

# The Influence of Organizational Culture, Leadership, Cognitive Ability, and Work Motivation on Employees Performance

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**Abstract—** This study was aimed at finding: The influence of organizational culture on work motivation; the influence of leadership on work motivation; the effect of cognitive ability on work motivation;) the influence of organizational culture on employee performance; the influence of leadership on employee performance; the effect of cognitive abilities on employee performance; and the effect of work motivation on employee performance. The research findings revealed the performance of employees in the Office of Communication and Information (Diskominfo) of North Sumatra Province directly affected by Organizational Culture, Leadership, Cognitive Ability and Work Motivation. Based on the hypothesis testing it concluded: there is a direct influence of organizational culture on work motivation, there is a direct influence of leadership on work motivation, there is a direct influence on cognitive abilities on work motivation, there is a direct influence on organizational culture employee performance, there is a direct influence of leadership on employee performance, there is a direct influence of cognitive abilities on employee performance, and there is a direct influence of work motivation on employee performance. The results of the study provide an overview of organizational culture, leadership, cognitive abilities, and work motivation affecting employee performance both directly and indirectly which reached 78.95%.

**Keywords—**Organizational Culture, Leadership, Cognitive Ability, Work Motivation and Employee Performance

## I. INTRODUCTION

The organization is a social unit that is consciously coordinated, with a relatively identifiable boundary, working continuously to achieve goals. The success of achieving organizational goals is strongly influenced by the role and performance of its employees. Performance is an outcome of the people and other resources interaction in the organization which bring the final results in accordance with the level of quality and standards that have been set.

Every government or private organization expects its members to have a good performance, because with good performance it will have a positive impact on the achievement of the goals that have been set. This idea also includes in the performance of employees in the Office of Communication and Information (Diskominfo). One of the big challenges facing government agencies is the effective and efficient implementation of performance. Employee performance should be reformed to respond the changes more quickly; it is

expected to create the officers' performance meet professional work.

Diskominfo of Medan Municipality is government agency of the Medan government which is led by the Head of Department, has the responsibility to assist the regional head in the administration in the communication and informatics affair and to carry out co-administration tasks in accordance with covered area of duty. The function of the Medan City Diskominfo is to assist the regional head in carrying out regional affairs in communication and informatics as well as carrying out co-administration tasks in accordance with covered area of duty. The North Sumatra Province Diskominfo plays a major role in the provision of communication and information. With an increasingly rapid population the information channeling needs to be fast and accurate for people.

In discussing performance, it is necessary to know the potential performance such as the strength or power possessed by employees, so they are able to complete their work in order to get maximum results. The actual performance in a level of real work performance is an output (outcome) of all employees. It also shows the success or failure of employees in carrying out their work related to the work environment. Meanwhile, performance is related to job and individual characteristics.

George and Gareth (2015: 176) explained that performance is an evaluation of the results of a person's attitude including determining whether or not someone's work is done well. If someone has completed the tasks delegated to him in referring to the set standards, it is categorized as good performance. Mondy and Noe (2012: 45) state that one of the goals of human resource management is to create activities that contribute to higher organizational performance.

Jackson and Mathis (2015: 12), in the perspective of human resource development, contend that performance could be seen from the effective resulting output and the organization's services which are forwarded to its customers. Performance is a benchmark of success. Milkovich and Boudreau (2011: 197) posited that performance reflects organizational success while employee achievement completes the work that has been set. This is in accordance with the research results of Hounger (2006: 1) who concluded that the

combination of the performance appraisal process is the talent that is owned (for example, hard-working, sociable, intelligent), appropriate rewards, and motivation that employees have will affect employee performance.

The initial study at the North Sumatra Province Diskominfo Office and refers to the references as well as regional technical meeting led by Diskominfo showed that there were some employees who had low performance. On the other hand, employees who carry out tasks on scheduled made should be guided and monitored and given rewards if the person concerned is performing in carrying out his duties and responsibilities, and is given punishment if he is negligent and does not heed his workload, so they feel heeded more and feel as an asset in organization.

Negative impacts arising from the low performance employees, namely: (1) employees do not work seriously, (2) employees do not provide the best service, (3) low work responsibilities, (4) low levels of employee discipline, (5) cooperation among employees is low, and (6) the desire for achievement and employee self-development is still low. Thus, Wood (2011: 91) pointed the factors that affect individual performance included the function of the interaction of individual attributes, work effort and organizational support.

Jex (2002: 118) argued that there are three predictor variables of performance, namely (1) cognitive ability, (2) work experience, and (3) personality & accuracy traits. Additionally Colquitt, Lepine and Wesson (2015: 27) mentioned the factors that affect performance are; (1) individual mechanisms including job satisfaction, stress, motivation, trust, fairness, and decision making, (2) individual characteristics including personality and values culture and ability, (3) team mechanisms include team characteristics, team processes and communication, leadership power and influence, leadership behavior and style, and (4) organizational mechanisms include organizational structure and organizational culture.

Referring to performance theories, there several variables that influence directly or indirectly with performance are: (1) organizational culture, (2) leadership, (3) cognitive abilities, and (4) work motivation. Noting the importance of achieving the goals of the organization's vision and mission, the factors that influence the achievement of these goals become something that needs to be improved. Such encouragement should be provided by the head of sections because the results of routine monitoring and evaluation carried out showed that are still problems. It should be solved together. Based on the performance problems in the Office of Communication and Information of North Sumatra Province, this study upholds the research title: "The Influence of Organizational Culture, Leadership, Cognitive Ability, and Work Motivation on Employee Performance of the Office of Communication and Information of North Sumatra Province".

## II. LITERATURE REVIEW

### 2.1 Employee Performance

Performance is the result of work achieved by a person based on job requirements. A job has certain requirements to be done in achieving goals which are also called job standards. Kane (2013: 212) contended that the concept of performance is a multidimensional concept, this means that performance can be understood in different ways depending on the perspective of each individual who sees it in general the concept of performance is associated with behavior.

The Performance Component Model from Mathis and Jackson recommend that performance is influenced by effort expended, individual abilities, and organizational support. Based on the model, performance indicators are divided into four namely: (1) Work Quality; (2) Work Quantity; (3) Working Time and (4) Cooperation.

Based on the description above, it can be synthesized that performance is the result of work in accordance with standardization, criteria and norms established through work achieved by a person or individual in carrying out their duties and responsibilities. The performance indicators in this study are (1) quantity, (2) quality, (3) effective use of time, (4) cooperation.

### 2.2 Organizational culture

Organizational culture is a system of shared meanings shared by members that distinguishes the organization from other organizations (Robbins, 2016: 286). This system of shared meaning, when examined more closely is a set of main characteristics that are upheld by the organization. Kreitner and Kinicki (2014: 212) define that organizational culture is such organizational cement that binds members of the organization through adhered values, symbolic tools, and social goals to be achieved.

Argued Sagala (2013: 122) that the organizational culture is a system of values of shared meaning that emphasizes the importance of: (1) working group norms, (2) sentiments, (3) values and interactions. Furthermore Luthans (2012: 241) pointed a number of important characteristics of organizational culture, namely: (1) rules of behavior, (2) norms, dominant values, (3) philosophy, (4) discipline, (5) organizational climate.

Based on the description above, organizational culture is a system of values, beliefs, norms and interactions that are introduced and taught and applied in agencies to influence the mindset, attitudes and behavior of employees. Indicators of organizational culture are: (1) cooperation, (2) a sense of kinship, (3) mutual respect, (4) caring for others and (5) discipline.

### 2.3 Leadership

Nelson and James (2014: 388) argued that: "Leadership in organizations is the process of guiding and directing the behavior of people in the environment." The direct influence of leadership on performance is described by Daft (2011: 81) that the characteristics of leader behavior directly influence performance. Employees with change leaders tend to have

higher levels of task implementation. They are also more likely to include in social personality. The rest is known about the effects of leadership change on opposing behavior.

Robbins and Timothy (2003: 419) explained that: "Leadership as the ability to influence a group toward the achievement of a vision or set of goals." The leader will keep trying to influence the members or followers to want to do what they want. To be able to fulfill his will, leaders use various methods so that the desire is carried out by members of his organization. Kantz in (2003: 27) said that there are three characteristics of effective leaders namely: (a) having technical skills, (b) having human skills, and (c) having conceptual skills.

Based on the description above, leadership is the ability to move, influence, motivate, encourage, direct, advise and foster in the provision of work learning to subordinates to achieve organizational goals, which can be measured through indicators: (1) technical skills, (2) human skills, and (3) conceptual skills.

#### 2.4 Cognitive Ability

Intellectual competence is the ability needed to perform various mental-thinking activities, tune in, and solve problems. Individuals in most societies place the intelligence for the right reasons at a high value. Gibson, et al (2012: 90) elaborated that: "abilities, skills and other factors play a role in individual behavior and performance. Ability is a trait (innate or learned) that permits a person to do something mental or physical. Skills are task - related competencies, such as the skills to negotiate a merger or operate a computer or the skill to clearly communicate a group's mission goals. Cognitive ability is a process that occurs internally within the central nervous system when humans are thinking.

Based on the description above, Cognitive Ability is the individual competence to do various tasks and job responsibilities whose process begins with gathering information on the symptoms / phenomena of the problem, determining alternatives, solving solutions / priorities, and evaluating. With indicators: (1) information gathering, (2) alternative determination, (3) problem solving, and (4) evaluation.

#### 2.5 Work Motivation

Motivation is the desire to act. Katz (2014: 210) argued that motivation is a term that is commonly used for all forms of desires, needs, security, and similar strengths. Robbins and Judge (2016: 183) stated that: "motivation as the processes that account for an individual's intensity, direction, and persistence of effort toward attaining goals". Mathis and Jackson (2016: 115) elaborated that motivation is an encouragement from within oneself that causes, channels, and is the background that underlies a person's behavior. Gibson, Ivancevich and Donnelly (2012: 252) explained that motivation is a concept used to describe the impulses that arise on or within a person to move and direct behavior. Furthermore, Colquitt, LePine, and Wesson (2015: 241) explained that: "motivation is defined as a set of energetic

forces that originates both within and outside and employee, initiates work-related effort, and determines its direction, intensity and persistence".

Based on the description above, work motivation is an encouragement that comes from within the individual to carry out his work in the organization with indicators (1) trying to be brave to face risks (2) the desire to overcome problems at work, (3) the drive to succeed at work, (4) complete the task well, (5) trying to be recognized his work.

### III. METHODOLOGY

This research was conducted at the Office of Communication and Information technology (Diskominfo) of North Sumatra Province. This research was conducted in April to May 2019. This research applied a quantitative research design with ex post facto research; the variables studied are not controlled and manipulated by researchers, but the facts are expressed based on the measurement of symptoms that have been existed. To analyze one variable with another, it used path analysis. A path analysis takes a significant value of the linear regression between variables.

The population of the study was 214 people and sample of 139 people were selected using the stratified proportional random sampling method to find out specifically how the state of organizational commitment was for each stratum.

The data collection technique used in this study was a questionnaire, in the form of a closed questionnaire covering non-tests (statements) and tests (questions). The technique is used to obtain primary data obtained directly from research subjects who will be subject to the conclusions of the research results.

This research implemented the three grouping activities, namely: (1) The researcher conducted a questionnaire test for 30 non-sample populations that aims to determine the validity of the questionnaire measuring instrument that might be distributed to the validity test sample using the product moment correlation formula from Pearson and the test reliability using the Cronbach Alpha formula (for non-test) and KR 20 formula (for tests); (2) After the researcher found the right questionnaire, then the questionnaire is distributed to the respondents; (3) After completion, the researcher then tabulated data based on the results obtained and performs' calculations in accordance with the steps that have been determined.

### IV. RESULTS AND DISCUSSION

#### 1. Organizational Culture of Work Motivation

Organizational culture has a direct positive effect on work motivation by 0.315 (9.92%). Meanwhile the unanalyzed component (U) through its correlation with leadership is amounted to 0.257, and the unanalyzed component (U) through its correlation with cognitive abilities of 0.165. This illustrates the influence of organizational culture on employee work motivation in the Office of Communication and Informatics (Diskominfo) of North Sumatra Province. Not

optimal organizational culture values can be seen from the low work motivation of employees in the office.

## 2. Leadership in Work Motivation

Leadership has a direct positive effect on work motivation by 0.405 (16.40%). Meanwhile the unanalyzed component (U) through its correlation with organizational culture is 0.199 and the unanalyzed component (U) through its correlation with cognitive abilities is 0.164. This illustrates the influence of leadership on the work motivation of employees in the Office of Communication and Informatics (Diskominfo) of North Sumatra Province. The non-optimal value of leadership can be seen from the low work motivation of employees in the office.

## 3. Cognitive Ability to Work Motivation

Cognitive ability has a positive direct effect on work motivation by 0.277 (7.67%). While the unanalyzed component (U) through its correlation with organizational culture is 0.188 and the unanalyzed component (U) through its correlation with leadership is 0.241. This illustrates the influence of cognitive abilities on employee work motivation in the Office of Communication and Informatics (Diskominfo) of North Sumatra Province. Not optimal cognitive abilities of employees can be seen from the low motivation to work employees in the office.

## 4. Organizational Culture on Performance

Organizational culture has a direct positive effect on employee performance by 0.231 (5.34%). The indirect effect of organizational culture on employee performance through work motivation was 0.24, while the unanalyzed (U) component through its correlation with leadership was 0.177 and the unanalyzed (U) component through its correlation with cognitive abilities was 0.096. This illustrates the influence of organizational culture on the performance of employees of the Office of Communication and Informatics (Diskominfo) of North Sumatra Province. The low organizational culture can be seen from the lack of cooperation received by employees from the work environment and the lack of enthusiasm of the work team in the office in improving performance.

Improving performance through improving organizational culture can be done by increasing innovation and risk taking, increasing attention to details, increasing orientation to results, increasing orientation towards people, increasing team orientation, increasing aggressiveness, and increasing stability.

## 5. Leadership on Performance

Leadership has a direct positive effect on employee performance by 0.279 (7.78%). The indirect influence of leadership on employee performance through work motivation is 0.258, while the unanalyzed component (U) through its correlation with organizational culture is 0.146 and the unanalyzed component (U) through its correlation with cognitive abilities is 0.096. This illustrates the influence of leadership on the performance of employees of the Office of Communication and Informatics (Diskominfo) of North

Sumatra Province. Not optimal leadership values can be seen from the lack of reward received by employees from the work environment, and the lack of enthusiasm of work teams in improving performance.

Thus, efforts that can be made to improve employee performance by increasing the willingness to guide subordinates, giving instructions on the implementation of work, instructing everything related to the task, improving the design of tasks, and increasing responsibilities.

## 6. Cognitive Ability to Performance

Cognitive ability has a direct positive effect on employee performance by 0.161 (2.59%). The indirect effect of cognitive ability on employee performance through work motivation was 0.237, while the unanalyzed (U) component through its correlation with organizational culture was 0.138 and the unanalyzed (U) component through its correlation with leadership was 0.166. This illustrates the influence of cognitive abilities on the performance of employees of the Office of Communication and Informatics (Diskominfo) of North Sumatra Province. Not optimal cognitive abilities can be seen from the low performance of employees in the office.

The level of expertise a person has reflects how much cognitive abilities they have. With the more expertise they have, the more work problems that can be solved. This raises the greater the challenges faced by the work that requires high cognitive abilities in completing the work. Employee cognitive abilities determine the amount of performance against work in the office.

## 7. Work Motivation on Performance

Work motivation has a direct positive effect on employee performance by 0.335 (11.22%). While the rest consists of the spurious component (S) through non-organizational culture pathways by 0.170, the spurious component (S) through non-leadership pathways by 0.215 and the spurious component (S) through non-cognitive ability pathways (X3) by 0.144. This influence is the biggest influence on employee performance. This influence is considered very important to improve performance because it provides a large contribution so that the increased work motivation of employees is expected to improve employee performance and hopefully the results achieved are better. Not optimal work motivation can be seen from the lack of willingness of employees to get feedback from every job they do as well as the lack of desire of employees to do work in an innovative way.

Someone might be motivated to do a better job because there is encouragement from within (intrinsic) or from outside (extrinsic). This impulse becomes a synergy so that someone wants to work hard to carry out the tasks given to him. To improve performance through work motivation can be done by increasing the desire for more, increasing cooperation, increasing appreciation and giving rewards (including career path).

Based on the calculation results, it concluded that the total effect is from direct influence (60.92%) and indirect effect (18.03%) of organizational culture, leadership, cognitive

abilities and work motivation combined to the performance of Office of Communication and Informatics (Diskominfo) employees in Sumatra Province North in the form of 78.95%. While the remaining  $1 - 0.789533 = 0.210467$  (21.05%) comes from other factors outside of organizational culture, leadership, cognitive abilities and work motivation.

## V. CONCLUSION

Data analysis and discussion of research results give the following conclusions:

1. Employee performance in the Office of Communication and Informatics (Diskominfo) of North Sumatra Province was constructive in an associative causal relationship between the exogenous variables of organizational culture, leadership, cognitive abilities and work motivation with endogenous variables of employee performance.
2. Organizational culture has a direct positive effect on the work motivation of employees of the Communication and Information Technology Office (Diskominfo) of North Sumatra Province.
3. Leadership has a direct positive effect on the work motivation of North Sumatra Province Communication and Information Office (Diskominfo) employees.
4. Cognitive abilities have a direct positive effect on the work motivation of employees of the Communication and Information Technology Office (Diskominfo) of North Sumatra Province.
5. Organizational culture has a direct positive effect on the performance of employees of the communication and informatics Office of North Sumatra Province
6. Leadership has a direct positive effect on the performance of employees of the Communication and Informatics Office in North Sumatra Province.
7. Cognitive ability has a direct positive effect on the performance of employees of the communication and informatics Office of North Sumatra Province.
8. Work motivation has a direct positive effect on the performance of employees of the Communication and Informatics Office of North Sumatra Province.

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