



Analysis of Factors Affecting Business Performance: Empirical Study of Hospitals in East Java

M. Fiyan Afifi

Management Department, University of Surabaya, Indonesia

Werner R. Murhadi*

Management Department, University of Surabaya, Indonesia

Article Info

Keyword:
Business Performance,
Environmental uncertainties,
Strategic Orientation, Managerial
Capability

JEL Classification Code:
M2, G3, L2

Corresponding authors:
werner@staff.ubaya.ac.id

DOI: [10.24123/jeb.v4i1.5362](https://doi.org/10.24123/jeb.v4i1.5362)

Abstract

Purpose: Hospitalization in Indonesia continues to increase by 5.2% per year in 2018 with the largest number of hospitals in Indonesia being the province of East Java. However, Indonesia is the largest contributor to overseas medical visits. Total expenses reach IDR 161 trillion/year (US\$ 11.5 billion/year) and 80% of visits are to Malaysia where every year million Indonesian citizens (WNI) seek treatment abroad. Of this amount, the total costs incurred reached IDR 97 trillion. This becomes a question, what triggers Indonesian citizens to seek treatment abroad. This study aims to analyze the factors that influence business performance in hospitals in East Java.

Methods: This study used a purposive sampling technique with a total sample of 62 respondents. Respondents in this study were hospital leaders in East Java. This study uses a quantitative approach with the analysis in this study using Smart PLS.

Result: the results show that environmental uncertainties have a negative effect on the business performance of the hospital. This result is due to environmental uncertainties is a broad factor, difficult to predict either individually or collectively. However, environmental uncertainties have a significant positive effect on strategic orientation. Environmental uncertainties have a negative and significant effect on managerial capability. Meanwhile, strategic orientation and managerial capability have a positive and significant effect on the business performance of hospitals in East Java.

INTRODUCTION

The current era of modernization has had such a big impact on business, where competition continues to force companies in various sectors to be able to maintain the pace of their business and always try to improve business performance. One of the industrial sectors that continues to grow from year to year is the hospital industry. While the hospital in operation is influenced by the environment, either directly or indirectly. Environmental conditions can directly affect a company's ability to achieve goals. Under conditions of uncertain environmental pressure, hospitals must be strategy-oriented so that they can carry out strategic planning that can be implemented as flexibly as possible to be able to quickly adapt to a dynamic environment. The number of hospitals throughout Indonesia is 2,813 units. This number consists of 2,269 general hospitals and 544 special hospitals. While the highest number of hospitals in Indonesia is in East Java, reaching 381 units (*Hospitals Accreditation*

Commission, 2019). Fernandes and Solimun (2017) said that there is an influence of environmental uncertainties on strategic orientation with the objective to investigate mediating effects of strategic orientation against the impact of environmental uncertainties on Business Performance and examining the effect of mediation of innovation on impact environmental uncertainties on business performance. The results of this study indicate that Environmental Uncertainties have an effect but are not significant on Business Performance. In other words, this research results in the aviation business being very sensitive to changes outside the environment.

Based on previous research which states that there are many factors that affect the business performance of a company, indicates that there is a need for further studies on the importance of the business performance of a company, which in this study is the business performance of hospitals in the East Java region. The growing hospital can indicate good hospital performance as well. The following is a picture of the growth of hospitals in Indonesia:

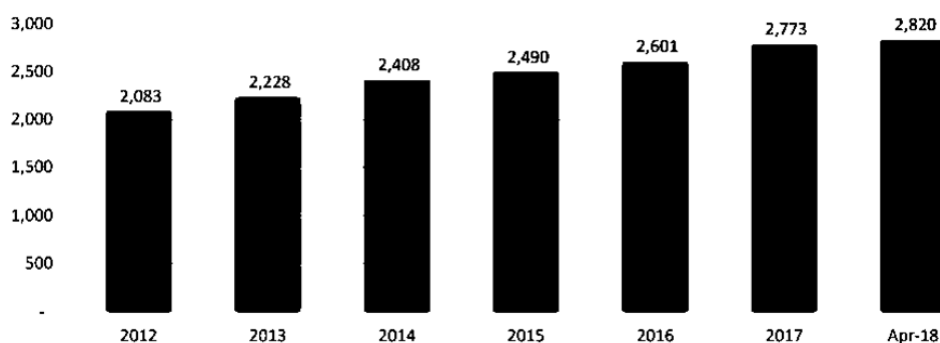


Figure 1 Hospital Growth in Indonesia

Source: Data from the Association of Indonesian Hospitals (PERSI)

The hospital industry in Indonesia continues to increase every year. In 2018 there was a growth of 5.2% in hospitals with the largest number of hospitals in Indonesia being the province of East Java (Trisnantoro & Listyani, 2018). In fact, Indonesia is the largest contributor to medical visits abroad. Total expenses reach IDR 161 trillion/year (US\$ 11.5 billion/year) and 80% of visits are to Malaysia (cnbcindonesia.com). Besides that every year there are two million Indonesian citizens (WNI) who seek treatment abroad. Of this amount, the total costs incurred reached IDR 97 trillion (Sembiring, 2021). This becomes a question, what triggers Indonesian citizens to seek treatment abroad. Quoted from katadata.co.id, he explained that the reason Indonesian citizens seek treatment abroad is the lack of quality of health services and supervision in the country. In addition, the accuracy of the diagnosis, the sophistication of the technology, and the reputation of the hospital are considered by the Indonesian people to seek treatment abroad.

Environmental uncertainties is a broad factor, difficult to predict either individually or collectively, this uncertainty comes from various changes such as changes in natural, political, economic conditions and specifically such as changes in the actions of competitors, customers and suppliers and even regulators (Merchant & Der, 2014). These environmental uncertainties must be overcome so that hospitals in the East Java region can survive and compete with hospitals in other regions. To be able to compete with hospitals in Indonesia both on a national and international scale, hospitals in the East Java region must be able to produce good performance so that patients can make a decision about their choice of being treated at that hospital.

Environmental uncertainties is something that cannot be predicted so that the management of the company in this study, especially the hospital marketers in the East Java region, must be able to predict and immediately take steps to overcome future uncertainties so that they can survive. This uncertainty can be overcome by making business strategies. Strategic orientation or strategic

orientation is a strategy that is able to find opportunities between competitors and the external environment that is not controlled by anyone (David, 2011). The strategic orientation of a company or hospital in the East Java region will be even better if they face challenges from increasingly uncertain external factors because with environmental uncertainty, management, especially marketers, will increasingly think about establishing the most effective and efficient strategy to survive and win the competition. business in attracting the hearts of his patients.

Managerial capability is the ability to move others in utilizing existing resources in achieving organizational goals effectively and efficiently. An unpredictable environment can make managerial skills even more difficult because managers must think more to be able to overcome uncertainty in order to survive. Apart from that, with an increasingly dynamic environment as indicated by the increasingly rapid changes in technology and the tastes of consumers or patients in the East Java hospital area, management and marketers must be able to arouse their interest in wanting to choose at the hospital. The more dynamic, the more challenges and the management must improve its capabilities in order to align and even have a competitive advantage from other hospitals.

David (2011) said that strategic orientation is a strategy that is able to find opportunities between competitors and the external environment that is not controlled by anyone. Strategy orientation provides information for a company in developing strategies to create decisions that can provide added value in the eyes of consumers or society. A strategy that is right on target will make it easier for the company in this study, namely hospitals in the East Java region, to achieve the vision of each hospital by carrying out its mission using an effective strategy. The better the strategy is implemented, the easier it will be for hospitals in the East Java Region to achieve their vision so that the hospital's business performance will be even better.

Managerial capability their capabilities and implementation must be increased because managerial capability is something that must be improved and carried out correctly. Managerial capability must pay attention to several aspects that must be considered such as technology, organization, administration, and human resources. Despite all these challenges, management still has to improve its capabilities because managerial capability is an asset that must be owned if hospitals in the East Java region want to improve their business performance so that they can compete with hospitals in other regions. The better the management capabilities carried out by hospitals in the East Java region, the better their business performance will be.

Based on all of the explanations above, a hypothesis is developed that will be tested in this study (figure 1):

- H1: Environmental Uncertainties have a negative effect on Business Performance at Hospitals in the East Java Region
- H2: Environmental Uncertainties have a positive effect on Strategic Orientation in Hospitals in the East Java Region
- H3: Environmental Uncertainties have a negative effect on Managerial Capability in Hospitals in the East Java Region
- H4: Strategic Orientation has a positive effect on Business Performance at Hospitals in the East Java Region
- H5: Managerial Capability has a positive effect on Business Performance at Hospitals in the East Java Region

The formulation of the contextual framework for this research is based on empirical and theoretical studies. This study uses organizational theory which explains that an organization must be able to adapt to a changing environment all the time if it wants to remain standing. One of the fundamental problems that is often faced by management is how to deal with environmental uncertainty because the external environment is something that cannot be controlled by the company and is an important factor in the survival of the organization so that inevitably the organization must be able to adapt. This environmental uncertainty can be anticipated if the company wants to change

and continues to improve to improve its business performance, one of the ways is by developing a strategy or running its business on a large basis based on a strategic orientation to ease the difficulties that must be taken and innovate both in terms of products, processes and services.

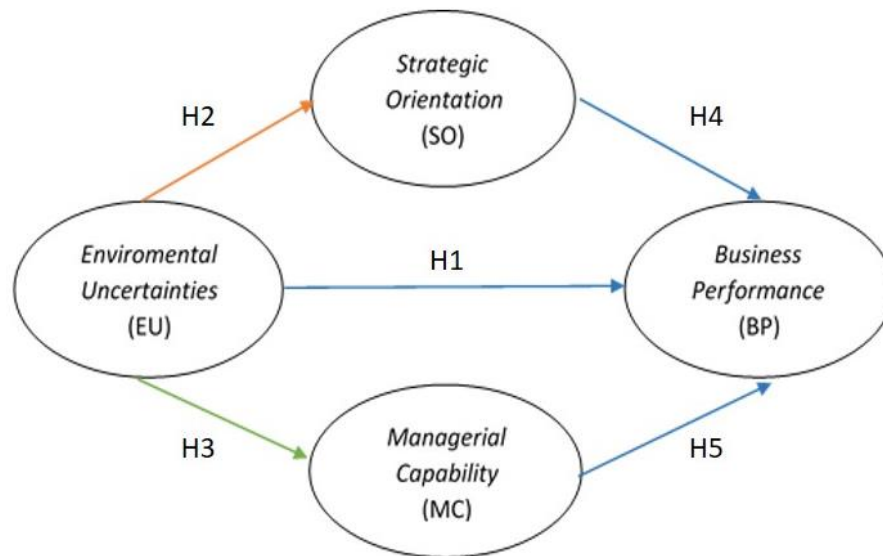


Figure 1. Research Model

RESEARCH METHODS

This study examines the effect of the independent variable Environmental uncertainties. Meanwhile, the intervening variables are strategic orientation and managerial capability. Then the dependent variable in this study is business performance with the object of this research being 62 hospitals in East Java that have been accredited main and plenary with classes A and B. The data collection technique in this study was to distribute questionnaires to respondents, in this case the leaders of hospitals in East Java.

Business performance variables are measured using the balanced scorecard indicators which are viewed from various perspectives, namely financial perspective, patient and referrer perspective, internal business process perspective, learning and growth perspective adopted from the definition put forward by (Weimann & Weimann, 2017). Strategic orientation variables in this study were measured using indicators of aggressiveness, analysis, defensiveness, futurity, proactiveness, riskiness, which were adapted from the definition(Pour & Asarian, 2018). Managerial capability variables in this study are managers or leaders who have a full role in making strategic decisions in hospital operations. Each indicator on the managerial capability variable in this study is planning, investigating, coordinating, evaluating, supervising, staffing, negotiating, representing, which was adapted to Mahoney in (Lau, 2015). The Environment Uncertainties variable in this study is measured by several indicators, namely the market environment, competitive environment, and technology environment. While the definition in this study is medical and non-medical workers who have duties and responsibilities in hospital services or operations who work in hospitals in the East Java region by adapting to the definition from (Desarbo et al., 2005).

In this study, the constructed research model has never been examined as a single unit but rather examined separately between variables. Therefore, PLS-SEM analysis is the appropriate technique of analysis to use. The process of PLS-SEM analysis consists of measurement models and structural models. The process of testing in the measurement model aims to measure the indicators used in a construct.

Table 1
Construct Reliability and Validity

| Variable Name | Cronbach's Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|-----------------------------|------------------|-------|-----------------------|----------------------------------|
| Business performance | 0.928 | 0941 | 0.940 | 0.664 |
| Environmental Uncertainties | 0.858 | 0.964 | 0.964 | 0.749 |
| Managerial Capabilities | 0962 | 0.964 | 0966 | 0.673 |
| Strategic Orientation | 0.933 | 0936 | 0.942 | 0.577 |

RESULTS & DISCUSSION

The reliability test is carried out by looking at the results of the Construct Reliability and Validity on the data that has been analyzed using smartPLS 3. The test results can be seen in Table 1. The data above shows that Cronbach's alpha and composite reliability values for all variables are above 0.7. While the AVE value is above 0.5. This shows that the variable components in this study are reliable/consistent. The process of testing the structural model is carried out after the measurement model meets the required criteria. Structural model testing is carried out to determine the relationship between variables directly or indirectly which is shown in Table 2 below.

Table 2
R-square value

| | R Square | R Square Adjusted |
|-------------------------|----------|-------------------|
| Business Performance | 0.372 | 0.339 |
| Capabilities Management | 0.165 | 0.151 |
| Strategic Orientation | 0.211 | 0.198 |

Based on the data in table 4.11 above, we can see that the R-square value of business performance at hospitals in East Java is 0.372 (37.2%). This shows that the independent variables in this study (environmental uncertainties, managerial capability and strategic orientation have an effect on business performance by 37.2%. Meanwhile, the R-square value of environmental uncertainties on managerial capability is 0.165 (16.5%). And the R-value for managerial capability is 0.165 (16.5%). - square environmental uncertainties to strategic orientation of 0.211 (21.1%).

Table 3
Model Fit Test

| Information | Saturated Mode | Estimated Model |
|-------------|----------------|-----------------|
| SRMR | 0.083 | 0.113 |
| d_ULS | 6,579 | 12.143 |
| d_G | 7,621 | 7,787 |
| Chi-Square | 1588,202 | 1594,708 |
| NFIs | 0.558 | 0.556 |

The structural model was analyzed using the criteria suggested by Henseler et al. (2016,) namely Standardized Root Mean Square Residual (SRMR). SRMR is a measure of the average absolute value of the residual covariance. The working mechanism is based on the transformation of the sample matrix and the predicted matrix into a correlation matrix. SRMR is defined as the difference between the observed correlations and the correlation matrix contained in the model. Henseler et al. (2014) introduced SRMR as a measure of goodness of fit for PLS-SEM which can be used to avoid model specification errors. An SRMR value of less than 0.10 is considered an acceptable fit-model. The SRMR values in the table above are 0.083 (saturated model) and 0.113 (estimated model).

In addition to SRMR, the model suitability measure found in the SEM method is Bentler and Bonett's Normal Factor Index (NFI) (1980). The NFI uses the Chi² values of the proposed model and compares them with rule-matched benchmarks. The Chi² of the proposed model is considered not to provide sufficient information to assess the fit of the model. The NFI is then defined as 1 minus the Chi² value of the proposed model divided by the Chi² value of the null model. NFI returns values between 0 and 1. The closer the NFI is to 1, the better the match. The NFI value of this study is 0.924 (saturated) and 0.926 (estimated) so that the fit of the model is acceptable because it is close to 1 even though it is below 0.9. NFI represents a measure of incremental fit.

Hypothesis testing is done by looking at the value of the Critical Ratio or T statistic and P-Value. The Critical Ratio value for a significance level of 0.1% is > 3.291. The Critical Ratio value for a significance level of 5% is > 1.96. The Critical Ratio value for a significance level of 10% is > 1.645. The following are the results of the hypothesis test in Table 1.

Table 4
Hypothesis Test Results

| hypothesis | Original Sample (O) | Sample Means (M) | Standard Deviation (STDEV) | T Statistics (O/STDEV) | P Value |
|------------|---------------------|------------------|----------------------------|------------------------|----------|
| H1: EU→BP | -0.277 | -0.280 | 0.162 | 1,709 | 0.088*** |
| H2: EU→SO | 0.459 | 0.465 | 0.128 | 3,597 | 0.000* |
| H3: EU→MC | -0.406 | -0.422 | 0.132 | 3,069 | 0.002** |
| H4: SO→BP | 0.365 | 0.373 | 0.156 | 2,331 | 0.020** |
| H5: MC→BP | 0.380 | 0.394 | 0.168 | 2,258 | 0.024** |

***significant with a P value ≤ 0.001

**significant with a P value ≤ 0.05

*significant with a P value ≤ 0.1

Based on the results of the hypothesis testing presented in table.1, it can be seen that the P-value for the relationship between Environmental Uncertainty and Business Performance is 0.088 < 0.1 and the statistical t value is 1.709 and the original sample value is negative; then it can be said that the first hypothesis (H1) is rejected. These results indicate that statistically Environmental Uncertainty has a significant negative effect on Business Performance. The results of this study are in line with the findings by (Erina Sudaryati, 2020) which states that environmental uncertainties have a negative effect on business performance. These significant results indicate that environmental uncertainty is a broad factor, difficult to predict either individually or collectively, this uncertainty stems from various changes such as changes in natural conditions, politics, the economy and specifically such as changes in the actions of competitors, customers and suppliers and even regulators. These environmental uncertainties must be overcome so that hospitals in the East Java region can survive and compete with hospitals in other regions.

Environmental Uncertainty and Strategic Orientation is 0.000 < 0.001 and the statistical t value is 3.597 and the original sample value is positive; then it can be said that the second hypothesis (H2) is accepted. These results indicate that statistically Environmental Uncertainty has a significant and positive effect on Strategic Orientation. The results of this study are in accordance with the findings of research conducted by (Fernandes & Solimun, 2017) said that environmental uncertainties had a significant positive effect on strategic orientation. The results of this study indicate that environmental uncertainty is something that cannot be predicted, so that the company's management in this study, especially the marketers of hospitals in the East Java region, must be able to predict and immediately take steps to overcome future uncertainties so that they can survive. This uncertainty can be overcome by making business strategies. Strategic orientation is a strategy that is able to find opportunities between competitors and the external environment that is not controlled by anyone.

Environmental Uncertainty and Managerial Capability is $0.002 < 0.05$ and the t statistic value is 3.069 and the original sample value is negative; then it can be said that the third hypothesis (H3) is accepted. The results show that statistically Environmental Uncertainty has a significant and negative effect on Managerial Capability. This research is in accordance with the results of research conducted by (Sofyani et al., 2020) shows that environmental uncertainties have a negative and significant effect on managerial capability. the ability to mobilize other people in utilizing existing resources in achieving organizational goals effectively and efficiently. An unpredictable environment can increase managerial ability because managers must think more to be able to overcome uncertainty in order to survive. An increasingly dynamic environment which is indicated by the increasingly rapid changes in technology and the tastes of consumers or patients in the East Java hospital area makes management and marketers have to be able to arouse their interest in wanting to choose at the hospital.

Strategic Orientation and Business Performance is $0.020 < 0.05$ and the t statistic value is 2.331 and the original sample value is positive; then it can be said that the fourth hypothesis (H4) is accepted. These results indicate that statistically Strategic Orientation has a significant and positive effect on Business Performance. The results of this study are also in accordance with the findings of research conducted by (Pour & Asarian, 2018) said that strategic orientation has a positive and significant effect on business performance. Strategic Orientation provides information for a company in developing strategies to create decisions that can provide added value in the eyes of consumers or society. A strategy that is right on target will make it easier for the company in this study, namely hospitals in the East Java region, to achieve the vision of each hospital by carrying out its mission using an effective strategy. The better the strategy is implemented, the easier it will be for hospitals in the East Java Region to achieve their vision so that the hospital's business performance will be even better.

Managerial Capabilities and Business Performance is $0.024 < 0.05$ and the statistical t value is 2.258 and the original sample value is positive; then it can be said that the fifth hypothesis (H5) is accepted. These results indicate that statistically Managerial Capability has a significant and positive effect on Business Performance. The results of this study are in line with the findings by (Pour & Asarian, 2018) said that knowledge management which reflects management capability has a positive and significant influence on business performance. This research shows that managerial capability must be improved and its implementation because managerial capability is something that must be improved and implemented correctly. Managerial capability is an asset that must be possessed if hospitals in the East Java region wish to improve their business performance so that they can compete with hospitals in other regions. The better the management capabilities carried out by hospitals in the East Java region, the better their business performance will be.

CONCLUSION

Testing with the SEM method using SmartPLS software found that of the 5 hypotheses that had been prepared, with 5 hypotheses that were supported, they included: (1) Environmental uncertainty has a significant and negative effect on business performance. (2) Environmental uncertainty has a significant and positive effect on strategic orientation. (3) Environmental uncertainty has a significant and negative effect on managerial capability. (4) Strategic orientation has a significant and positive effect on business performance. (5) Managerial capability has a significant and positive effect on business performance.

The practical implication of this research is that the results of hypothesis testing show that environmental uncertainty has a significant and positive effect on strategic orientation. The lowest indicator that needs to be optimized by hospital management is EU3 (the hospital serves many patients with the same disease in the past). While the highest indicator that needs to be maintained by hospital management is EU8 (Technological changes provide great opportunities in the hospital industry).

The results of hypothesis testing show that environmental uncertainty has a significant and negative effect on managerial capability. The lowest indicator that needs to be optimized by hospital

management is EU3 (the hospital serves many patients with the same disease in the past). While the highest indicator that needs to be maintained by hospital management is EU8 (Technological changes provide great opportunities in the hospital industry).

The results of hypothesis testing show that strategic orientation has a significant and positive effect on business performance. The lowest indicator that hospital management needs to optimize is SO5 (Hospitals always adopt new technologies in medical equipment and medical materials.). While the highest indicator that needs to be maintained by hospital management is SO11 (hospitals in carrying out operations involve coordination with various views to reduce the risk of failure).

The results of hypothesis testing show that managerial capability has a significant and positive effect on business performance. The lowest indicator that hospital management needs to optimize is MC7 (our hospital manager assesses employee performance through KPIs). While the highest indicator that needs to be maintained by hospital management is MC9 (our hospital manager directs, leads and develops employee capabilities).

This research has several limitations, and these limitations can create opportunities for improvement for further research. This research can be carried out again with a larger number of samples and a wider range by taking into account the representation of each class and type of hospital in Indonesia. Subsequent research is to analyze more deeply the relationship between environmental uncertainty, strategic orientation, managerial ability in influencing hospital performance by using more detailed indicators of medical resources and medical technology.

REFERENCES

- Chong M. Lau. (2015). The effects of nonfinancial performance measures on role clarity, procedural fairness and managerial performance. *Pacific Accounting Review*, 27(2), 142–165.
- David, F. R. (2011). *Strategic Management: Concept and Cases* (3rd ed.). Pearson Education.
- Desarbo, W. S., Di Benedetto, C. A., Song, M., & Sinha, I. (2005). Revisiting the miles and snow strategic framework: Uncovering interrelationships between strategic types, capabilities, environmental uncertainty, and firm performance. *Strategic Management Journal*, 26(1), 47–74.
- Erina Sudaryati, R. A. (2020). Environmental Uncertainty and Firm Performance: The Moderating Role of Corporate Governance. *Jurnal Akuntansi*, 24(2), 187.
- Fernandes, A. A. R., & Solimun. (2017). The mediating effect of strategic orientation and innovations on the effect of environmental uncertainties on the performance of business in the Indonesian aviation industry. *International Journal of Law and Management*, 34(1), 1–5.
- Hospitals Accreditation Commission. (2019). Akreditasi.Kars.or.Id. http://akreditasi.kars.or.id/application/report/report_accredited.php
- Merchant, K. A., & Der, W. A. V. S. (2014). *Sistem Pengendalian Manajemen. Penguuran kinerja, evaluasi, dan insentif* (marthoccio (Ed.)). salemba empat.
- Pour, M. J., & Asarian, M. (2018). Strategic orientations, knowledge management (KM) and business performance: An exploratory study in SMEs using clustering analysis. *Kybernetes*, 48(9), 1942–1964.
- Semiring, L. J. (2021). *Wow! Warga RI Rogoh Rp161 T/Tahun Demi Berobat ke Luar Negeri*. Cnbcindonesia.Com. <https://www.cnbcindonesia.com/news/20210319113213-4-231366/wow-warga-ri-rogoh-rp161-t-tahun-demi-berobat-ke-luar-negeri>
- Sofyani, H., Simali, M. F. I. S., Najda, T., & Al-maghrebi, M. S. (2020). The Role of Budgetary Participation and Environmental Uncertainty in Influencing Managerial Performance of Village Government. *Journal of Accounting and Investment*, 21(2).
- Trisnantoro, L., & Listyani, E. (2018). *Jumlah RS di Indonesia Pertumbuhan RS Publik*. Persi.or.Id. <https://persi.or.id/wp-content/uploads/2018/04/rsindonesia418.pdf>
- Weimann, E., & Weimann, P. (2017). High Performance in Hospital Management. In *High Performance in Hospital Management*.