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VRIO and THES Based Development of University Competitive Advantage Model in Formulating University Strategic Plan

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Abstract

The orientation of competitive advantage in strategic planning is an institutional challenge in a competitive business environment. With Barney's approach, excellence is measured by valuable, rareness, inimitability, and organizational (VRIO). This paper resulted in a model development of University strategic plan based on Competitive Advantages University with VRIO and Times Higher Education Supplement (THES) approach. So the university strategic plan model developed by the university of XYZ has a clear orientation toward World Class University (WCU) by referring to the THES standards. The results of the study recommend that the results of strength, weakness, opportunity, and threat (SWOT) analysis need to be sharpened by VRIO analysis as one of the considerations of developing a competitive development strategy. The THES indicators need to be entered explicitly in the policy setting stage as a basis for consideration of development strategy

Key Words: Competitive advantage, THES, VRIO, World class university, University

1. Introduction

The university of XYZ is ready to become world-class university (WCU) in the middle of tight competition especially facing the Association of Southeast Asian Nations (ASEAN) Economic Community (AEC) with the target to enter QS 500. So in evaluating the achievement of WCU of a university, the concept of Times Higher Education Supplement (THES) is widely used as a reference standard. The THES indicators are performances of teaching, international outlook, research, citation, and industry income. To bridge the demands of intense competition, valuable approaches, rare (unique factors), inimitable, and involving organizational support (support, process, and management systems) are known as the VRIO approach [1-2]. With the approach of valuable, rareness, inimitability, and organization (VRIO), the university stakeholders can analyze the internal potential, the environment and the interaction, the strategic portfolio analysis, develop and analyze strategic alternatives (strategic decisions) and determine optimal strategic [3].

A good strategic planning philosophy and supported with the right approach will result in a strategic planning format that not only places institutions forward but strengthens institutions in optimizing their competitive advantage [4-6]. Some studies have shown that the VRIO approach is able to describe the competitive advantages of various institutions including universities [7-8]. Due to [9] believes that with VRIO, higher education institutions are able to compete in a dynamic competition environment, a changing environment, and have highly complex organizational demands. While [10] shows that with the VRIO approach, strategic planning developed by several universities is able to improve the global education market, maintain and enhance their competitive position, and capture new markets in regional and international segments, and improve university rankings based on QS world universities ranking, the Eduniversal rankings, and Webometrics ranking.

The university of XYZ ready to become WCU in the middle of tight competition especially face ASEAN Economic Community (AEC). So in evaluating the achievement of a college WCU, the concept of Times Higher Education Supplement (THES) is used as a reference standard. THES indicators are performances of teaching, international outlook, research, citation, and industry income. Therefore this university needs to formulate and re-evaluate and develop its strategic plan based on the readiness of the competition to be faced. This paper is expected to produce evaluation and develop a model of the strategic plan of university of XYZ based on competitive advantages of university facing the competition of AEC with evaluation approaches of VRIO and THES criteria.

Based on the above formulation, the general objective of the evaluation and development of the strategic plan model of the university is to improve the strategic plan direction in the discussion of competitive advantages of university of XYZ, especially in facing the AEC competition with the evaluation approaches of VRIO model and THES criteria. With these objectives, the specific objectives to be achieved in this paper are knowing the readiness of the university of XYZ in competing on AEC competition as contained strategic plan in 2015-2019 with VRIO framework; knowing the level of conformity of the strategic plan of this university in 2015-2019 with the demands of WCU standards especially using THES; increasing the effectiveness of the university of XYZ strategic plan in achieving the capacity of readiness to compete in the AEC competition; and knowing the factors of the university of XYZ competitive advantage faces ASEAN Economic Community.

2. Materials and Methods

This research is a qualitative descriptive research for the development of university strategic planning tool with VRIO framework approach which aims to evaluate and develop a

strategic planning model for university with THES criteria.

2.1 VRIO framework

The competitive potential of resources lies in their ability to meet the criteria of value, rareness, inimitable and organize (VRIO). The VRIO framework aims to measure whether organizational resources are a value, mature, not easily imitated, and easily organized that directed at a competitive advantage source. So the resources possessed are required to provide influence and manageable [11-12]. Organizational resource capability must exert influence by utilizing capacities that include the ability of knowledge to produce new products [13].

The application of the VRIO framework should provide the answer to the question: Will organizational resources, including human resources, be regarded as strengths or weaknesses? The VRIO framework is an abbreviation consisting of the first letter of the name of its elements i.e. value, rareness, inimitable and organize. Value is a valuable resource in terms of neutralizing threats and exploiting opportunities from the environment [14]. Rareness is the maturity of resources compared to existing competitors. Inimitable or not easily imitated are expensive resources or impossible for competitors to imitate or duplicate. Organizations are resources used by organizations, or institutions organized in a way that enables efficient use of resources. So the resources within the VRIO framework are high-quality resources that can prepare sustainable competitive advantage as shown in Fig. 1.

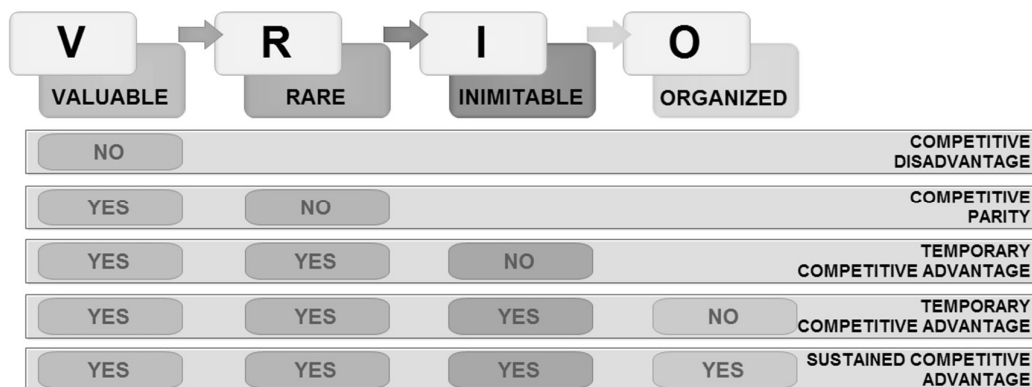


Fig. 1. VRIO framework.

The development of university resource capacities includes marketing, networking, managerial, fund raising, and innovation capacity [10]. Their research illustrates that the issue of competition among universities consists of several elements of excellence, namely the superiority of providing quality education, commitment to scientific research, the achievement of quality standards and accreditation, the development of infrastructure that meets international standards in order to attract regional and international students, local excellence, adherence to international standards on curriculum and teaching, diversification of

universities and financial resources, and the development of its human resources.

2.2 Times Higher Education Supplement (THES)

The Times Higher Education Supplement (THES) is derived from a supplement from London-based TIMES magazine that periodically reports on issues related to higher education. In the first edition, 1971, then on January 10, 2008, THES was initialized as a supplement made in the weekly magazine format called The Times Higher Education published by TSL Education Ltd., a division of News International. The magazine is edited by Ann Mroz. Phil Baty is the deputy editor in charge of news and opinions. The Times Higher Education Supplement (THES) has been recognized as one of the best referrals for the Times Higher Education Supplement (THES) and Quacquarelli Symonds with the latest rankings continuously published each year. THES is recognized as a holistic assessment system that became known as the best guide to the world's top universities [15].

The Ministry of Education and Culture of Indonesia has determined that Indonesia follows the WCU rating according to the Times Higher Education Supplement (THES). So the university of XYZ should also meet the criteria made by THES. The WCU criteria according to THES are teaching (the learning environment), research (volume, income, and reputation), citations (research influence), industry income (innovation), and international outlook. The Times Higher Education Supplement rating-based research rankings reinforce researchers' perceptions of system quality [16].

3. Results and Discussion

Strategic planning is the process by which an organization determines its strategy or direction, and makes the decision to allocate resources to achieve this strategy. Strategic planning is essential for the university in the face of challenges, achieving vision and mission, surviving in a dynamic society and creating knowledge with fewer resource capitals [6]. In strategic planning, it is necessary to consider several things such as typology variables, architecture, flexibility, sustainability, and competitive advantages. Strategic planning generally requires a team to work together to provide views and interpret the vision, mission and basic values of the organization [17]. Some management experts believe that business analysis techniques that can be used in this process include analysis of SWOT (Strengths, Weaknesses, Opportunities, and Threats). Strategic planning is a management tool used to manage current conditions for projecting future conditions over the next 5 to 10 years.

To achieve a strategy established by a competitive advantage-based organization, the stakeholders work in a system of strategic planning [18-19]. Institutions measure progress in

achieving their goals through various guarantees of learning activities. The ability of the managerial process should be used appropriately in a strategic plan [20]. The strategic planning is an activity that includes a series of processes from innovation and corporate change, support for innovation and change [21].

A plan is expected to develop the planning process itself. Planning doesn't ensure a success in achieving organizational goals and success is also not based on luck alone. The planning process requires stakeholders at the university to concentrate on achieving organizational goals [6]. Strategic planning requires comprehensive planning with overall organizational coverage. Experts suggest that strategic planning at the university should create a better future for every individual, group, organization, and community. So that strategy, organization, and information must be in line [22-24]. The evaluation and development of the strategic plan model of this university are to gain competitive advantages using of VRIO model and THES criteria as shown in Fig. 2.



Fig. 2. Diagram in strategic development based on THES-VRIO framework for the university of XYZ.

The resources used in using THES-VRIO approach are internal resources. If this positive potential is in the internal then it will be the strength and chosen to get its factors to get unusable strength and if potentially negative will be weakness and choose how to avoid it to get unusable strength. But if it used the external resources and the potential is positive it will be an opportunity and need to be exploited to get unusable strength and valuable strength and if potentially negative then it will be grouped into a threat and need to choose a way to neutralize and exploit it to get unusable strength and valuable strength. From valuable strength then it will be assessed related to rareness, inimitability, and organizable by sorting

unusable strength from each of these points to get sustainable strength. Based on the strategic plan of 2015-2019, the university of XYZ's readiness to compete in the AEC competition in line with the demands of WCU standards due to THES is shown in Table 1.

Table 1. The strategy of university of XYZ in line with THES

Number	Strategy	THES
1	Developing conducive academic environments for the implementation of education so as to produce qualified and capable graduates at international, regional and national levels, and have comparative and competitive advantages.	Teaching international outlook
2	Developing new study programs (bachelor, master, doctoral, both academic and applied courses referring to national curriculum) and updating courses and/or existing course works in accordance with the demands of science and technology development and national development needs and issues regional development. Included the affirmative policy to expand and state the opportunity to follow education at the university, in accordance with the characteristics of the needs of the special and disadvantaged areas, from the nearest community around this university.	Teaching
3	Carry out research and development that can contribute significantly to the development of science and practice of education, and improvement of community life, both local, regional, national, and international levels. The development of research and development is conducted in an integrated manner and in line with the development of education and community service.	Research industry income
4	Implementing the dedication to the community and various forms of professional services, as a means of disseminating the work of lecturers, especially students related to the work of appropriate technology to help solve existing problems in the community so as to ensure the continuity and sustainability of development towards the achievement of welfare society widely.	Industry income
5	Increasing the publication and publication of scientific works, research results of lecturers and students at local, regional, national, and international levels Besides dissemination of research results, patent right processing, and patents are also consistently encouraged and facilitated.	Research citations, industry income, and international outlook
6	Enhance cooperative networks of education and culture, research, and scientific publications with local and international universities, local, regional and national governments, with business and industry to increase income generating activities (IGA) or activities which result in a material gain.	Industry income and international outlook
7	Reorganizing systems, institutions, and resources (human resources, educational facilities, equipment, supplies, materials, and funds) are in line with local, national, regional and international demands.	International outlook
8	Applying quality assurance, quality control, quality culture, strategic management, strategic planning, transformational leadership, and good university governance by applying the principles of participation, transparency, accountability and law enforcement.	
9	Improving the empowerment of campus facilities as an effort to create a green campus that is beautiful, comfortable, support the atmosphere of learning for the academic community of this university.	Teaching and research

Competition between universities consists of several elements of excellence that is, the superiority of providing quality education, commitment to scientific research, achievement of quality and accreditation standards, infrastructure development that meets international standards in order to attract regional and international students, achievement of local excellence, fulfillment of international standards on curriculum and teaching, diversification of universities and financial resources, and the development of its human resources.

4. Conclusion

This research has resulted in evaluation and development model of the university of XYZ's strategic plan based on competitive advantages of university facing the competition of AEC using evaluation approach of VRIO and THES criteria. In its development strategy used a policy aligned with THES and VRIO where the processed material comes from SWOT materials that have been made for the creation of a university strategic plan. This policy is tailored to the vision and mission of the university. The targets and results obtained are used to get the programs and activities to be done in the management structure. The future work will implement these methods in the decision support system (DSS) to ease the output results with implementing fuzzy algorithm, or other data mining. So the usage of the computer-aided application will be more valued in strategic development based on THES-VRIO framework for the university of XYZ.

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