Interrelationship Among Business Units and Private University Performance: A conceptual Framework

Siti Samsiah¹, Zul Azmi², Linda Hetri Suriyanti³, Nik Maharan Bint Nik Muhammad⁴
¹2.3. Faculty of Economics and Business, University of Muhammadiyah Riau
⁴Faculty of Entrepreneurship and Business, University Malaysia Kelantan
email: siti.samsiah@umri.ac.id

ABSTRACT
This conceptual framework aims to determine the relationship between the concept of interrelationship among business units and the performance of private universities in the Indonesian context. In this study the dimensions of tangible, intangible and competitor interrelationships are used to measure the relationship between business units, while the dimensions of financial performance and non-financial performance are used to measure university performance. The unit of analysis in this study is the leadership of private tertiary institutions in Pekanbaru City with the Dean, Head of Department, Head of Study Program, and Study Program Secretary as respondents. The development of this conceptual framework contributes to further research to be able to test the framework empirically to further increase knowledge about how factor interrelationships among business units which consist of tangible, intangible and competitor interrelationship

Keywords:
Private University Performance; Interrelationships Among Business Units

ABSTRAK
Kerangka konseptual ini bertujuan untuk mengetahui hubungan antara konsep interrelationship among business unit dengan kinerja perguruan tinggi swasta dalam konteks Indonesia. Dalam penelitian ini dimensi tangible, intangible dan competitor interrelationship digunakan untuk mengukur hubungan antar unit bisnis, sedangkan dimensi kinerja keuangan dan kinerja non keuangan digunakan untuk mengukur kinerja universitas. Unit analisis dalam penelitian ini adalah pimpinan pada perguruan tinggi swasta di Kota Pekanbaru dengan responden Dekan, Ketua Jurusan, Ketua Program Studi, dan Sekretaris Program Studi. Pengembangan kerangka konseptual ini berkontribusi kepada penelitian selanjutnya untuk dapat menguji kerangka tersebut secara empiris untuk lebih meningkatkan pengetahuan tentang bagaimana factor interrelationship among business unit yang terdiri dari dimensi tangible, intangible dan competitor interrelationship dapat mempengaruhi kinerja universitas swasta
INTRODUCTION

The implementation of higher education in Indonesia is contained in Law of the Republic of Indonesia No.12 of 2012 concerning Higher Education. Higher education as part of the national education system has a strategic role in educating the nation's life and advancing science and technology in producing intellectual beings. In Indonesia, to determine the eligibility of a tertiary institution and study program can be seen from the accreditation rating of the higher education institution. The criteria for assessing accreditation in Indonesia are based on Permendikbud no.5 of 2020, namely A, B, C, excellent, very good, and good (Mendikbud, 2020). The results of the accreditation assessment of higher education institutions and study programs greatly determine the quality of higher education in Indonesia at institutional tertiary institutions, and 28.87% at religious tertiary institutions continue to dominate the assessment of higher education accreditation in Indonesia, while universities with A accreditation ratings obtained 37.43% and excelled 1.45% in state universities, 6.91% accredited A and excels as much as 0.09% (PDDikti, 2020). When compared to the total population of Indonesia with the gross enrollment rate (APK), APK in Indonesia is in the range of 36.16% of the total population aged 19-23 years with a total of 22,120,400 participating in higher education (PDDikti, 2020). An increase in the gross enrollment rate (APK) of people entering tertiary institutions has triggered the level of competition between tertiary institutions and even between faculties at these tertiary institutions to attract prospective students to choose majors. Apart from that, a rumor that is developing in the community is the perception that people are competing to choose state universities.

Knowing the feasibility of a tertiary institution is very important because this information is very useful for tertiary management to know the condition of the tertiary's performance. Higher education performance is important for leaders as an ingredient to determine the level of success of planned programs and work targets. Higher education performance can be achieved with the support of interrelated resources such as tangible and intangible asset relationships, and knowing the advantages of competitors can also make us superior to our competitors (Greco et al., 2013); (Mathur et al., 2007);(Zhang & Pi, 2015); (Wardhani et al., 2021); (Ivanov & Mayorova, 2015); (Day & Wensley, 1988); (Drew, 1997); (Alsoboa & Alalaya, 2015). Resource linkages such as tangible, and intangible and knowing competitors within a tertiary institution can improve performance (Carmeli & Tishler, 2004a); (Akinyi, 2010); (Kim et al., 2019); (Chukwu & Egbuhuzor, 2017); (Zhang & Pi, 2015).
The ability of the organization's management to utilize its resources to their fullest extent also contributes to the success of the organization. Several previous studies argue that organizational performance depends on the amount and quality of its resources. (Rajchelt-Zublewicz et al., 2019); (Kamasak, 2017); (Saleh, 2018); (Huang et al., 2006); Adero (2012); Kim dkk (2019); Schriber (2015); ngavec (2008).

As the center of government at the provincial level, Pekanbaru City has five private higher education institutions in the form of universities (http://ews.ildikti10.id/). The entire University has resources, both tangible and intangible assets that are interrelated, the existence of these resources is used to support the operational implementation of learning. The most appropriate strategic management model enables the leaders of private tertiary institutions, especially private universities in Pekanbaru City, to identify and develop resources that can form superior performance. A key component of the marketing philosophy, competition orientation, contends that in order to succeed, a business must better serve customer requirements and wants than its rivals (Ichoroh, 2021); (Tatiek Nurhayati, 2021). Likewise, what happens to private universities, knowing competitors is important for us to identify our position from competitors, knowing our weaknesses and strengths to increase creativity and improve the quality of competitors.

The phenomenon of the performance of private tertiary institutions requires a comprehensive study that combines all factors, such as the relationship between business units owned in an integrated framework. Literature Review reveals that various studies that try to study the relationship between performance and relationships between business units (tangible interactions, intangible interactions and competitor interactions) are not integrated and there are conflicting results (Rajchelt-Zublewicz et al., 2019); (Kim et al., 2019); (Wardhani et al., 2021); (P.J & V.N, 2018); (Tatiek Nurhayati, 2021); (Jawed & Siddiqui, 2020); (Karyani & Rossieta, 2018).

Utilization of tangible, intangible, and competitor relationships in the higher education management system is carried out as an effort to provide quality services to students and stakeholders in the context of implementing higher education tri-dharma activities. Through the concept of interrelationships among business units, it is hoped that universities will excel in providing educational services so that higher education performance can also be realized. The purpose of this study is to develop a conceptual framework for interrelationships among business units with the performance of higher education organizations in Pekanbaru City.
LITERATURE REVIEW

Resource Based Views

A resource-based view is a theoretical approach to achieving the competitive advantage of an organization, this theory emphasizes that organizations must identify sources of competitive advantage. The Resource Based View idea, according to (Wernerfelt, 1984), holds that businesses will be more successful and able to achieve strong financial performance.

In the RBV model, tangible and intangible resources have a major role in the company to achieve organizational performance. Physical resources that are easy to obtain, such as land, buildings, machinery, and equipment, are known as tangible assets. Because competitors can also quickly acquire tangible assets, the corporation has little advantage over them. Meanwhile, intangible assets such as brand reputation, intellectual property, and patents are assets owned by companies without a physical form, but their existence can provide ongoing benefits.

In this study, the theory of the resources-based view is used as a basis for explaining the influence of interrelationships among business units which consist of the dimensions of tangible assets, intangible assets, and competitor interactions on competitive advantage and university performance. Tangible, intangible assets and competitiveness are strategic resources owned by companies that can create a competitive advantage and improve company performance; (Barney, 2001); (Mathur et al., 2007); (Yu et al., 2015); (Masyitoh et al., 2019); (Purwanti & ., 2019); (Safari & Saleh, 2020). The availability of strategic resources owned by the company provides support in achieving overall company performance.

Tangible assets, intangible assets, and the ability to compete play an important role in improving the performance of tertiary institutions in an all-competitive environment. Besides the impact of the Covid-19 pandemic, it has had an impact on the decline in the community's economy which has resulted in a tendency for people to delay entering higher education institutions, causing universities to be able to maintain their identity as educational institutions that have a good reputation in the community.

Interrelationships Among Business Units

According to (Porter, 1998), there are three different forms of ties between corporate units: tangible relationships, intangible relationships, and relationships with competitors. These three types are very important to support organizational performance to achieve competitive advantage. The interrelationships between business units have the advantage that
they can share costs, risks, and benefits. Thus, each related business unit can contribute to the development of the organization so that the planned benefits can be achieved.

**Tangible interrelationships**

A tangible interrelationship arises from the opportunity to share activities in the value chain among related business units. Tangible interrelationships have the potential to share activities, both main activities and support activities to generate sustainable competitive advantage and ultimately improve overall organizational performance. According to Statement of Accounting Standard (SAS) 3, tangible assets are things that an organization owns and can utilize to carry out its operations. Financial Accounting Standard No. 16 regarding fixed assets, identifies fixed assets as property, factories, and machinery. According to PSAK 16, fixed assets are defined as assets held for use in the production or supply of goods or services, for rental, or administrative purposes, and use for more than one year. (Grant, 1991) defines tangible as resources in the form of physical assets such as infrastructure, human resources, financial resources, and formal organizational structures.

**Intangible interrelationships**

Intangible interrelationships involve knowledge management leaders across separate value chains. This relationship can lead to changes toward competitive advantage by managing one business unit with other business units. Intangible assets according to PSAK 19 are defined as identifiable non-monetary assets without physical form. Epstein and Mirza (2005) define intangible assets as non-financial assets without physical substances that are owned for use in creating products or rendering services to consumers, or for administrative needs that can be identified and used by businesses based on past experiences and are anticipated Future-flowing economic gains from the acquisition may be obtained (Purwanti & ., 2019). Brand names, book titles, computer software, licenses and franchises, copyrights, patents, and other industrial property rights, recipes, formulas, models, drawings, and prototypes, as well as intangible assets under development, are a few examples of intangible assets.

**Competitor interrelationships**

Competitor interrelationships originate from the existence of competition and the potential for competition with other business units. Balance with competitors can be achieved in business units. Linkages with competitors make tangible and intangible interrelationships
even more important to recognize and exploit. Competitors from a customer perspective complement each other in terms of providing products and services that add value to the company (Brandenburger & Nalebuff, 1997). A large number of results show that competitor orientation can improve the company's financial performance by positioning the company's strengths to overcome competitors' weaknesses (Day and Nedungadi, 1994); (Slater & Narver, 1995); (Luo et al., 2007). Porter (1980) argues that a company's profitability is highly dependent on the company's ability to beat its competitors. (Luo et al., 2007) reveal the results of their research that competitor orientations have different effects, depending on the competitor's dimensions or orientation strategy and goals, from which the competitor gets the financial advantage. Thus, his research advice manager must be competitor-oriented, remaining cautious.

**Performance Organization**

The accomplishments of an organization's performance are supported by its physical and intangible. Knowing the performance of an organization is very important as a form of evaluation for owners and management regarding the results of their organization's efforts. The good or bad of the organization depends on the performance process carried out by all elements of the company. Organizational performance can be affected by physical resources such as supporting infrastructure and non-physical resources such as intellectual human resources. Organizational support, such as the availability of work infrastructure, modern technology, and leadership styles, can also have an impact on how well an organization performs.

Organizational goals can be seen through the degree to which the organization achieves the goals set by the corporation, according to Surjadi's (2009) definition of organizational performance as the accomplishment of work outputs that have been defined by the organization. According to Sobandi (2006), organizational performance is a measure of the achievement of the goals of an organization within a certain period as seen from the inputs, outputs, outcomes, benefits, and impacts on the company. In this study, organizational performance is measured using indicators of financial performance and non-financial performance.

**Financial Performance**

One of the tools that stakeholders frequently use to judge a company's quality and whether it has been conducted appropriately is financial performance. Chio (2011) explains that financial performance is a reflection of a company's financial condition, financial
condition can be known whether the company's financial performance is good or bad. According to Sadeli (2011), a company's financial health is its beating heart. As a result, management must properly prepare in order to accomplish the company's objectives and reap the anticipated benefits for the company in the future. The company's financial performance reflects financial reports that present asset positions, both tangible and intangible assets, current assets, fixed assets, liability position, and equity condition of the company. Financial performance is important to evaluate to see the company's position, the company's ability to carry out company operations, the company's ability to settle obligations, and measure the company's ability to remain competitive.

Several previous studies have used different financial performance measurement indicators, but are commonly used, as has been used in previous studies using the return on asset (ROA) value indicator (Purwanti & ., 2019); (N. Isanzu, 2015), return on assets and return on equity (Vanderpal, 2019), net profit (Soeters, 2002), Return on assets (ROA), Return on equity (ROE) and Debt (Sung & Choi, 2012), return on average assets (ROAA), return on average equity (ROAE), total asset growth (TAG), and share return (SR) (Goosen et al., 2002). The financial performance has been examined in terms of valuations ratios, profitability ratios, growth rates, liquidity ratios, efficiency ratios, and leverage ratios. Leverage ratios have the most significant impact on retail companies' financial performance (Nguyen et al., 2021).

Non-Financial Performance

The balanced scorecard technique is one of the performance evaluation tools that is frequently utilized by both profit- and non-profit-oriented organizations. Kaplan and Norton created the balanced scorecard. One non-profit organization that also uses the balanced scorecard approach to measure the success of its non-financial performance is a university. The balanced scorecard is separated into four perspectives: the consumer perspective, internal company perspective, innovation and learning perspective, and financial perspective. This division is taken from study by (Aljardali et al., 2012)

Customer perspective

Consumers are assets for the business that are not shown in the financial accounts but are nonetheless resources. Through customers, income is obtained from the sale of goods or services. Customers at tertiary institutions are students, educators or lecturers, alumni, and the community. Below is described the measurement of non-financial performance from a customer perspective

Interrelationship Among Business Units and Private University Performance© 2022 JIMEK: Jurnal Ilmiah Mahasiswa Ekonomi Universitas Kadiri. Semua hak cipta dilindungi undang-undang
Table 1: Measurement customer perspektif

<table>
<thead>
<tr>
<th>Student</th>
<th>Percentage of students dropping out and dropping out, student achievement index, student satisfaction survey, alumni evaluation, accreditation assessment, percentage of students working in certain fields, number of companies recruiting to campus, average starting salary, donations from alumni, complaints student.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff (teaching staff, educational staff)</td>
<td>Employee ethics, training, salary increase, certification, courses, sharing of knowledge and skills between work units, employee welfare, number of doctors and professors, employee satisfaction survey</td>
</tr>
<tr>
<td>alumni</td>
<td>Surveys of alumni satisfaction levels, tracer studies, the number of jobs offered to alumni, the average salary earned by alumni</td>
</tr>
<tr>
<td>society</td>
<td>The number of alumni who are involved in the community, alumni who do community service</td>
</tr>
</tbody>
</table>

**Internal business perspective**

From an internal business process perspective, there is a process that must be carried out and what must be mastered. The stages of the internal business process start from identifying market needs, product production, sales, and the process of providing after-sales services. In higher education, the internal business process starts with providing quality services, facilities, and infrastructure available to support the development of new products and services, quality assurance, and a curriculum that is different from other universities. Indicators for measuring non-financial performance in internal business processes can be carried out by providing service facilities for employees, quality new services, learning plans, programs and curriculum changes, regulations, evaluation of student competencies, the number of student apprentices, and student internships.

**Innovation and learning perspective**

The innovation and learning perspective emphasizes how we continue to make changes and create value. The dimensions of innovation and learning show the ability of tertiary institutions to guarantee the life and development of tertiary institutions in the future. The perspective of innovation and learning in tertiary institutions can be measured by looking
Financial perspective

In the context of higher education, according to Richardus'Djokopranoto', 2004), operating performance, financial position, and college grades can be used as instruments for preparing the financial performance, but adjustments still need to be made as needed. Operating performance refers to the average cost of a student, the percentage of student income, the percentage of income from campus businesses, the total amount of debt, and the number of student receivables. The financial position of the tertiary institution describes the ability of the tertiary institution to finance campus operations. While the value of higher education can be reflected in the development of assets, intellectual property rights, patents owned, and those that have non-financial values. From a financial perspective, to improve the quality of education, a budget allocation is needed to support institutions, SPP costs, SPP receipts, budget allocations for learning, costs incurred for employees,

Interrelationship Among Business Units and Performance Organizations

Porter (1998) explained that there are three types of relationships between business units that can be carried out, namely tangible interrelationships, intangible interrelationships, and competitor interrelationships. In Porter's opinion, the three relationships have influences that are equally important but different from one another. Assets are an important part of a company, with the assets owned by the company, business operations can operate smoothly. The intangible interrelationship will lead to competitive advantage through the transfer of knowledge. In the face of business competition, business people will be encouraged to improve the quality of the products and services offered.

(Gamayuni, 2015); (Carmeli & Tishler, 2004b), and (Jawed & Siddiqui, 2020) the results of their research show that tangible and intangible assets improve company performance. the same results were also carried out by Adero (2012); (Kim et al., 2019); (Schriber & Löwstedt, 2015); (Chareonsuk & Chansa-Ngavej, 2008); Rindfleisch and Tse (2007); that building alliances with competing companies can provide benefits and ultimately improve financial performance. (Tatiek NURHAYATI1, 2021) Competitors have an
important role in forming superior business performance. (Luo et al., 2006) that competition is not always detrimental. In contrast to the results of (Armstrong & Collopy, 1996), orientation to competitors reduces profitability. Following the justification, the researcher resubmitted the hypothesis that had previously been tested with the following assertion:

H: Relationships between interrelationships between businesses (tangible interrelationships, intangible interrelationships, and competitor interrelationships) have a significant effect on the Organizational Performance of Private Universities

RESEARCH METHODOLOGY

Data sources and data collection methods

Researchers use primary data and secondary data to support research. The primary data source in this study was in the form of questionnaires that were distributed to respondents, namely faculty leaders consisting of the Dean, Deputy Deans, Heads of departments, Heads of study programs, and study program secretaries. While secondary data sources include the number of tertiary institutions, the list of leaders of each tertiary institution, university statistics, relevant articles, and other data sources that support this research. The data collection method used in this research is using a survey through the distribution of questionnaires and data documentation.

Population and sample selection

The population used in this study were all leaders at the faculty level at private universities in Pekanbaru consisting of Deans, Deputy Deans, Heads of departments, Heads of study programs, and study program secretaries. These leaders were chosen as respondents because leaders at the faculty level have roles and functions as planners, managers, controllers, and decision-makers and are responsible for the performance results of the faculty they lead. To avoid low questionnaire return rates, the researcher decided to make the entire population a sample.

Variable measurement

This study uses one independent variable, namely Interrelationship among business units, and one dependent variable, namely Higher Education organizational performance. The elements of financial performance and non-financial performance are used to assess university performance, while the dimensions of tangible interrelationship, intangible interrelationship,
and competitive interconnection are used to assess variable interrelationships within business divisions. The statement items in the questionnaire for each variable in this study were measured using a Likert point scale of 1 (one) to 5 (five), namely 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. The following figure 1, is the conceptual framework that will be used to test the relationship of each variable to one another.

**Data analysis technique**

This study uses structural equation models (SEM) with a variant approach with the help of Smart PLS 0.3 software. Outer model and inner model are used to perform data testing. The outer model is done to determine the validity and reliability of the data. Meanwhile, the inner model test was carried out to test the research model. The validity test was carried out to find out the score of each statement item with the construct score of the loading factor. Each indicator is declared valid if the results of the loading factor have a value greater than 0.5 for the intended construct. The reliability test is seen by comparing the value of Cronbach's Alpha. Data is said to be reliable if it has a Cronbach Alpha value greater than 0.6.

By examining the R2 results for the dependent construct, the path coefficient value, or the t-value of each path for the significance test between constructs in the structural model, the PLS structural model is assessed. The R2 value is used to measure the level of variation in the independent variable changes to the dependent variable. The higher R2 means the better the prediction model of the proposed research model.
The research question is as follows:

1. Does tangible interrelationship influence the organizational performance of private universities?
2. Does intangible interrelationship influence the organizational performance of private universities?
3. Does competitor interrelationship influence the organizational performance of private universities?

CONCLUSION

Performance measurement is very important to evaluate the running of the organization in the past and as material for planning in the future. Organizational performance measurement involves developing a useful framework for identifying the extent to which the organization's strategy has been implemented. This paper presents a conceptual framework of higher education organizational performance that integrates the relationships between each business unit. The concept of higher education organizational performance was chosen using two approaches, namely financial performance, and non-financial performance. This conceptual framework is developed and presents the relationship between the
interrelationships among business units and the performance of higher education organizations.

Several previous studies found that there was an insignificant or weak relationship from the tangible, intangible and competitor dimensions to organizational performance (Jawed & Siddiqui, 2020); (Gupta et al., 2018); (Rajchelt-Zublewicz et al., 2019); (Nwauzor, 2022). Therefore, many subsequent studies have explored that there is a positive and significant relationship between tangible, intangible and competitors on organizational performance (Kim et al., 2019); (Tatiek Nurhayati, 2021); (P.J & V.N, 2018). Based on the results of this study, this proves that the tangible, intangible and competitor dimensions are interrelated and are believed to improve organizational performance.

This study tries to clarify the results of previous research in non-profit organizations such as universities. Globalization has demanded higher education as a producer of intellectual human resources to produce quality graduates. To produce quality human resources, tertiary institutions must have organizational performance capabilities contained in the tertiary education strategic plan. Therefore, the existence of tangible and intangible plays an important role to support the performance of tertiary institutions, in addition to the presence of competitors as a driving force for further development and creativity.

The interrelationships among business units are believed to support the achievement of university organizational performance. The direct relationship of interrelationships among businesses as measured by the dimensions of tangible interrelationships, intangible interrelationships, and competitor interrelationships is believed to affect the performance of higher education organizations. Based on a comprehensive literature review, can provide some significant theoretical contributions to this paper. The conceptual framework developed in this paper can be used as a starting point for further research in the field of organizational performance. For research development, suggestions for further research can use different conceptual framework contexts.

BIBLIOGRAPHY


Kamasak, R. (2017). The contribution of tangible and intangible resources, and capabilities to a firm’s profitability and market performance. *European Journal of Management and
Interrelationship Among Business Units and Private University Performance
© 2022 JIMEK: Jurnal Ilmiah Mahasiswa Ekonomi Universitas Kadiri. Semua hak cipta dilindungi undang-undang


Interrelationship Among Business Units and Private University Performance

© 2022 JIMEK : Jurnal Ilmiah Mahasiswa Ekonomi Universitas Kadiri. Semua hak cipta dilindungi undang-undang


