

The Effect of Organizational Innovation and Technological Innovation on the Quality of Animal Health Service and Their Impact on Organizational Performance in Aceh Livestock Department

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Abstract: This study aims to examine the effect of organizational innovation and technological innovation on organizational performance in the Aceh livestock department mediated by the quality of animal health service. The research population was 118 district/city animal health service officers in Aceh province. There were 128 officers chosen as the sample through the Slovin method. Data were analyzed by Structural Model Test. From the result we can see that the model tested proves that organizational innovation affects the service quality, technological innovation affects organizational performance, technological innovation does not affect organizational performance, service quality affects organizational performance, service quality mediates the effect of organizational innovation on organizational performance, and service quality mediates the effect of technological innovation on organizational performance in the Aceh Livestock Department. The results also illustrate that service quality functions as a partial mediator on the effect of organizational innovation on organizational performance, and service quality functions as a full mediator on the effect of technological innovation on organizational performance. These results contribute academically to the development of a management model to improve organizational performance, which is a function of increasing organizational innovation variable either directly or through service quality, and the function of improving technological innovation to improve service quality, and ultimately will have an impact on improving organizational performance. For future researchers, research can be developed based on this tested model by adding variables such as organizational culture and organizational behavior.

Keywords: Organizational Innovation, Technological Innovation, Quality Of Animal Health Service, Organizational Performance.

I. INTRODUCTION

In line with Aceh Governor Regulation Number 127 of 2016, the Aceh livestock Department has a position as the regional apparatus implementing an element of Aceh government in the field of animal health and livestock. The organizational structure of the Aceh livestock department consists of the Head, Secretariat, Livestock Breeding and Production Division, Feed Sector, Animal and Veterinary Health Sector, Livestock Product Management and Marketing

Division, Reginal Technical Implementing Unit (UPTD), and Functional Position Groups.

Aceh livestock department has its vision and mission. The vision of the Aceh livestock department is to create a strong, independent, and competitive animal husbandry. Meanwhile, the mission of the Aceh livestock department is to optimize the prevention and control of livestock diseases, increase the quality of meat and egg independent production, improve the welfare of farmers, and carry out bureaucratic reforms in the field of animal health and livestock. Furthermore, the objectives of the Aceh livestock department are to improve the quality and quantity of livestock breeds, increase the capacity of farmers through livestock agribusiness, meet the consumption needs of livestock products, expand business opportunities and create employment in the livestock sector, and improve animal health status and veterinary public health.

According to (Sinambela, 2016), "organizational performance is the accumulation of Organizational Performance. According to (Nasucha, 2004), organizational performance is also defined as the overall effectiveness of the organization to meet the defined needs of each group regarding systematic efforts and continuously improve the organization's ability to achieve its needs effectively. Based on the two opinions above, the essence of organizational performance is a description of cooperative activities outcomes among members of the organization to pursue predetermined organizational goals.

Every organization will compete to win public interest in quality service. The failure of an organization to earn this will have an impact on the government's review of the organization as a whole because the organization formed by the government aims to actualize the government's agenda as well. According to (Nasution, 2015), service quality is an effort to fulfill customer needs and desires and the provision of delivery to balance customer expectations. (Zeithaml, Bitner, & Gremler, 2018) suggest the meaning of service quality, namely the delivery of services that are good or very good when compared to customer expectations. Service

quality is the level of perfection that is expected and the control of that perfection to meet customer desires.

Animal health service is an animal health maintenance system that aims to improve the health status of livestock; provide guarantees for the safety of humans, animals, and the environment from the threat of animal diseases; avoid the possibility of risks that can interfere with the health of both livestock and non-food animals and increase responsiveness to the threat of animal diseases” (Ministry_of_Agriculture, 2007).

Animal health services in Indonesia are oriented to (LAW, 2009) concerning Animal Husbandry and Health. Animal health based on the Act means that all matters relating to animal care, animal treatment, animal health services, control and prevention of animal diseases, disease rejection, reproductive medicine, conservation medicine, veterinary medicine, and animal health equipment and feed safety.

External environmental conditions with a high level of uncertainty as well as an increasingly dynamic and complex environment have become the biggest trigger factors for many organizations to make new breakthroughs which are called innovations. Successful organizations are those that can adapt their internal structure to environmental characteristics.

The tendency of increasing innovation practices in organizations today and in the future is mostly caused by external environmental conditions, changes in the competitive environment, and so on. Previous research has shown that organizational innovation is the development and use of new ideas or behaviors related to new products, services, markets, and administration (Damanpour, 1991).

Aceh livestock department has made various breakthroughs in achieving organizational innovation towards the ideal organizational portion. In the actualization of organizational innovation, various facts are found that must find solutions for the better performance of the Aceh livestock department. The table below describes aspects of organizational innovation and its acquirement throughout 2020.

Table 1. Organizational Innovation of Aceh livestock department 2020

| No. | Organizational Aspect | Actualization | Score *) |
|-----|--|---|----------|
| 1. | Office equipment | | |
| 2. | Organizational structures: | Expanding in quality and quantity | + |
| | a. Chart | Slightly leaner but more duties and authority | - |
| | b. Number of employees | Remarkably decreasing but duties and authority increase | - |
| | c. Task flow | No change, hierarchy | O |
| | d. Formal Communication | More frequently because office equipment is supportive | + |
| 3. | Organizational culture | - Nepotism has not decreased - Openness among fields decreases | - - |
| 4. | Employees' work quality and motivation | Significantly increasing | + |

| | | | |
|-----|--------------------------------------|---|--------|
| 5. | Budget | - Sufficiently increasing - Spending on project | + O |
| 6. | Organizational vision | - Simple arrangement - Lack of realization | o o |
| 7. | Head department leadership | - Oriented to duties - More individualistic | + O |
| 8. | Head of field leadership | - Oriented to duties - More individualistic | + O |
| 9. | Decision making at the service level | Not participatory | - |
| 10. | Decision making at the field level | - More rational - Less participative | + O |
| 11. | Planning process | More in line among fields because it is regulated by the Planning Subdivision | + |
| 12. | Governor's support | Very good | + |
| 13. | Effectiveness | Less effective because there are still inappropriate programs | - |
| 14. | Efficiency | Inefficient because the duration of work is long but the number of employees is reduced | - |
| 15. | Service image | The quality of the society is still lacking | O |

Description: (+) = improve; (-) = worsen; and (o) = stable

Source: General Section of Aceh livestock department (2021)

Based on Table 1 above, it can be concluded that organizational innovations at Aceh livestock department are very useful to be implemented to achieve the organization's vision and mission although there are still many that are not actualized yet. With the enthusiasm of realizing the competence of the Aceh livestock department on organizational performance, it is expected that various organizational innovation agendas can be actualized in the future.

The majority of people interpret innovation as a new way with the help of devices and systems owned by technology. One of them, (Fontana, 2011) defines technological innovation, namely the characteristics associated with the post-industrialization period, including global competition, market fragmentation, production decentralization, pluralism, diversity (environment), automation, and flexibility in the production process based on speed and technological innovation and so on.

In this case, the Aceh livestock department has made use of technological innovations in its efforts to help farmers obtain livestock health services. This was taken to answer the expectations of the breeders to maximize results and fulfill the duties of the Aceh livestock department in its challenge of actualizing adequate health services.

Table 2. Technology Innovation and its Actualization of Aceh livestock department 2020

| No. | Technology Components | Planned | Actualization |
|-----|---------------------------------|---------|---------------|
| | | % | |
| 1. | Use of superior livestock seeds | 100 | 87 |
| 2. | Environment sanitation | 100 | 83 |
| 3. | Preservation/feed processing | 95 | 90 |
| 4. | Concentrate administration | 85 | 85 |

| | | | |
|----|--|----|----|
| 5. | Artificial insemination | 90 | 85 |
| 6. | Utilization of agricultural waste for feed | 95 | 95 |
| 7. | Utilization of waste/bokashi | 95 | 80 |

Source: Aceh livestock department (2021)

Table 2 shows that the use of technology planning as a form of innovation that applies to farmers is still not as expected. That is proven by the realization of various technological component planning prepared by the Aceh livestock department in their implementation which is still far from satisfactory. Thus, concrete steps are needed for the future so that the planned technological innovations can be actualized following the targets that have been set.

To answer the various phenomena that occur in the Aceh livestock department environment as described above, the authors were interested to study "**The Effect of Organizational Innovation and Technological Innovation on the Quality of Animal Health Service and Their Impact on Organizational Performance of Aceh Livestock Department**"

II. LITERATURE REVIEW

Organizational Performance

According to (Steers, 2013), organizational performance is the level that shows how far the actual implementation of tasks can be carried out so the organization's mission can be achieved. Meanwhile, according to (Mahsun, 2012), organizational performance is a description of achievement level in implementing activity/program/policy to accomplish the goals, objectives, mission, and vision of the organization contained in the strategic planning of an organization. The organizational performance indicators according to (Dwiyanto, 2012), namely productivity, service quality, responsiveness, responsibility, and accountability.

Quality Service

Service quality focuses on the attempts to fulfill customer needs and desires as well as delivery accuracy to balance customer expectations (Tjiptono, 1996). Gronroos in (Tjiptono, 1996) stated that the perceived quality of service consists of two main dimensions, namely dimension related to the perceived quality of service outputs by customers and dimension related to the quality of service delivery. There are several indicators of service quality according to (Zeithaml et al., 2018), namely adequate equipment and supplies in health services, reliability of officers at work, responsiveness in providing services, knowledge of officers at work, and attention of officers and staff comfort provided during the service.

Organizational Innovation

(Varadarajan & Jayachandran, 1999) explained the concept of organizational innovation refers to a set of beliefs and ways of working that influence an organization's view of how innovation and change should be handled. While

(Amabile, Conti, Coon, Lazenby, & Herron, 1996) says that organizational innovation is the successful application of creative ideas in companies and organizational mechanisms to adapt in a dynamic environment. Thus, organizations are required to be able to create assessments as well as new ideas and offer innovative products. According to (Hameed, Ramzan, Zubair, Ali, & Arslan, 2014), the indicators of innovation in an organization consist of; organizational size, top management support, technology, information and communication infrastructure, and employees' expertise.

Technological Innovation

Based on (Subramani, 2004), technological innovation can be defined as the adoption of a new idea to build a new product or service and a new way of building an organization's production process or service operation. The idea must be implemented through an adoption process. The adoption is the decision to use the innovation as a whole as the best way of action (Higa, Sheng, Hu, & Au, 1997). According to (Subramani, 2004), technological innovation has several indicators, including work equipment, automation and Electronic Processing (e-Government), office applications and management information systems, and administrative information systems.

Research Framework and Hypothesis

From the literature, the authors formulated the research framework and hypothesis as follows.

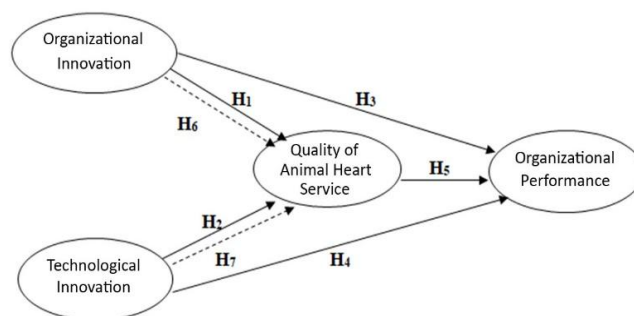


Figure 1. Research Framework

- H1: organizational innovation affects the quality of animal health services in the Aceh Livestock Department.
- H2: technological innovation affects the quality of animal health services in the Aceh Livestock Department.
- H3: Organizational innovation affects organizational performance in the Aceh Livestock Department.
- H4: technological innovation affects organizational performance in the Aceh Livestock Department.
- H5: service quality affects organizational performance in the Aceh Livestock Department
- H6: Service quality mediates the effect of organizational innovation on organizational performance in the Aceh Livestock Department.
- H7: Service quality mediates the effect of technological innovation on organizational performance in the Aceh Livestock Department.

III. RESEARCH METHOD

Population and sample

The population of this research was 188 district/city livestock department officers in Aceh Province. There were 128 officers as the sample using the Slovin method.

Operation Variable

The variables formulated in this study consist of the independent variable, namely organizational innovation (X1), technological innovation (X2), and the dependent variable, namely organizational performance (Y) and service quality (Z) as described in the following table.

Table 3. Research Operational Variable

| No | Variable Definition | Indicator |
|-----------------------------|---|---|
| Endogenous Variable | | |
| 1 | Y: Organizational Performance organizational performance is a description of achievement level in implementing activity/program/ policy to accomplish the goals, objectives, mission, and vision of the organization contained in the strategic planning of an organization, Mahsun (2016) | <ol style="list-style-type: none"> 1. Productivity 2. Service quality 3. Responsiveness 4. Responsibility 5. Accountability Dwiyanto (2016) |
| Exogenous Variable | | |
| 2 | X ₁ : Organizational Innovation Organizational innovation is the successful application of creative ideas in companies, organizational mechanisms to adapt in a dynamic environment. Thus, organizations are required to be able to create assessments as well as new ideas and offer innovative products, Amabile (2016) | <ol style="list-style-type: none"> 1. Organizational size, 2. Top management support 3. Technology, information and communication infrastructure, 4. Employees' expertise. (Hameed <i>et al</i>,2017) |
| 3 | X ₂ : technological innovation technological innovation can be defined as the adoption of a new idea to build a new product or service and a new way of building an organization's production process or service operation, Subramanian and Nilikanta in Abdiaziz and Ali (2016) | <ol style="list-style-type: none"> 1. Work equipment 2. Automation and electronic processing (e-government), 3. Office applications and management information systems 4. Administrative information systems, (Subramanian and Nilikanta in Abdiaziz and Ali, 2016) |
| Intervening Variable | | |
| 4 | Z: service quality Service quality is all forms of activities carried out by the company to meet consumer expectations. Services are provided by the owner in the form of convenience, speed, relationship, ability, and hospitality shown through the attitude and nature of providing services to meet consumer quality (Firdian, <i>et.al.</i> , 2017: 52). | <ol style="list-style-type: none"> 1. adequate equipment and supplies in health services 2. reliability of officers at work 3. responsiveness in providing services 4. knowledge of officers at work, and attention of officers and staff comfort provided during the service (Zeithaml, Parasuraman, and Berry in Tjiptono (2016), |

Source: Noor, (2015)

Data Analysis Technique

The data analysis technique used in this research was Structural Equation Modelling (SEM) with the help of the Statistical Package for the Social Science Software Analysis of Moment Structures (SPSS-AMOS-22). This study used SEM because the development of this research model had variables that connect exogenous variables to endogenous variables. The connecting variable was the quality of animal health services. While the exogenous variables in this study were organizational innovation and technological innovation and the endogenous variable was organizational performance.

Respondents Perception Analysis

In order to conclude the results of each variable whether it falls into high, mid, and low categories, we need to determine the interval scale (Sekaran & Bougie, 2016), as mention in the following table:

Table 4. Interval Score Perception

| Average Score | Category |
|---------------|-----------|
| 1.00 – 1.80 | Poor |
| 1.81 – 2.60 | Fair |
| 2.61 – 3.40 | Good |
| 3.41 – 4.20 | Very Good |
| 4.21 – 5.00 | Excellent |

Source: Sugiyono (2016)

Confirmatory Factor Analysis (CFA) Testing

CFA is used to test the un-dimensionality of a theoretical construct. This analysis is often called testing the validity of a theoretical construct. The purpose of CFA is to confirm or to examine the model, that is, a measurement model whose formulation is derived from theory. Thus, CFA is said to have a study focus on whether the conceptualized indicators are un-dimensional, precise, and consistent; and whether dominant indicators forming the construct under study. (Ghozali, 2018).

The Goodness of Fit (GOF)

The goodness of fit index can be used to test the feasibility of a research model (Haryono, 2017):

Table 5. Goodness of Fit

| No | The goodness of Fit Index | Cut off Value | Criteria |
|-----|---------------------------|---------------|-----------------|
| 1. | DF | > 0 | Over Identified |
| 2. | Probability | > 0.05 | Fit |
| 3. | CMIN/DF | < 2 | Fit |
| 4. | GFI | ≥ 0.90 | Fit |
| 5. | AGFI | ≥ 0.90 | Fit |
| 6. | CFI | ≥ 0.90 | Fit |
| 7. | TLI | ≥ 0.90 | Fit |
| 8. | IFI | ≥ 0.90 | Fit |
| 9. | RMSEA | ≤ 0.08 | Fit |
| 10. | RMR | ≤ 0.05 | Fit |

Source: (Haryono, 2017)

IV. RESULT

Research Validity and Reliability

Table 6. The Result of Validity Testing

| No. Statement | Variable | Correlation coefficient | Critical Value 5% (N=128) | Validity |
|---------------|--------------------------------|-------------------------|---------------------------|----------|
| 1. IO1 | Organizational Innovation (X1) | 0.833 | 0.1736 | Valid |
| 2. IO2 | | 0.876 | | |
| 3. IO3 | | 0.776 | | |
| 4. IO4 | | 0.739 | | |
| 5. IT1 | Technological Innovation (X2) | 0.693 | 0.1736 | Valid |
| 6. IT2 | | 0.577 | | |
| 7. IT3 | | 0.622 | | |
| 8. IT4 | | 0.738 | | |
| 9. IT5 | | 0.618 | | |
| 10. KP1 | Service Quality (Z) | 0.714 | 0.1736 | Valid |
| 11. KP2 | | 0.853 | | |
| 12. KP3 | | 0.841 | | |
| 13. KP4 | | 0.309 | | |
| 14. KP5 | | 0.837 | | |
| 15. KO1 | Organizational Performance (Y) | 0.826 | 0.1736 | Valid |
| 16. KO2 | | 0.795 | | |
| 17. KO3 | | 0.825 | | |
| 18. KO4 | | 0.628 | | |
| 19. KO5 | | 0.448 | | |
| 20. KO6 | | 0.394 | | |

Source: Processed Primary Data (2021)

Table 6 above shows that all the variables used in this study are valid because they have a correlation coefficient above the critical value of the product-moment correlation, which is 1.736 so all questions contained in this research questionnaire are valid for further in-depth research. Thus, all indicator items of each variable in this study have met the requirements for further testing.

Reliability Testing

Table 7. Reliability of research variable (Alpha)

| No | Variable | Variable Item | Alpha Value | Reliability |
|----|--------------------------------|---------------|-------------|-------------|
| 1. | Organizational Innovation (X1) | 4 | 0,883 | Reliable |
| 2. | Technological innovation (X2) | 5 | 0,657 | Reliable |
| 3. | Service Quality (Z) | 5 | 0,853 | Reliable |
| 4. | Organizational Performance (Y) | 6 | 0,752 | Reliable |

Source: Processed Primary Data (2021)

Based on table 7 above, the alpha value for each respondent's perception variable shows that organizational

innovation (X1) obtained an alpha value of 0.883, technological innovation (X2) obtained an alpha value of 0.657, service quality (Z) obtained an alpha value of 0.853, and organizational performance (Y) obtained a value of 0.752. This reliability proves that all indicators of the research variables meet the credibility of Cronbach Alpha where the alpha value is greater than Alpha 0.60.

Confirmatory Factor Analysis (CFA)

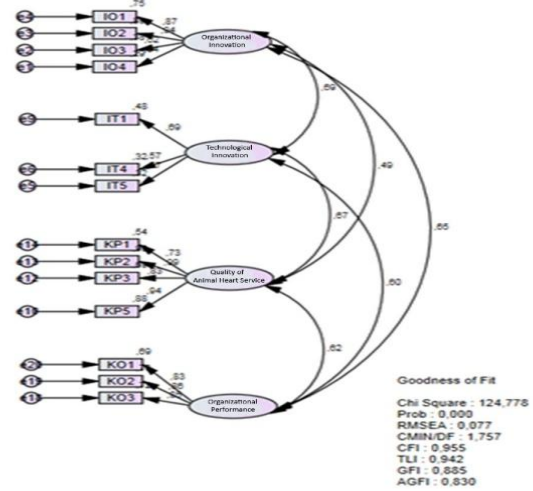


Figure 2. Confirmatory Factor Analysis for Research Construct

Table 8. Loading Factor After eliminating Indicators

| | | | Estimate |
|-----|------|----------------------------|----------|
| IO4 | <--- | Organizational Innovation | .537 |
| IO3 | <--- | Organizational Innovation | .616 |
| IO2 | <--- | Organizational Innovation | .944 |
| IO1 | <--- | Organizational Innovation | .868 |
| IT5 | <--- | Technological innovation | .568 |
| IT4 | <--- | Technological innovation | .569 |
| IT1 | <--- | Technological innovation | .692 |
| KP5 | <--- | Service Quality | .936 |
| KP3 | <--- | Service Quality | .830 |
| KP2 | <--- | Service Quality | .989 |
| KP1 | <--- | Service Quality | .733 |
| KO3 | <--- | Organizational Performance | .850 |
| KO2 | <--- | Organizational Performance | .857 |
| KO1 | <--- | Organizational Performance | .832 |

Source: Processed Primary Data (2021)

Based on the results show in Table 8 above, all indicators have met the requirements to be included in the next data processing because all loading factor values are > 0.5.

The goodness of Fit Evaluation Criteria

Table 9. Feasibility Test Results Measurement Model

| The goodness of Fit Index | Cut off Value | Result | Model Evaluation |
|---------------------------|---------------|--------|------------------|
| Chi-Square | < 240,995 | 94.247 | Good |
| Probability | ≥ 0,05 | 0.193 | Good |
| RMSEA | ≤ 0,08 | 0.066 | Good |
| GFI | ≥ 0,90 | 0.960 | Good |
| AGFI | ≥ 0,90 | 0.993 | Good |
| CMIN/DF | ≤ 2,00 | 1.172 | Good |
| TLI | ≥ 0,90 | 0.910 | Good |
| CFI | ≥ 0,90 | 0.930 | Good |

Source: Processed Primary Data (2021)

Based on table 9 above, shows that the results of the measurement model analysis obtain the value of chi-square = 94.247 at probability = 0,193 classified as fit. Meanwhile $\chi^2/df=1,172$; RMSEA=0.066; GFI=0.960; TLI=0.910; AGFI=0.993; and CFI = 0.930 has met the criteria and the value indicates fit. In general, by using the Goodness of Fit test, it can be concluded that the existing measurement model has met the fit criteria so that the outputs from this model can be used as research findings related to the relationship between indicators and their respective constructs.

Structural Model Test

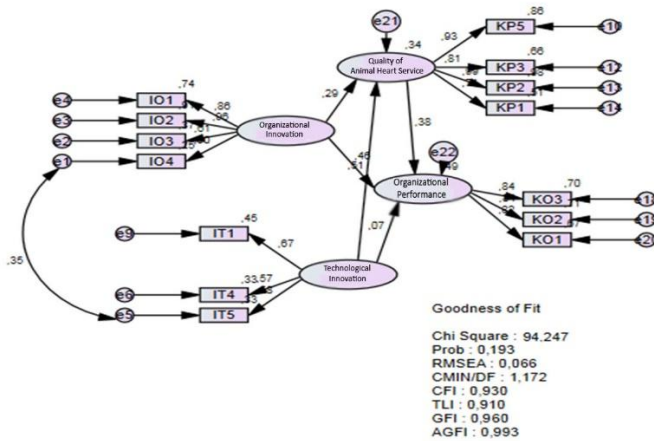


Figure 3. Structural Model Test

Based on the figure above, it can be concluded that there is an effect toward each variable, which are organizational innovation and technological innovation on organizational performance also the indirect effects on organizational performance through animal health service quality.

Hypothesis Testing

Table 10. Regression Weight

| | | | Estimate | S.E. | C.R. | P |
|----------------------------|------|---------------------------|----------|-------|-------|-------|
| service quality | <--- | organizational innovation | 0.291 | 0.132 | 3.088 | 0.002 |
| service quality | <--- | technological innovation | 0.505 | 0.212 | 3.983 | 0.000 |
| organizational performance | <--- | organizational innovation | 0.457 | 0.114 | 4.188 | 0.000 |
| organizational performance | <--- | technological innovation | 0.070 | 0.144 | 0.611 | 0.541 |
| organizational performance | <--- | service quality | 0.504 | 0.077 | 3.692 | 0.000 |

Source: Processed Primary Data (2021)

Based on the results in table 10 above, it formulates the following equations.

$$\text{Service quality} = 0.291 \text{ organizational innovation}$$

$$\text{Service quality} = 0.505 \text{ technological innovation}$$

$$\text{Organizational performance} = 0.457 \text{ organizational innovation} + 0.070 \text{ technological innovation} + 0.504 \text{ service quality}$$

From these results, it can also be explained that each hypothesis answer is as follows.

H1 : Organizational Innovation Affecting Service Quality

The effect of organizational innovation on service quality obtains a CR value of 3.088 with a significance level of 0.002. Thus, it indicates that changes in organizational innovation have a significant impact on service quality.

The coefficient of 0.291 proves that an increase of 1 unit in organizational innovation will have an impact on increasing service quality by 0.291 units.

H2 : Technological Innovation Affecting Service Quality

The effect of technological innovation on service quality obtains a CR value of 3.983 with a significance level of 0.000. Thus, it indicates that changes in technological innovation have a significant impact on service quality. The coefficient of 0.505 proves that an increase of 1 unit in technological innovation will have an impact on increasing service quality by 0.5051 units.

H3 : Organizational Innovation Affecting Organizational Performance

The effect of organizational innovation on organizational performance obtains a CR value of 4.188 with a significance level of 0.000. Thus, it indicates that changes in organizational innovation have a significant impact on organizational performance. The coefficient of 0.457 proves that an increase of 1 unit in organizational innovation will have an impact on increasing organizational performance by 0.457 units.

H4 : Technological Innovation Affecting Organizational Performance

The effect of technological innovation on organizational performance obtains a CR value of 0.611 with a significance level of 0.541. Thus, it reveals that technological innovation does not affect organizational performance. The effect of technological innovation on service quality is 0.070 or 7%. This is proven by the improvement of technological innovation in providing a positive and significant impact on increasing organizational performance. This also illustrates the very small influence of Technological Innovation on Organizational Performance, in line with the results of the p-value which is also not significant.

H5 : Service Quality Affecting Organizational Performance

The effect of service quality on organizational performance obtains a CR value of 3.692 with a significance level of 0.000. Thus, it indicates that changes in service quality have a significant impact on organizational performance.

The coefficient of 0.504 proves that an increase of 1 unit in service quality will have an impact on increasing organizational performance by 0.504 units.

H6 : Service Quality Mediates the effect of Organizational Innovation on Organizational Performance

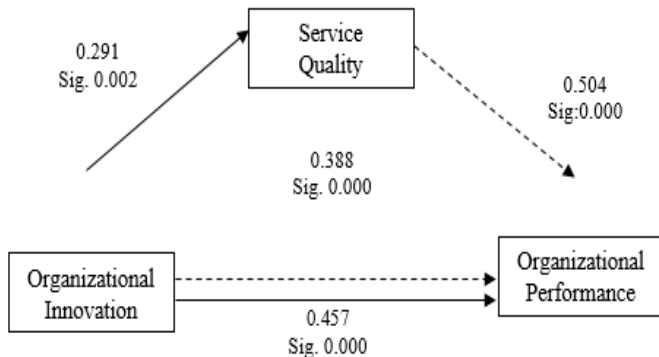


Figure 4. Mediation Effect Testing of Organizational Innovation on Organizational Performance through Service Quality

Based on the figure above, it is found that the path coefficient between organizational innovation and animal health service quality shows a path coefficient value of 0.291,

while the path coefficient of animal health service quality on organizational performance is 0.504. The path coefficient between organizational innovation and organizational performance is 0.457. Because of the direct effect of organizational innovation on organizational performance, organizational innovation on service quality, and service quality on organizational performance all three are significant at 5%, it can be concluded that service quality acts as a variable that partially mediates the relationship between organizational innovation on organizational performance.

H7 : Service Quality Mediates the effect of Technological Innovation on Organizational Performance

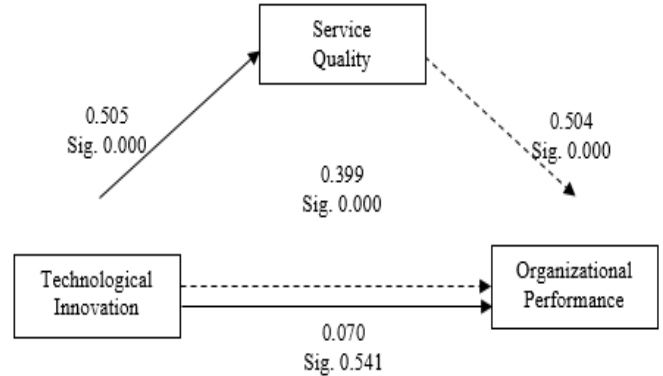


Figure 5. Mediation Effect Testing of Technological Innovation on Organizational Performance through Service Quality

Based on the figure above, it is found that the path coefficient between technological innovation and animal health service quality shows a path coefficient value of 0.505, while the path coefficient of animal health service quality on organizational performance is 0.504. The path coefficient between technological innovation and organizational performance is 0.070. Because the direct effect of technological innovation on organizational performance isn't significant at 5%, technological innovation on service quality and service quality on organizational performance both are significant at 5%, it reveals that service quality acts as a variable that fully mediates the relationship between technological innovation on organizational performance.

Meanwhile, the conclusion of mediation testing in this study is described in the following table:

Table 11. Mediation Testing Result

| No | Hypothesis | Direct effect X to Y | Direct effect X to Z | Indirect effect X to Z | Desc. |
|----|--|-----------------------|-----------------------|------------------------|---------------------|
| 1 | Testing the effect of organizational innovation (X1) on organizational performance (Y) through service quality (Z) | 0.457 (0.000<0.05) | 0.291 (0.002<0.05) | 0.388 (0.000<0.05) | Partially Mediating |

| | | | | | |
|---|---|-----------------------|-----------------------|-----------------------|-----------------|
| 2 | Testing the effect of technological innovation (X2) on organizational performance (Y) through service quality (Z) | 0.070 (0.541>0.05) | 0.505 (0.000<0.05) | 0.399 (0.000>0.05) | Fully Mediating |
|---|---|-----------------------|-----------------------|-----------------------|-----------------|

***, Significance at 5%

Based on table 11 above, a brief conclusion can be drawn that testing the effect of organizational innovation variable (X1) on organizational performance variable (Y) through service quality variable (Z) shows the correlation of partial mediating, which means organizational innovation can directly impact the organizational performance without going through service quality.

Conversely, the effect testing of technological innovation (X2) on organizational performance (Y) through service quality (Z) shows the correlation of full mediating, which means technological innovation isn't able to directly impact organizational performance without going through service quality.

V. CONCLUSION

From the result we can see that in the model tested proves organizational innovation affects the service quality, technological innovation affects the service quality, organizational innovation affects organizational performance, technological innovation does not affect organizational performance, service quality affects organizational performance, service quality mediates the effect of organizational innovation on organizational performance, and service quality mediates the effect of technological innovation on organizational performance in the Aceh Livestock Department. The results also illustrate that service quality functions as a partial mediator on the effect of organizational innovation on organizational performance, and service quality functions as a full mediator on the effect of technological innovation on organizational performance. These results verify the previous causality theory where there is a significant influence between variables, but technological innovation is proven to be unable to significantly affect organizational performance variables directly, it must be through the service quality variable. These results contribute academically to the development of a management model to improve organizational performance, which is a function of increasing organizational innovation variable either directly or through service quality, and the function of improving technological innovation to improve service quality, and ultimately will have an impact on improving organizational performance. For future researchers, research can be developed based on this tested model by adding variables such as organizational culture and organizational behavior.

This also contributes to practical management, especially in the subject of this research, namely the Aceh Livestock Department. This also contributes to practical management, especially in the subject of this research, namely the Aceh

Livestock Department. Several suggestions are recommended based on the results for the research subject, as follows.

1. In terms of organizational innovation, Aceh Livestock Department should improve the capabilities of its veterinary clinics so they are more representative, with easy access to them through hotline services and websites that always update the information.
2. On the technological innovation variable, Aceh Livestock Department should improve the capacity of its human resources in terms of reporting to SIKHNAS (*Integrated National Animal Health Information System*) because late reporting often happened when the majority of helpdesk officers encounter difficulties in carrying out their duties.
3. On the variable of animal health service quality, some indicators still need to be improved, such as the need to improve livestock officers who have standardization and qualifications based on their field of expertise at Aceh Livestock Department. This is quite important to provide quality animal health services.
4. On the organizational performance variable, the Aceh livestock department still doesn't complete Standard Operating Procedure (SOP) for public services, so it is expected to make improvements to achieve performance standards for community services.

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