

*Original Article*

# **The Effect of Benchmarking on Competitive Advantage through Financial Performance in Hospitals at East Kalimantan, Indonesia**

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**Abstract:** This study determines the effect of benchmarking on competitive advantage, the effect of benchmarking through financial performance on competitive advantage and the effect of benchmarking on competitive advantage moderated by policy. With proper benchmarking in hospitals, it is expected to be superior compared to competing hospitals. This study was conducted on 54 hospitals recorded in the Central Statistics Agency (BPS), East Kalimantan, Indonesia. The research design used an explanatory research approach. This type of research is quantitative. The population in this study was High Management Hospital. Samples were taken from as many as 45 people using the non-probability sampling method, namely by purposive sampling techniques. Data collection is carried out through the distribution of questionnaires. The data analysis technique used is the SEM method, namely PLS (Partial Least Square), with the help of Smart PLS software. The results showed that Benchmarking had a positive and significant effect on Competitive Advantage, both competitive advantage through Financial Performance and competitive advantage moderated by policy.

**Keywords:** Resources-Based View; benchmarking; competitive advantage; financial performance; policy



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## **1. Introduction**

Indonesia is one of the developing countries with an increasing health sector and is one of the priorities in national development. East Kalimantan, as one of Indonesia's regions, has experienced an increase in the number of hospitals and other health facilities. Population growth and virus variations that become diseases can cause pandemics, making health services even more important. The need for health services has increased significantly in terms of facilities, infrastructure, and service quality. Therefore, it is necessary to improve health infrastructure and the quality of human resources in the health sector to provide optimal services in overcoming various kinds of diseases that develop. According to the Central Statistics Agency (BPS), in 2021, there were 3,112 hospitals throughout Indonesia, an increase of 5.17% from the previous

year, which was only 2,959 hospitals. Of these, 2,514 are general hospitals, and 598 are special hospitals. From 2011 to 2021, the number of hospitals in Indonesia increased by 80.8%, from 1,721 units to 3,112 units. The distribution of hospitals in Indonesia by region shows In East Kalimantan, there are 54 hospital units consisting of general hospitals and special hospitals with the following type classifications: 2 units of Type A, 6 units of Type B, 29 units of Type C, and 17 units of Type D. Limitations Type A hospitals indicate limited health services in some special diseases that cannot be handled and must be referred to hospitals that have service facilities aforementioned. Therefore, increasing the type of Hospital is inseparable from the role of hospital management because there are many requirements needed to apply for an increase in the type of Hospital, and the management must carry out technically.

Health insurance plays an important role in the treatment of the general public. The government has guaranteed ownership of health insurance and it is one of the programs of the government. In figure 1.2, the percentage of health insurance ownership by type in East Kalimantan 2021 shows that 45.7 percent of East Kalimantan residents have BPJS Health Non-PBI (Contribution Assistance Recipients) insurance. The proportion of people with BPJS Non-PBI health insurance is greater than those with BPJS PBI health insurance 24.2 percent. The rest have health insurance in the form of JAMKESDA 0.6 percent, private insurance 1.6 percent and hospitals/offices 7.0 percent.

Competition between hospitals as health service providers is increasing and complex, so the right strategy is needed to compete with other hospitals, one of which is using the benchmarking concept. Benchmarking is the process of comparing the performance of an organization with other organizations that are considered the best in their fields. Benchmarking is carried out to identify and analyze the difference in performance between the Hospital being measured and the Hospital used as a reference. Applying the Benchmarking concept in hospitals is important because it can provide benefits for improving the quality of health services and competitive advantages. Benchmarking can help identify strengths and weaknesses in healthcare provision, so appropriate action can be taken to improve service quality and reduce operational costs. According to Costa et al. (2006), Benchmarking is a systematic process of learning and understanding the processes and practices that produce the best performance in other companies, then applying them to the company itself to improve performance. In previous research, it was found that the application of the Benchmarking concept in hospitals can significantly improve service quality and financial performance.

Financial performance is an important factor that influences the success of a hospital in implementing the concept of benchmarking and achieving competitive advantage. Good financial performance can demonstrate the Hospital's ability to generate adequate profits, allocate financial resources appropriately, and obtain the necessary funding to finance its operations. Financial performance in hospitals can be an intervening variable that affects benchmarking against competitive advantage. If the Hospital's financial performance is good, benchmarking can be used more effectively to increase competitive advantage. Good financial performance can help support effective and efficient policy implementation, so policies play an important role in influencing benchmarking against competitive advantage. Policy can be interpreted as a set of rules, norms, and procedures to guide and strengthen decision-making and implementation of actions in achieving desired goals. Policies can act as a guide in carrying out existing operational activities and business strategies.

The policy can act as a moderating variable, meaning that policy can strengthen or weaken the relationship between the effect of benchmarking on competitive advantage in hospitals. In this case, the policy in question can be in the form of strategic policies, service policies, or hospital management policies. Strategic policies, for example, can influence the success of benchmarking and the Hospital's competitive advantage by determining the direction and long-term goals of the Hospital. Service policies aim to improve service quality and reduce service costs, which can be an important factor in increasing the competitive advantage of hospitals. In addition, hospital management policies can also affect the success of the influence of benchmarking in competitive advantage in hospitals. Good management policies can increase the effectiveness of the use of hospital resources, increase hospital productivity and performance, and increase patient and hospital employee satisfaction. Based on this background description, this study was conducted to determine how much influence Benchmarking and financial performance and policies have on competitive advantage in East Kalimantan, Indonesia.

## **2. Literature Review**

### **2.1. Underlying Theory (Resources-Based View (RBV))**

Resource Based View (RBV) is a theory that focuses on the company's internal resources and capabilities as key factors in achieving competitive advantage. According to Barney (1991), resources

owned by companies can provide competitive advantages if these resources have four characteristics: valuable, rare, inimitable, and non-substitutable (VRIN). Valuable resources mean that these resources can provide added value and benefits to the company. Rare resources mean that they are scarce or difficult to obtain by competitors. An inimitable resource means that it is difficult for competitors to replicate. A non-substitutable resource means that another resource cannot replace it. The application of the Resource Based View (RBV) concept in hospitals aims to manage their internal resources and capabilities effectively. It gives it an advantage in competing sustainably in the healthcare market, compared to hospitals focusing only on product aspects or market position. Implementing Resource Based View (RBV) will help hospitals sustainably manage their resources and assets. In the face of business competition, hospitals that can optimize their internal resources will have a better advantage in the long run. In implementing benchmarking, hospitals must pay attention to the competitive advantages possessed by competitors. Therefore, this theory is relevant to explain the variables in this study because it can help obtain the necessary resources and capabilities to increase competitive advantage in the health market.

## 2.2. Benchmarking

Benchmarking is a systematic and ongoing process of comparing, learning, and applying best practices from superior competitors to achieve competitive performance and results. The benchmarking process is carried out continuously over a long period to find the advantages of the best hospitals. (Ramli, 2013) stated that Benchmarking is a learning process that occurs systematically and continuously where every part of a hospital is compared with the best or superior competitor. Here are some types of benchmarking namely:

1. Internal Benchmarking is a type of benchmarking that compares performance on its internal scope with different departments or units within the organization. It aims to improve business processes and look for ways to improve overall performance.
2. Competitive benchmarking involves comparing an organization's performance with competitors of the same or similar industries to identify relative strengths and weaknesses and look for opportunities to improve organizational performance.
3. Functional Benchmarking: is a type of benchmarking that involves comparing the performance of a function in an organization with other organizations in the same or similar industry, which shows the best performance in the same function.
4. Generic benchmarking involves comparing an organization's performance with organizations in the same or similar industries, which show the best performance in processes or functions that are not directly related to the same product or service.
5. Collaborative Benchmarking: This type of benchmarking involves working together between two or more organizations to improve business processes and performance.

The right type of benchmarking to use in increasing competitive advantage will depend on the characteristics and needs of the Hospital. However, in general, Competitive Benchmarking and Functional Benchmarking are the types that are more appropriate to use for this purpose. In Competitive Benchmarking, hospitals can compare their performance with competing hospitals of the same type or those of higher types. By comparing the performance of hospitals against those considered better and superior, hospitals can determine areas that need improvement and adopt best practices from other hospitals. While in Functional Benchmarking, the Hospital will compare and study operational processes in other hospitals that are more efficient and effective in handling the same function or service.

According to Natasha (2013), Benchmarking is the process of measuring commercially and comparing one or more Hospital business processes with the best Hospital business processes to obtain information that can help the Hospital to identify and implement business process improvements. At the same time, Albar et al. (2014) stated that Benchmarking is an evaluation of the relative performance of a Hospital (or other production entity) that converts the same type of input (resource) into the same type of output. So, it can be concluded that Benchmarking can be applied in various sectors, including the health sector. According to Guven-Uslu (2005), benchmarking in the health sector can be done to improve service quality, cost efficiency, and hospital financial performance. In addition, Gonzalez (2019) added that Benchmarking can also help hospitals improve innovation, product development, and customer satisfaction.

## 2.3. Competitive Advantage

Competitive advantage can be interpreted as the ability of the Hospital to maintain its position and outperform competitors in terms of health services. This competitive advantage can be measured from various aspects such as quality health services, speed in providing services, cost efficiency, and innovation

and development of services that meet patient needs. According to Sugiarno & Novita (2022), competitive advantage is an organizational / company achievement that can exceed the performance achievements of its competitors. One theory that can be used to explain the concept of competitive advantage is the Resource-Based View (RBV). RBV states that competitive advantage can be gained by managing unique resources that competitors cannot replicate. In the context of hospitals, such unique resources can be qualified medical personnel, advanced medical technology, or cooperation networks with related parties such as insurance or government health institutions. Grant (2021) stated that competitive advantage is a condition in which a firm can produce higher value than its competitors in the same industry. This can be achieved by utilizing the resources owned by the company more effectively and efficiently than its competitors to create added value for customers. Competitive advantage also allows the company to maintain its market share and improve the quality of the Hospital.

#### **2.4. Financial Performance**

Performance is a description of the achievements achieved by the Hospital in its operational department, which concerns financial, marketing, fundraising, fund dissemination, technological, and human resources. Meanwhile, finance is an aspect related to managing hospital funds, so financial performance is the organization's ability to manage financial resources and obtain adequate profits within the desired period. Financial performance is one factor that shows an organization's effectiveness and efficiency in order to achieve hospital goals. Financial Performance is usually assessed using financial measurements based on accounting data or financial statement data, for example, profitability measurements such as the top level of assets (return on assets), the top level of investment, the top level of sales (return on sales), and the top level of capital (return on equity). Measurement or Criteria based on accounting data is commonly used to measure the company performance (Jahanshahi et al., 2012).

According to Fahmi (2018), Financial performance is an analysis conducted to evaluate the extent to which a company carries out financial policies and procedures properly and effectively. According to Rudianto (2013), financial performance is the result or achievement of company management in managing company assets effectively during a certain period. Hospitals need financial performance to determine the extent of the level of financial success achieved. In the era of health services under health laws, the government, through the BPJS (Social Security Administration Agency) program, around 70% of people become BPJS participants. Therefore, hospitals are competing to become BPJS service partners so that the main income or the largest income of hospitals comes from BPJS patients. Hospitals that are not partners or partners of BPJS will lack patients, resulting in reduced income. High income will result in good financial performance with management who are able to manage resources efficiently, because BPSJ prices are packaged and very different for general patients who pay according to hospital rates.

#### **2.5. Policy**

The policy is a set of alternatives ready to be selected based on certain principles to provide direction and direct action in achieving the desired goals. According to McDougal (1947), policy is a statement of what will be done or will be achieved in the future. This policy has certain goals or objectives to be achieved. Policy or policy review can refer to important decision-making processes within the organization, such as prioritizing programs or expenditures and selecting appropriate alternatives. Policy can also be defined as a political, management, financial, or administrative mechanism to achieve explicit goals. Castronovo & Huang (2012) define policy as a program of achieving goals with values and directed actions. Policy is an action or activity proposed by an environment, group or government in an environment where there are obstacles and possibilities where the policy is proposed to be useful in achieving the intended goals (Bauer, 2010). Policies can affect the performance and success of the Hospital. Appropriate and effective policies can help hospitals achieve their strategic goals, improve service quality and operational efficiency, and support consistent and coordinated decision-making. However, improper or poorly coordinated policies can have a negative impact on the performance and success of the Hospital. Therefore, implementing good and effective policies is important for the success of hospitals in providing quality health services.

#### **2.6. Conceptual Framework**

On the basis of Resources Based View (RBV) Theory, it explains that hospitals can utilize all their resources to achieve a competitive advantage. The resource in question can be both tangible and intangible resources. Tangible resources can be land, buildings, machinery and equipment. At the same time, intangible

resources can be in the form of knowledge, employee skills, Hospital reputation and organizational culture. The Hospital's efforts to achieve a competitive advantage should give attention and appreciation to the development of intangible resources, and intangible resources can be a source of competitive advantage if they meet the criteria of rare, valuable, difficult to replicate, and irreplaceable.

According to RBVT, the long-term success of a Hospital is determined by the valuable, scarce, difficult to replicate, and irreplaceable resources it has. Therefore, in an effort to achieve competitive advantage, Hospitals need to give proper attention and development to intangible resources. RBVT can provide the basis for developing Hospital capabilities resulting in superior performance over time. This capability is essential for the Hospital to combine, manage and exploit resources effectively thereby providing added value to customers and creating an advantage compared to its competitors.

Hospitals can use their resources as a basis for evaluating strategies in order to achieve competitive advantage, one strategy that can be used is Benchmarking, Benchmarking is the process of comparing performance and business flows carried out by hospitals with superior hospitals. This is done to gain insight into best practices in the industry and look for ways to improve Hospital performance, improve patient satisfaction, and reduce costs. In practice, benchmarking can be done on various aspects of the Hospital's business, such as patient management, inventory management, and HR management. In this study the influence of Benchmarking becomes an independent variable, the independent variable is a variable that can affect other variables, in this study the influence of Benchmarking will be tested on the dependent variable, namely competitive advantage.

If Benchmarking can create a competitive advantage in a hospital, especially in East Kalimantan, it is necessary to evaluate the effectiveness and efficiency of using Benchmarking. The evaluation can be done by analyzing the Hospital's financial statements. Hospital financial statements can provide information about financial performance before and after the implementation of Benchmarking, so that the effectiveness and efficiency of Benchmarking can be assessed. Financial performance is a measure or indicator used to evaluate the effectiveness and efficiency of using a hospital's financial resources to achieve business goals. In this conceptual framework, financial performance will be tested as an intervening variable that plays a role in mediating the effect of benchmarking on competitive advantage. It is important to consider policy factors in strategic decision-making. Therefore, in this study, effective policies will greatly affect the Hospital's ability to achieve the set goals. Policy can be interpreted as a strategy or action the Hospital takes to optimize the effect of benchmarking and financial performance on competitive advantage. Policy can be a moderating variable to the effect of benchmarking on competitive advantage so that policy can strengthen or weaken the influence between these variables.

The implementation of appropriate policies can have an impact on increasing competitive advantage, both through service development, improving service quality, and increasing operational efficiency. Therefore, Hospital policies can affect competitive advantage. Competitive advantage is a condition in which a hospital has advantages or advantages distinguishing it from other hospitals regarding patient health services. Competitive advantage can be measured from various aspects, such as service quality, handling speed, competitive prices, and facilities provided. Competitive advantage in this study becomes a dependent variable because the dependent variable results from the variable studied. Thus, the competitive advantage becomes a variable that depends on other variables. Based on the description described above, for more clearly, the overall picture of this research is illustrated in the framework of the following concept:

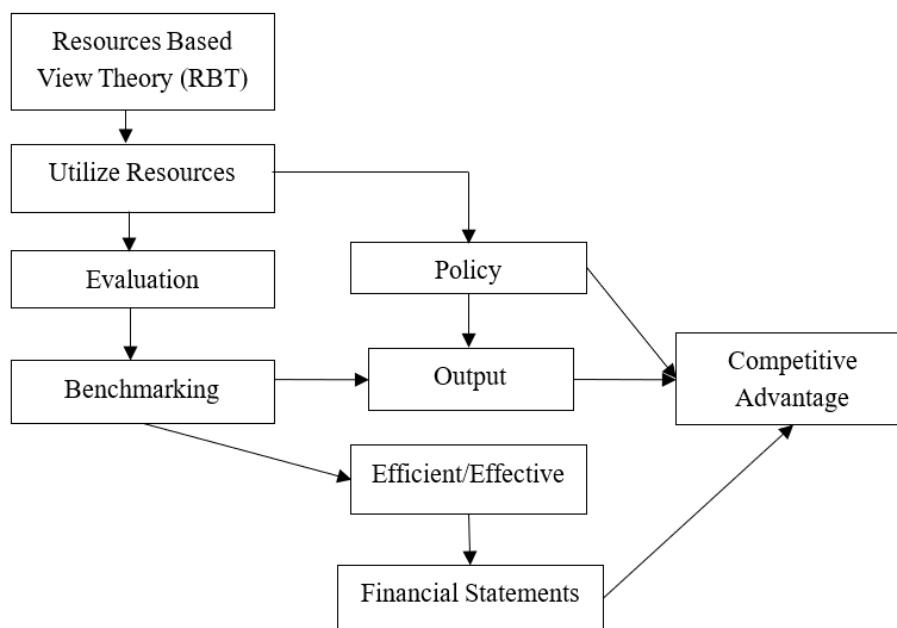


Figure 1. Conceptual Framework

### 3. Materials and Methods

#### 3.1. Population and Sample

Population is a set of all elements or individuals that meet the criteria set and are relevant to the problem to be studied. In this study, the population is 54 hospitals recorded in data from the Central Statistics Agency (BPS) East Kalimantan. According to Sugiyono (2009), sample is a subset of the population selected and researched to conclude the characteristics or traits of the population. Meanwhile, Moleong (2005) defines a sample as a part of the population taken to represent the entire population in the study. According to Probability sampling is a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a sample member (Sugiyono, 2009). This study intends to generalize the research results to all hospitals registered with the Central Statistics Agency in 2017-2021. The characteristics are the respondents are High Hospital Management consisting of Hospital Directors (Director and Deputy Director), Head of Field and or Head of Section and Hospital respondents in East Kalimantan consisting of Type A, Type B, Type C and Type D Hospitals.

#### 3.2. Data Collection Methods

Primary data collection uses questionnaires distributed to respondents, namely employees who have met the criteria. Computer-assisted data processing based on analysis models using Smart PLS programs. Computer-assisted processing aims to overcome time constraints; namely, the analysis process can be done quickly, facilitating the process of processing data by the variables studied, and the needs for analysis and calculation results are more precise and accurate. This study is included in the category of correlational research, which is to analyze the influence of several independent variables (exogenous/independent) on one non-free variable (endogenous/dependent) or known as multivariate (Sugiyono, 2009). The data used are primary data with time sequences that are cross-sectional. In contrast, the measurement scale uses Likert scales 1 to 5 using interval data (stratified) so that it can be analyzed using multiple regression. This type of research is causality research. The method used in this study is the census method, which is research that takes samples from a population and uses questionnaires as a data collection instrument.

#### 3.3. Method of Data Analysis

In this study, using the SemPLS analysis tool is assisted by the SmartPLS application. Partial Least Square (PLS) is a component- or variant-based Structural Equation Modeling (SEM) equation model (Ghozali & Latan, 2015). Partial Least Square (PLS) approach is distribution-free (does not produce certain

distributed data, can be nominal, ordinal, interval and ratio)—the use of PLS to obtain strong structural models for prediction purposes.

### **3.3.1. Measurement Model (Outer Model)**

The measurement model aims to test the relationship between latent variables and related manifest variables so that they can be quantitatively measured and tested for accuracy. In the outer measurement model, each latent variable is measured by some manifest variable and tested for consistency using reliability coefficients. According to Ghazali & Latan (2015), measurements that can be done are:

#### **Convergent Validity**

Convergent validity is performed to measure an indicator's ability to correlate positively with other indicators in the same construct. Convergent validity relates to the principle that the gauges of a construct should be highly correlated. The convergence validity test can be seen from the loading factor value for each construct indicator. The value for the loading factor must match the rule of thumb:  $> 0.70$  for confirmatory research and  $> 0.60$  for exploratory research.

#### **Discriminant Validity**

The validity of discriminant aims to ensure that each variable has nothing in common. The validity of discriminant relates to the principle that different construct gauges should not be highly correlated. How to test discriminant validity with reflexive indicators on cross-loading values. The value for cross-loading must match the rule of thumb for each variable must be more than 0.70.

#### **Reliability**

Reliability tests are used to prove instruments' accuracy, consistency and accuracy in measuring constructs. Measurement of the reliability of a construct with reflective indicators can be done with Cronbach's Alpha and Composite Reliability or Dillon-Goldstein's. The rule of thumb for reliability tests is  $>0.70$  for confirmatory research and  $>0.60$  to be accepted for exploratory research. Besides that, Composite Reliability tests are  $>0.70$  for confirmatory research, and 0.60-0.70 is still acceptable for exploratory research.

### **3.3.2. Structural Model (Inner Model)**

Structural models are one of the important concepts in path analysis or Structural Equation Modeling (SEM). Structural models aim to see relationships between variables. According to Ghazali & Latan (2015), structural model measurements can be seen from R-Squares. Changes in R-Squares values can be used to explain the effect of certain exogenous latent variables on endogenous latent variables. The rule of thumb in structural mode with R-Square criteria of 0.75, 0.50, and 0.25 indicates strong, moderate and weak models. The next step in the structural model is to test the hypothesis using bootstrapping, where the criteria for making a decision can be seen with its statistical T- value, the statistical T- value should not be less than 1.96 and must be more than 1.96, showing a significant influence. The original value of the sample is to identify the direction of the variable relationship, whether a positive or negative level is 5% in each variable.

### **3.3.3. Moderating Effect Analysis**

According to Ghazali & Latan (2015), the moderation effect shows the interaction between exogenous and moderator variables in influencing endogenous variables. Four ways can be done to test the moderation effect using the SmartPLS 3.0 program depending on the exogenous construct and moderator, whether reflective or formative. If exogenous constructs and moderators are reflective, the appropriate method to test the moderation effect is using the Product Indicator Approach. The product indicator approach is carried out by making multiplication between exogenous variable indicators and moderators to form interaction constructs according to Ghazali & Latan (2015) using a Sobel test (criteria from mediation) which is done by testing the strength of the indirect influence of the independent variable (X) to the dependent variable (Z) through the Intervening variable (Y). Measurement of moderation variables to test whether policies affect the relationship between benchmarking to competitive advantage can be seen from the results of the path coefficient on the T- statistic. If a value of  $>1.96$  is obtained, the moderator variable can moderate the relationship between the independent and dependent variables.

## 4. Results

For this study, a specific model of the relationship between latent variables and existing indicators called the definition of the outer model, namely how each indicator relates to existing latent variables. It is said that the direction of the arrow of the indicator with the latent construct is to lead to indicators that show that the study uses reflective indicators that tend to be precise in perceptual measurements. The relationship to be studied (hypothesis) has an arrow symbol between constructs.

### 4.1. Assessment of Measurement Model (Outer Model)

The outer model tests the measurement of each latent variable or the measurement of indicators of each variable. The outer model test is used in assessing as follows:

#### 4.1.1. Convergent Validity

Convergent validity measures the correlation value between constructs and latent variables. An indicator can be called ideal or reliable if the value of the loading factor  $\geq 0.7$ , which means that this indicator is valid. The results of the outer loading analysis provide the results of all outer loading values above 0.70 and by convergent validity requirements.

**Table 1.** Results of Outer Loadings

Variable(s)	Item(s)	Loading(s)
Benchmarking (X)	BR1	0.912
	BR2	0.923
	BR3	0.865
	BR4	0.862
	BR5	0.886
	BR6	0.886
	BR7	0.788
	BR8	0.788
	BR9	0.884
	BR10	0.949
	BR11	0.75
	BR12	0.898
Competitive Advantage (Y2)	KB1	0.749
	KB2	0.869
	KB3	0.769
	KB4	0.824
	KB5	0.804
	KB6	0.879
	KB7	0.886
	KB8	0.724
Financial Performance (Y1)	KB9	0.757
	KK1	0.958
	KK2	0.947
	KK3	0.885
	KK4	0.946
	KK5	0.936
	KJ1	0.78
Policy (Z)	KJ2	0.875
	KJ3	0.806
	KJ4	0.756
	KJ5	0.868
	KJ6	0.875
	KJ7	0.823



Table 1 captures the results of outer loadings. Benchmarking with Planning indicators, namely: X1 = 0.912; X2 = 0.923 and Search is X3 = 0.865; X4 = 0.862 and Observe: X5 = 0.886; X6 = 0.866; X7 = 0.788; X8 = 0.788 and Analyze namely: X9 = 0.884; X10 = 0.949 and X11 = 0.750; X12 = 0.898. Competitive Advantage with Service Quality indicators, namely: Y2.1 = 0.749; Y2.2 = 0.869; Y2.3 = 0.769 and Price namely: Y2.4 = 0.824 and Reliable Strategy namely: Y2.5 = 0.804; Y2.6 = 0.879; Y2.7 = 0.886; Y2.8 = 0.724 and Organizational Value is: Y2.9 = 0.757. Financial Performance with Net Profit Margin indicator, namely: Y1.1 = 0.958 and Return on Assets namely: Y1.2 = 0.947; Y1.4 = 0.946 and Return On Equity i.e. Y1.3 = 0.885; Y1.5 = 0.936. Policy with Financial Performance Policy indicators, namely: Z.1 = 0.780; Z.2 = 0.875; Z.3 = 0.806 and Competitive Excellence Policy, namely: Z.4 = 0.756; Z.5 = 0.868; Z.6 = 0.875; Z.7 = 0.823. The following is an overview of the loading factor diagram of each indicator on its variables and the magnitude of the influence of the R square ( $R^2$ ) independent variable on the dependent variable.

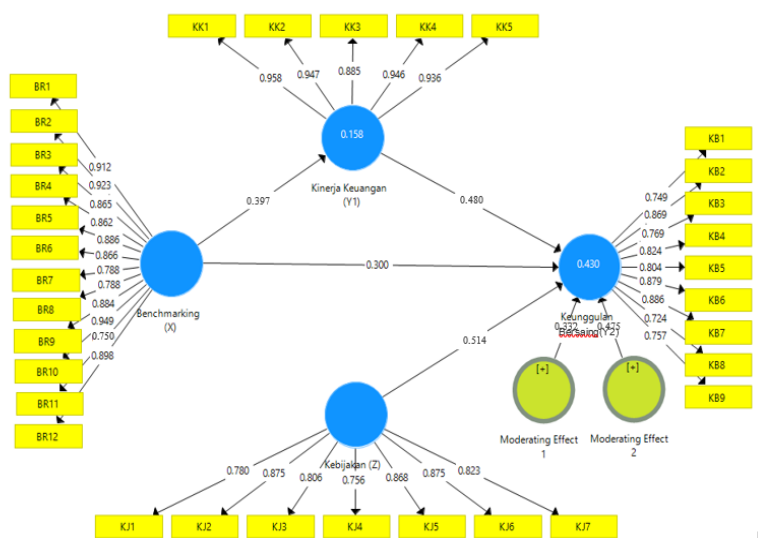


Figure 2. Loading Factor using Partial Least Square Diagram

Figure 2 displays the results of the loading factor analysis on exogenous variables are Benchmarking (X), Analyze indicator (X.10), namely the Performance Improvement Program with a Value of 0.949 which gives the highest results and the Improvement Implementation Program (Adapt-X11) with a Value of 0.750 which gives the lowest results. Overall Benchmarking indicators give values above 0.70. Furthermore, endogenous variability is the Competitive Advantage (Y2) indicator of the availability of experienced medical personnel (Y2.7) with a value of 0.886 which gives the highest results and the availability of decent facilities (Y2.8) with a value of 0.724 which gives the lowest results. Overall the Competitive Advantage indicator gives a value above 0.70. The mediating or intervening variables are Financial Performance (Y1), profit margin indicator (Y1.1) with a value of 0.958 which provides the highest return, and efficiency of capital use (Y2.3) with a value of 0.885 which provides the lowest return. Overall Financial Performance indicators give a value above 0.70. The moderating variables are Policy (Z) indicator of investment policy on building facilities (Z.2) with a value of 0.875, online registration policy (Z.6) with a value of 0.875, which gives the highest results and policies with friendly greetings (Z.4) with a value of 0.756 which gives the lowest results. Overall the Policy indicator gives a value above 0.70.

#### 4.1.2. Discriminant Validity

To see the validity of the discriminant validity indicator, namely by reviewing the square root Average Variance Extracted or AVE value. The recommended value is 0.5. The SmartPLS output for Average Variance Extracted (AVE) can be seen in Table 2 below:

Table 2. Result of Convergence Validity using Average Variance Extracted (AVE)

Variable(s)	AVE	Decision
Benchmarking_(X)	0.739	Valid
Policy (Z)	0.684	Valid

<b>Variable(s)</b>	<b>AVE</b>	<b>Decision</b>
Competitive Advantage (Y2)	0.654	Valid
Financial Performance (Y1)	0.873	Valid

Table 2 shows the square root value of AVE for each outer loading. This study indicates that the value exceeds 0.5 in each construct, so discriminant validity based on AVE (Average Variance Extracted) is valid. Once the construct can be called valid, the next step is testing the reliability of the research construct.

#### 4.1.3. Composite Reliability

The reliability test is carried out, which reviews the value of composite reliability on the indicator block that is a construct gauge, as shown in Table 3:

**Table 3.** Result of Composite Reliability

<b>Variable(s)</b>	<b>Composite Reliability</b>	<b>Decision</b>
Benchmarking_(X)	0.971	Reliable
Policy (Z)	0.938	Reliable
Competitive Advantage (Y2)	0.944	Reliable
Financial Performance (Y1)	0.972	Reliable

Table 3 shows the result of composite reliability. The results indicated that a satisfactory value if it exceeds 0.7. The reliability standard of each outer loading variable of the existing research model shows that the composite reliability value for each construct is more than 0.7; thus, all constructs in the model are reaching the reliability criteria. In addition, Cronbach's alpha gauges the lower limit of a construct's reliability value. The rule of thumb is that the alpha value needs to exceed 0.7 even though the value of 0.6 is still acceptable. Cronbach's alpha value of each variable is presented below:

**Table 4.** Result of Reliability Test using Cronbach's Alpha

<b>Variable(s)</b>	<b>Cronbach's Alpha</b>	<b>Decision</b>
Benchmarking_(X)	0.968	Reliable
Policy (Z)	0.924	Reliable
Competitive Advantage (Y2)	0.933	Reliable
Financial Performance (Y1)	0.966	Reliable

Table 4 reports the reliability test using Cronbach's Alpha. The result indicated that all variables has a value exceeding 0.70. It means that each variable has reached Cronbach's alpha, therefore, it can be concluded that all variables have the best possible level of reliability. After the estimated model meets all valid and reliable criteria for the outer model, the next stage is testing the inner model (structural model). Structural model tests are implemented to prove the relationship of the research model's latent constructs. Structural model testing can be processed to review the R- square value as a goodness-fit model test. Changes in the R-square value can be used in describing the impact of some exogenous latent variables on latent variables. R-square values are 0.75, 0.50 and 0.25, respectively which can be concluded that this model is weak, moderate and strong (Ghozali & Latan, 2015).

**Table 5.** Result of Coefficient Determination (R- Square)

<b>Variable(s)</b>	<b>R Square</b>
Competitive Advantage (Y2)	0.356
Financial Performance (Y1)	0.338

Table 5 shows the construct of the Financial Performance (Y1) variable R-Square value is 0.356. It means Benchmarking (X), can explain the variance of Financial Performance (Y1) with a moderate score of 35.6%, while the rest of the score of 64.4% is explained by other variables that were not studied; The

Excellence (Y2) construct an R-Square value of 0.338 which means Benchmarking (X), as well as Financial Performance (Y1) and Policy (Z), can explain the variance of Competitive Advantage (Y2) strongly by 33.8%. In comparison, the rest of the score of 66.2% is explained by other variables that were not studied.

### 4.2. Assessment of Structural Model (Inner Model)

The structural model tests the relationship between variables, namely the influence of exogenous latent variables on endogenous latent variables. The following is the bootstrapping diagram result of each indicator of the independent variable against the dependent variable.

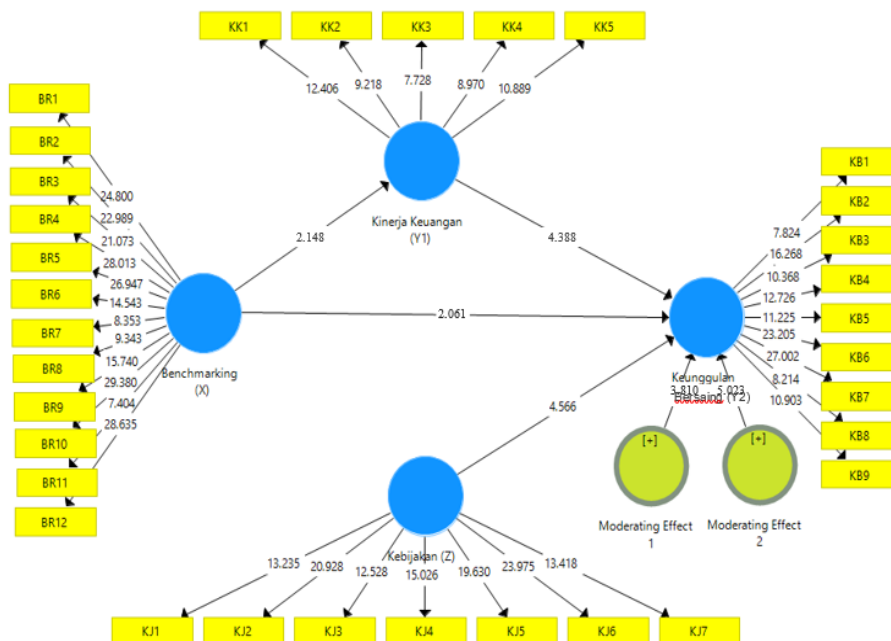


Figure 3. Result of PLS Bootstrapping

From the results of the Inner Model test (see Figure 3), all variables with statistical t values above 1.96 were obtained, which showed a significant influence of exogenous variables on endogenous variables.

### 4.3. Hypothesis Testing

The results of testing the hypothesis as seen in Table 6 below:

Table 6. Result of Hypothesis Testing

Hypothesis	Original Sample (O)	T-Statistics ( O/STDEV )	P-Values	Conclusion
H1- Benchmarking --> Competitive Advantage	0.3	2.061	0.04	Accepted
H2 - Benchmarking --> Financial Performance	0.397	2.148	0.032	Accepted
H3 - Financial Performance --> Competitive Advantage	0.48	4.388	0.027	Accepted
H4 - Benchmarking --> Financial Performance --> Competitive Advantage	0.443	4.34	0.004	Accepted
H5 – Policy*Benchmarking --> Competitive Advantage	0.332	3.81	0.009	Accepted

H6 – Policy*financial performance --> competitive advantage	0.475	5.023	0.001	Accepted
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#### 4.4. Sobel Test Analysis

Sobel test (criteria of mediation) uses to examine the strength of indirect influence of the independent variable, namely *Benchmarking* (X), to the dependent variable, namely *Competitive Advantage* (Y.2), through the Intervening variable, namely *Financial Performance* (Y.1).

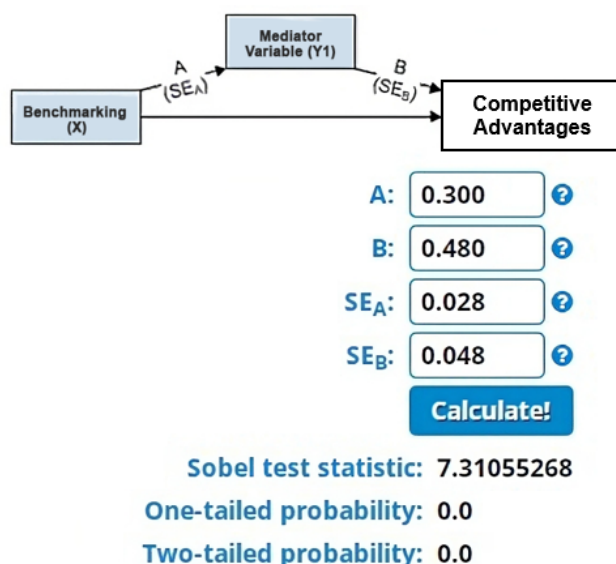


Figure 4. Result of Sobel Test

Source: www. danielsoper.com

Figure 4 captures the results of Sobel test conducted using online calculator from www. danielsoper.com. The result showed that getting a moderator value of 7,311 > 1.96 with a significant level of 5%. These results show that H4 Benchmarking Effect on Competitive Advantage through Financial Performance has a significant influence.

## 5. Discussion

### 5.1. The Effect of Benchmarking on Competitive Advantage

The results showed that benchmarking had a positive and significant effect on the Competitive Advantage of Hospital entities. In line with the thinking of Natasha (2013), the effect of benchmarking on competitive advantage and company performance is that appropriate benchmarking will increase competitive advantage. Similarly, Kumar et al. (1999) studied benchmarking as a measure of competitiveness" where there is a significant and positive influence between Benchmarking on competitive advantage. Where the Hospital entity applies Benchmarking will increase competition in competition. The application of Benchmarking in Hospitals will use all the potential resources they have to increase the competitive advantage to align with Resource Based View Theory. The ability of Hospital management to utilize resources, both human resources and capital resources, will improve the quality of the Hospital in winning competition.

### 5.2. The Effect of Benchmarking on Financial Performance.

The application of higher benchmarking will result in higher financial performance. Benchmarking is an effective measurement tool for managing the resources owned by the Hospital in each section or unit, especially operational units that generate revenue. It is in line with Resource Based View Theory which uses all resources owned by the Hospital to improve financial performance. The results of this study are also in line with Rudianto (2013), that financial performance is the result or achievement achieved by company management in managing company assets effectively during a certain period. Similarly, with hospital

entities, financial performance is a measure of management success in hospital management. Management with poor financial performance allows the owner to make decisions to hold accountable and even replace, otherwise, successful hospital management will get an award.

It is supported by previous research by Natasha (2013), who analyzed the Effect of Using Benchmarking on Competitive Advantage and Company Performance. Although this thinking sees the influence of benchmarking on competitive advantage and company performance, good company or organizational performance certainly affects the improvement of financial performance because the estuary of all activities or company performance leads to financial statements. The application of Benchmarking in utilizing the use of all assets owned by the Hospital, such as parking areas with good management as a source of Hospital income, discipline of employees working by duties and responsibilities within nominal working hours so that work can be completed without having to work overtime can minimize the burden which means it can increase profits, provide empty areas for rental of food sales facilities and drinks for the patient's family and even patient visitors will boost the Hospital's income. Adding technology-based medical equipment to attract more patients will increase hospital profits and maximize experienced doctors so that the rates charged to patients can be quite expensive even more without patients feeling expensive, increasing revenue.

Maximizing the use of drugs in patients properly and managing drug inventory management properly and according to standards so that drugs do not expire, which results in losses, setting up parking systems that support services so that there is additional income from parking lots, ensuring proper doctor practice hours and discipline so that all registrant patients can be handled properly without any patients going home or being referred to the Hospital because there is no doctor, Of course, it adds income from every patient service and others. Based on the description of the deepening of the hypothesis above, it can be concluded that the effect of Benchmarking on Financial Performance has a positive and significant effect which shows that H2 is accepted or proven.

### **5.3. The Effect of Financial Performance on Competitive Advantage**

The results of research on the effect of financial performance on Competitive Advantage have a positive and significant effect, the higher the financial performance, the higher the competitive advantage. Financial performance measures the Hospital's financial statements consisting of statements of financial position or balance sheet, income statement, statement of changes in equity, cash flow statement and notes to financial statements with the term financial statements adjusted to the legal entity managing the Hospital. Financial performance is a snapshot of all activities and operations of the Hospital. The better the financial performance, the better the operational activities of the Hospital. The ingredients of all activities and use of hospital resources reflected in the report that provides a high level of profit, good return on assets and high return on equity will provide satisfaction to all stakeholders, both shareholders or owners, directors and management and employees, the government in terms of tax obligations, patients and patients' families in terms of providing health facilities and services which is sufficient and adequate.

With the achievement of good financial performance, the Hospital will be superior in competition because it can carry out various adequacies for health services that can be needed and can make new innovations because of the availability of working capital and investment from performance results. Competitive advantage is a condition where a hospital can do something, and other hospitals cannot or have something that competitors want. Thus, the Hospital uses Resource Based View Theory to improve financial performance to competitive advantage. It is supported by previous research by Mustamin et al. (2020), which found that there is an influence on financial performance on competitive advantage because good performance will increase competitive advantage. The financial performance is quite good, coupled with the award as the most trusted company, so this bank also has advantages compared to other banks.

### **5.4. Financial Performance mediates the relationship between Benchmarking and Competitive Advantage**

The results show that the effect of Benchmarking on Competitive Advantage through financial performance is positive and significant. It shows that Hospitals conducting Benchmarking can improve financial performance through various measures, targets, performance, and facilities that cause efficiency, improve financial performance, make superior competition in one type of Hospital, and even increase excellence in the type of Hospital higher ones. The use and utilization of various potentials owned by the Hospital in improving financial performance, both the process of increasing revenue and streamlining the

burden of the Hospital so that it can increase profits. Utilization and management of various resources as described, in line with the application of Resource Based View Theory to increase Competitive Advantage.

A study by Natasha (2013) investigated the effect of using benchmarking on competitive advantage and hospital performance" where there is a significant and positive influence between Benchmarking on organizational performance. Organizational performance will produce financial performance. If organizational performance is good and improving will also increase financial performance. Based on the results of the Path Coefficients test on the effect of Benchmarking on competitive advantage through financial performance with a coefficient value of 0.443, this results in T-statistics ( $4.340 > 1.96$ ) and P-values ( $0.004 < 0.05$ ), which means they have a significant influence. Similarly, the results of the Sobel test with a moderator value of  $7,311 > 1.96$  with a significant level of 5% prove that financial performance can mediate the relationship between benchmarking and competitive advantage.

Good benchmarking results in efficient use of resources owned, indirectly burdening hospitals more efficiently and producing financial performance through financial statements, especially income statements with increased margins. When a hospital generates increased margins or profits, financial resources available in development and other services, such as Return on Asset (ROA) and Return on Equity (ROE), will be superior to other hospitals whose type I can even increase to compete in higher type hospitals. The reason is that the Hospital can increase the number of specialist doctors, sophisticated medical devices, and building facilities. Based on the deepening description of the hypothesis above, it can be concluded that the influence of Benchmarking on Competitive Advantage through Financial Performance has a positive and significant effect which shows that H4 is accepted or proven.

### **5.5. Policy Moderates the Relationship between Benchmarking and Competitive Advantage**

The results showed that the policy moderating the relationship between Benchmarking to Competitive Advantage had a positive and significant effect that the policy was able to make benchmarking as an analytical tool in hospitals because by comparing with partners in terms of seeing good performance, it can improve company performance and become the basis for increasing resources and help change company culture to achieve goals that In order to be able to create in competitive advantage with other companies. Benchmarking in increasing competitive advantage even the policies issued by hospitals must be by several considerations whether the policies issued are effective or not for hospitals in the future, whether these policies can help hospitals to increase competitive advantage.

Based on research conducted by Sianturi et al. (2021), they stated that competitive advantage can mediate the influence of financial performance on hospital value. From the description above, it can be concluded that policies can moderate the relationship between financial performance and competitive advantage. With policies that are right on target based on all potentials, such as disciplined employees, patient-friendly services and improving other policies, the Hospital uses Resource Based View Theory in the application of benchmarking against competitive advantage.

The policy moderates the relationship between benchmarking to competitive advantage with a coefficient value of 0.332, which means benchmarking has a significant influence on competitive advantage and produces t-statistics ( $3.810 > 1.96$ ) and p-values ( $0.009 < 0.05$ ), which means significantly positively affecting competitive advantage. The right policy will strengthen the influence of benchmarking on competitive advantage and vice versa. The wrong policy will weaken the competitive advantage and can even become a hospital that patients do not choose. The ability of Hospital management is to understand which policy is the most appropriate to win the Hospital in competition. Of all service units in the Hospital, providing a short waiting time in the sense that it is enough to satisfy patients and patients' families will make the Hospital trusted and become a referral for patients when they re-treatment. This also becomes information from patient to patient so that the Hospital becomes the choice of many patients. Thus, the Hospital becomes superior to other Hospitals. Service with comfort and safety is the mainstay of one level of patient care.

### **5.6. Policy Moderates the Relationship between Financial Performance and Competitive Advantage.**

The results showed that the policy of moderating the relationship between financial performance and competitive advantage had a positive and significant effect which showed that the policies that have been implemented in the Hospital could improve financial performance and become superior to compete by relying on Hospital resources to continue to follow the policies contained in the company (both tangible and intangible) with the ability of the resources themselves. Therefore, company resources are among the most

important factors affecting competitive advantage in improving financial performance. Thus, the Hospital uses the Resource Based View Theory to implement appropriate policies such as investment policies, room rate policies and others that improve financial performance. Good financial performance will make it superior in competition with other hospitals. The policy moderates the relationship between financial performance and competitive advantage with a parameter coefficient of 0.475, which is a positive effect.

## 6. Conclusions

This study concludes that benchmarking positively and significantly influences competitive advantage. Thus, it can be interpreted that Benchmarking has a significant influence on competitive advantage. The impact of Benchmarking on competitive advantage is positive, meaning that the greater the use of Benchmarking, the more competitive advantage increases. Furthermore, benchmarking variables exert a positive and significant influence on financial performance. Hospitals that apply Benchmarking will improve financial performance. Financial performance variables exert a positive and significant influence on competitive advantage. Hospitals with good financial performance will have a competitive advantage over those with low financial performance. In addition, Benchmarking variables on competitive advantage mediated by financial performance variables have a positive and significant influence. Hospitals that apply Benchmarking will make good financial performance and create an edge in competition.

Benchmarking variables on competitive advantage with policy variables as moderation have a positive and significant influence. Hospitals that implement benchmarking with the right policies will strengthen competitive advantage. Financial performance variables on competitive advantage with policy variables as moderation have a positive and significant influence. Hospitals that implement the right policies on financial performance will strengthen competitive advantage. This study suggests future researchers and advice for hospital directors and management are (i) the application of Benchmarking can increase competitive advantage. The stages are consistent and continuous, starting from planning, searching, observing, analyzing and adapting. Can improve financial performance by making efficiency and maximum utilization of resources owned in the investment of human resources, medical devices, and infrastructure equipment and even the development of innovations in the field of technology based SIMRS.

Carrying out investments using retained earnings is more profitable than loans. (ii) appropriate policymaking is expected to support patient comfort and trust with friendly employees, shorter service waiting times, sufficient information available and others. (iii) examines the latest government policies and regulations related to BPJS to analyze competitive advantages in hospitals of one type or different types. Similarly, research for competitive advantage at every level of Hospital type. The next researcher can examine other variables related to benchmarking because this study only examines 4 variables: benchmarking, financial performance, competitive advantage and policy.

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