

Influence Mastery ICT And ICT Facilities on the Performance of Employees of the PUPR Department of Minahasa District

Daudson EA Rombon^{1*}, Parabelem T. D. Rompas¹, Rolly R Oroh¹

¹Universitas Negeri Manado, Indonesia

*Corresponding author: daudsonrombon@gmail.com

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ABSTRACT

Study This aim study influences mastery of Technology Information and Communication (ICT) and means ICT infrastructure towards performance employees at the Department of Employment Regency Public and Public Housing (PUPR) Minahasa. Study This uses a quantitative method with an approach survey involving 30 PUPR Service employees as respondents. Data is collected through a questionnaire tested for validity and reliability. Data analysis was carried out using multiple linear regression to influence independent to dependent variables. Research results show that ICT mastery has a positive and significant effect on the performance of employees. Likewise, ICT infrastructure also has a positive and significant impact on the performance of employees. This matter indicated that the more ICT mastery and more good means available for ICT infrastructure, the performance of Regency PUPR Service employees Minahasa will the more increase. Findings This emphasized the importance of improving ICT capacity and provision means adequate infrastructure for support optimization performance employee. Conclusion of the study This is that mastery of ICT and facilities ICT infrastructure is a factor crucial in increasing the performance of employees. Therefore, it is recommended that the government keep increasing training and development of ICT skills for employees as well as ensure availability means adequate infrastructure use support duties and functions. This Study's expectation can contribute to the planning and retrieval of more policies effective for the public, especially in field infrastructure and services in the District Minahasa.

Keywords: ICT Mastery, ICT Infrastructure, Employee Performance, PUPR Service, Regency Minahasa.

INTRODUCTION

In the growing digital era fast, Technology Information and Communication (ICT) is an element key to increasing the performance of organizations, including the public sector. Regency Minahasa faces demands to make use of ICT to increase the efficiency and effectiveness of public service. Employment Department General Affairs and Spatial Planning (PUPR) plays a vital role in the development of infrastructure and management of quality space for the public.

The use of ICT in the public sector is recognized as important. However, its implementation is often constrained by employee mastery of ICT, and availability means adequate infrastructure. Study about influence mastery of ICT and facilities infrastructure to performance Regency PUPR Service employees Minahasa become relevant. Utilization of ICT in the public sector increases efficiency in administration, transparency, and accountability of government. At the PUPR Department, ICT is available and used in the planning, implementation, and maintenance of public infrastructure, speeding up the administrative process and improving the quality of public service. Mastery of ICT by Regency PUPR employees Minahasa determines the extent to which technology can utilized in a way effective. Expertise and understanding in the use of device software, applications, and ICT systems influence productivity and quality of work employees.

The challenge in ICT implementation includes the availability of adequate ICT infrastructure and skilled employees. However, progress in infrastructure, telecommunications, and training programs by the government opens opportunities for repair conditions. Availability Adequate ICT facilities and infrastructure are very important. Factors like internet accessibility, adequate hardware devices, and infrastructure networks impact the abilities of employees to use technology in the tasks they do. Regency Minahasa Possibly faces challenges in the provision of ICT infrastructure and readiness for employees, influencing the effectiveness of ICT implementation and performance of PUPR Department employees. Performance of Regency PUPR Service employees Minahasa measured from efficiency tasks, accuracy of work, satisfaction public to services, and more. Study This aim investigates the connection between mastery of ICT, availability means ICT infrastructure, and performance of Regency PUPR Service employees Minahasa. With an understanding of influencing factors performance, expected can identify effective strategies for increasing efficiency and effectiveness in task administrative as well as service to the community in the Regency Minahasa.

This Study is expected to contribute significantly to understanding the importance of mastery of ICT and facilities ICT infrastructure for increased performance Regency PUPR Service employees Minahasa, as well as give recommendation policy for increasing quality service public in the area them. Based on pre-observation, District PUPR Service employee Minahasa generally does not yet implement

ICT in work. Although adequate ICT facilities and infrastructure are available, the mastery employees take advantage of it still low. ICT frequently times only made symbol modern technology without being utilized optimally. Only a few employees use ICT to increase performance. Therefore, research deeper into the influence of mastery of ICT and facilities infrastructure on the performance of Regency PUPR Service employees Minahasa is very important.

RELATED WORKS

1. Employee Performance

Performance is the result of all forms of actions and policies in the network business. Work For reaching objective in term time certain. According to Robbin in Nawawi (2006), performance is an answer to What kind of question the results achieved by somebody after doing something." Mangkunegara (2000) defines the performance of an employee as results in a way; the quality and quantity achieved by an employee are not quite enough, he answered. Prawirosentono (2008) stated that performance is the result of work achieved by someone or a group of insider's organization following authority and responsibility answer they. For public institutions, the definition of performance covers operating function and role following rules, laws, morals, and ethics.

Factors Affecting Performance

According to Henry Simamora in Mangkunegara (2005), performance is influenced by three factors:

1. Individual Factors:
 - Ability and expertise
 - Background behind
 - Demographics
2. Factor Psychological:
 - Perception
 - Attitude
 - Personality
 - Learning
 - Motivation
3. Factor Organization:
 - Source Power
 - Leadership
 - Award
 - Structure
 - Job design

Individual and psychological factors originate from in self-someone (internal), whereas factor organization originates from outside self-someone (external). According to Mangkunegara, individual factors (internal) include integrity between function psychological and physical, concentration good self, intelligence mind (IQ), and intelligence emotion (EQ). Factor environment Work organization (external) includes description, clear position, authority adequate, work targets challenging, communication effective, relationship Work harmonious, climate Work respect and dynamic, opportunities career, and facilities adequate work.

To measure the performance of employees, Malayu SP Hasibuan in Mangkunegara (2005) stated aspects assessed performance cover loyalty, results work, honesty, discipline, creativity, cooperation, leadership, personality, initiative, skill, and responsibility answer.

2. Mastery of ICT

ICT is defined by UNESCO as the technology used for communicating, as well as for creating, managing, and distributing information; it covers computers, the internet, telephone, television, radio, and audiovisual equipment. Mastery of ICT has brought Lots of change, especially in education and among employees in Indonesia, with the most dominant use being email, ICT integration in curriculum, and training related to ICT.

Initially, ICT mastery was only considered as a technical skill, like the use of application word processors or databases. Today, ICT skills include more extensive digital competence, including the ability to access, manage, evaluate, create, and communicate information. ICT mastery is the ability of an individual to use digital technology and tools to communicate in a way appropriate to participate effectively in public information.

According to Nutt (2010), ICT mastery includes three ability main:

1. Use digital technology, tools, communication, or networks to discover, evaluate, use, and create information.
2. Understand and use information in various formats from various sources.
3. Do tasks in a way that is effective in a digital environment.

ETS (2005) adds seven component ICT skills:

1. Define (define)
2. Access
3. Manage
4. Integrate (integrate)
5. Evaluate (evaluate)
6. Create (create)
7. Communicate

In conclusion, ICT mastery is digital skills that include the ability to use digital technology to discover, evaluate, use, and create information; understand and use information from various sources; as well as do tasks in a way effective in a digital environment.

3. Infrastructure

Facilities and Infrastructure Technology Information and Communication (ICT) is an element important in supporting administrative and operational in various organizations, including agency government. According to UNESCO (2008), ICT includes various technologies like computers, internet, telephone, television, radio, and audiovisual equipment used For communication, management, and distribution of information. Means refers to the device technology used directly for support tasks. Meanwhile, infrastructure covers infrastructure like internet networks and facilities physical support use means the.

The importance of ICT Facilities and Infrastructure in Employee Performance Improvement: The availability of adequate ICT facilities and infrastructure plays an important role in increasing employee performance. Mangkunegara (2005) stated that source power and infrastructure organization, in a way, significantly influence the performance of individuals. In agency government, ICT accelerates administrative processes, improves accuracy, as well supports transparency and accountability. Dimyati & Mujiono (2009) confirmed that the completeness of facilities and infrastructure reflects condition good learning and guarantees a better work process that is efficient and effective. Rivai & Mumi (2012) also mention that the accuracy and suitability of on-site facilities Work support performance individual.

Mastery of ICT by Employees: Mastery of ICT by employees is an aspect key to utilizing technology for increased performance. UNESCO (2008) notes that the most dominant use of ICT is for email, deep ICT integration curriculum schools, and training related to ICT. Ilomäki (2008) expands the definition of mastery of ICT, including digital skills as competence in a more extensive context, including the ability to use digital technology, tools, communication, or networks for discovering, evaluating, using, and creating information. Mangkunegara (2005) added that the abilities and expertise of individuals play an important role in determining the performance of employees.

Relationship between ICT Infrastructure and Employee Performance: Availability of adequate ICT facilities and infrastructure, as well as mastery of technology by employees, contribute directly to improvement performance. Barnawi & M. Arifin (2012) classify means of education into three types based on finished whether or not, move whether or not, and relationships with the learning process, as well as infrastructure school into two kinds that are direct or not directly used in the learning process. Regulated National Education Standards in Law No. 20 of 2003 and Regulations Government Number 19 of 2005 also underline the importance of adequate facilities and infrastructure to support the learning and work process.

METHOD

This research includes quantitative research in the ex-post facto category. Ex-post facto research is research that uses variables that have occurred at the research site as independent variables

and begins by observing the dependent variables, which are thought to be related to each other (Sukardi, 2012). This research was conducted to reveal the factors that influence employee performance, namely the influence of the ICT mastery variable and infrastructure as the independent variable, with the employee performance variable as the dependent variable, so that it is a correlation research.

This research was carried out at the Minahasa Regency PUPR Service. The implementation of this research was carried out in several stages, namely: (1) Pre-survey, (2) Preparation of instruments, (3) Collection of research data, (4) Analysis of research data, and (5) Preparation of research reports. Furthermore, According to Arikunto, a sample is part of the number and characteristics possessed by the population. Arikunto says that if the subject is not enough 100, then the overpopulation becomes a sample study. But If the subject is more than 100, then it can be taken 10-15% or 15-25%. Based on the definition of the number of ASNs in the district secretariat Minahasa, totaling approximately 144 people, a 20% sample of 144 could be 30 people as a sample.

1. "Variables are research objects, or what is the point of attention of a research" (Suharsimi, 2010). The variables in this research are divided into 2 (two), namely, the independent variable and the dependent variable. The variables in this research are:

Variable-free or the independent variable is several symptoms with various elements or factors in it that influence variable others (Wagiran, 2013). Variable free in study This is as follows.

- a. Mastery (X1)

Mastery of ICT for employees is required abilities owned and controlled To increase knowledge and skills in the field of ICT. Mastery of Technology, Information, and Communication now become part of demands competence, Good use support implementation of his task. So, every employee must be Ready to keep going Studying ICT use fulfillment demands competence.

- b. Infrastructure (X2)

Facilities and infrastructure are functioning facilities that help, facilitate, and improve quality implementation tasks that impact on achievement objectives. To reveal the role of facilities and infrastructure in learning, the indicator is as follows: (1) means covers finished or not worn, move or whether or not, and relationships with the learning process; And (2) infrastructure covers in a way directly used for work processes and activities No direct used for work processes. The means are all something to wear as a tool to reach aims and objectives; means are more shown For moving objects like computers and machines. Infrastructure is something that supports the main implementation of processes (Business, Development, Projects), infrastructure is more shown For things that don't move, like buildings, space, and land. The means are all something to wear as a tool in reaching aims and objectives; means are more shown For moving objects like computers and machines. Infrastructure is something that supports the main implementation of processes (Business, Development, Projects),

Infrastructure is more shown For things that don't move, like buildings, space, and land (Sri Mulyani, 2008). Indicators here are: 1. Equipment 2. Conditions 3. Use of Infrastructure 4. Internet Network by Hartono (in Aula and Nugraha, 2020). Variable bound or variable dependent is a symptom with various elements or factors specified therein or influenced by the existence of other variables (Wagiran, 2013) Variables bound in study This is as follows.

c. Employee performance (Y)
performance employee is results work or performance work carried out by employees.

Exposure variable bound and controlled can be depicted in Figure 1.

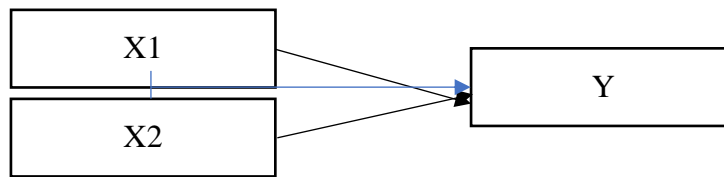


Figure 1. Influence of variable X on Y

Information:

X1 = ICT Mastery

X2 = ICT infrastructure

Y = Employee Performance

The instruments used in the study can be seen in Table 1.

Table 1. Instrument study

No.	Variable Study	Indicator	Number tems	Amount	Reference
1.	ICT Infrastructure	Equipment	1	1	Hartono (in Aula and Nugraha, 2020)
		Condition	2,3,4	3	
		Use of Infrastructure	5,6	2	
		Internet Network	7,8,9	3	
2.	Mastery of Technology Information and Communication	Use Computer	1,2,3,4	4	Suyanto (2005), And Winidyaningrum (2010)
		Use Network	5,6	2	
3.	District Regional	Quality	1	1	

Government Performance Minahasa	Quantity	2	1	Robbins (1996: 20)
	Cooperation	3	1	
	Initiative	4	1	
	Reliability	5	1	
	Responsibility	6	1	
Total		21		

RESULTS AND DISCUSSION

Objective study This is to answer the question of the influence of Mastery of ICT and ICT Infrastructure on Employee Performance at the Regency PUPR Service Minahasa. See Figure 1.

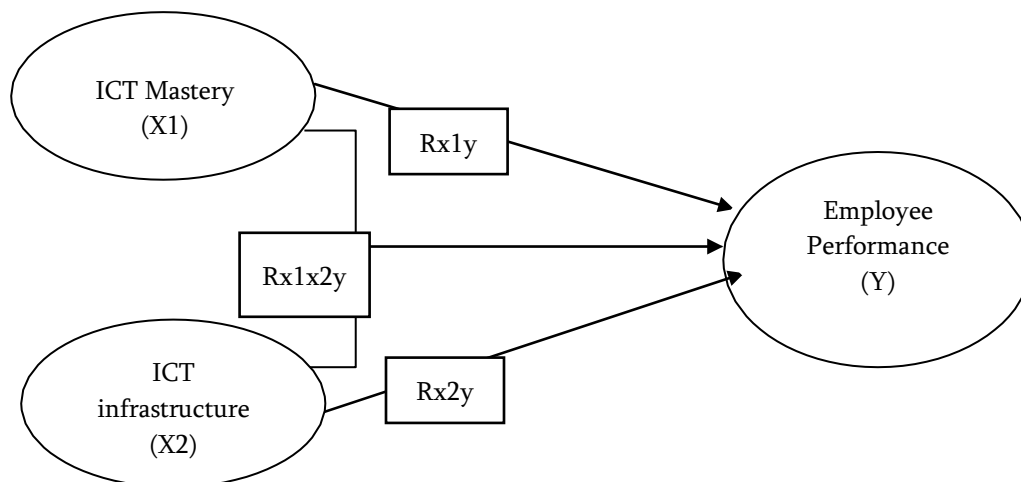


Figure 2. Paradigm Study with Determination Value Information

As for explanation more detailed about results analysis in frame answer question study in study This is as follows:

1. *Influence Mastery of ICT on Employee Performance at the District PUPR Service Minahasa*

Research results show that there is a positive and significant Mastery of ICT on Employee Performance at the Regency Regional Secretariat Minahasa. Based on the analysis of the results, regression simple with SPSS version 20 for Windows assistance was obtained with a mark coefficient correlation r_{xy} of 0.143. These results show that the coefficient correlation is positive, that is, there is an influence of positive Mastery of ICT on Agency Performance Government. Coefficient determination (r^2), i.e., of 0.143 or 14.3%, which means ICT mastery has a contribution on Employee Performance amounting to 14.3%, and the remainder is influenced by factors other. Based on the analysis, regression obtained mark t count amounting to 3,993. When compared with t_{table} of 1.701, then $t \text{ count} > t_{table}$ or $3.993 > 1.701$, it can be concluded that ICT mastery has meaningfulness or significant influence on Agency Performance Government. That matter shows that the taller the Mastery of ICT then will the more Institutional Performance is also high Government, on the other hand, the lower the Mastery of ICT, the Lower the Agency Performance of Government. Donations effective ICT Mastery on Employee Performance that amounting to 14.3%.

Research results in strengthened the proposed theory that one indicator in measuring the performance of employees is ICT mastery. Mastery of ICT is an attitude of respect, appreciation, and obeying applicable regulations No written as well as ready run, no dodge sanctions if one violates assigned duties and authority (Siswanto Sastrohadiwiryo, 2001). Based on data analysis, mastery of ICT provides donations amounting to 14.32% against performance employees. This means that the ability of employees to master ICT has a significant influence. However, no dominance in How they finish duties and responsibilities answers them. Improvement in ICT mastery among employees can increase efficiency, accuracy, and productivity. Work.

2. The Influence of ICT Infrastructure on Employee Performance at the Regency PUPR Service Minahasa

Based on the results analysis regression, simple use of SPSS version 20 for Windows assistance obtained mark coefficient correlation r_{xy} 0.560. These results show that the coefficient correlation is positive, that is, there is a positive impact of ICT Infrastructure on Employee Performance. Coefficient determination (r^2), i.e., amounting to 0.452 or 45.2%, which means that ICT Infrastructure has a contribution to Employee Performance amounting to 45.2%, and the remainder is influenced by other factors. Furthermore, a significance test was carried out using the t-test at level significance 0.05. Based on the results analysis, regression obtained t count amounting to 5,964. When compared with t_{table} of 1.701, then $t \text{ count} > t_{table}$ or $5.964 > 1.701$, it can be concluded that ICT Infrastructure has meaningfulness or significant influence on Employee Performance. That matter shows that the higher the ICT Infrastructure, the higher employee performance; on the contrary, the poorer the ICT Infrastructure, the lower agency Performance Government. Donations effective ICT Infrastructure on Employee Performance amounting to 45.25%.

Donations mean ICT infrastructure towards performance employee reached 45.25%, showing that availability and quality ICT infrastructure are the main factors influencing performance employee.

Working employees with good ICT infrastructure can finish tasks faster, reduce errors, and improve coordination as well as on-site work communications.

3. Influence Mastery of ICT and ICT Infrastructure together on Employee Performance at the Regency PUPR Service Minahasa

Based on the results analysis regression double using SPSS version 20 for Windows obtained mark correlation R (1,2) is 0.846. These results show that the coefficient correlation is positive, that is, there is an influence of positive Mastery of ICT and ICT Facilities together on the performance of Employees. The coefficient determination is in Table 2.

Table 2. ICT Mastery and IT Mastery

Source	Coef.	R	R^2	F_{count}	F_{table}	Sig.	Information
Const	8.000	0,772	0.596	19,889	2.60	0,000	Positive Significant
X1	0.154						
X2	0.470						

R^2 y (1,2), i.e., of 0.596 or 59.6%, which means that Mastery of ICT and ICT Infrastructure together own contribution to Employee Performance amounting to 59.6%. Furthermore, the testing significance using the F test at level significance 0.05 and obtained F count as big as 19,889. When compared with F_{table} of 3.32, then $F_{count} > F_{table}$ that is $19,889 > 3.32$. That matter signifies that there is a significant influence Mastery of ICT and ICT Infrastructure together on Agency Performance Government. The size donation is effective Mastery of ICT and ICT Infrastructure together on Employee Performance that is amounting to 59.6%, and the remaining 40.4% is influenced by factors other.

Analysis results are strengthened by the proposed theory that influencing factors performance including internal employee factors, the organization's internal environment, and factors external organization (Wirawan, 2009). ICT Facilities and Infrastructure and ICT Mastery are factors that arise from internal. One company Not only needs Sufficient ICT mastery, good, but good or even very good so that it can produce a good and helpful employee performance to reach its objective. Good ICT Infrastructure will push employees to work with more enthusiasm and better Again so that the results achieved will also be Good.

CONCLUSION

Based on the results of research conducted by researchers, there is mastery (X1) has an influence significant to the performance of employees, with donation effective amounting to 14.32%. This shows that improvement in ICT skills among employees will increase performance. ICT Infrastructure (X2) provides more contributions to performance employees, with donations effective amounting to 45.25%.

This signifies that availability and quality ICT infrastructure are very important in supporting the productivity of employees. Overall, mastery of ICT and facilities ICT infrastructure together donate effectively, amounting to 59.6% against performance employees. That means secondly, variables, in a way, significantly influence the performance of Regency PUPR Service employees in Minahasa. There are 40.4% of performance employees who are influenced by other variables that are not discussed in a study this shows that factor additions are also necessarily noticed For increased performance in a way overall.

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