light-medium category complaints, 3). Employees have a better understanding of excellent service, improved coordination, communication, thoroughness and leadership patterns, 4). After work space improvements, updating computer facilities, adding circulation and lighting, employees are more comfortable, thus optimal in carrying out their daily tasks.

#### 4. Conclusion

The work facilities, work environment and leadership style have a positive and significant effect on employee performance. From this study we can conclude that adequate facilities, conducive work environment and good leadership can increase employee's productivity. A comfortable and mutually supportive work environment, both from superiors, subordinates, and colleagues can certainly increase productivity. Leaders who understand and appreciative to input or even complaints from subordinates can certainly create a more productive work environment. The results from improvement strategy using PDCA are: 1). There is an acceleration in light and medium complaints category completion time from 0-14 days during year 2016 - 2020 to 0-7 days in year 2021, 2) Faster in responding public complaints, 3). Officers have better understanding of the task which lead to better information delivery and better understanding by the general public, 4). Officers receive and respond to any criticism, suggestions, or input from public, 5). Officers respond to every complaint properly, 6). Application is updated regularly to minimize errors.

This study has some implications for UPT JSC in terms providing insight that adequate facilities and employees satisfaction can certainly increase organization's productivity.

This include a comfortable and mutually supportive working environment, in terms of physical working environment and relationship of all the people within the organization, as well as a leader that caters the need of subordinates and the availability of employee's trainings. This research is only focused on employee performance, work facilities, work environment and leadership style and the study objects limited UPT JSC employee, so that research results are not directly applicable in other cities. Further research recommended to add another variable affected on employee performance such as training, motivation, linkage of follow-up between related units, income and work stress.

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