

Innovation As The Competitiveness Of Maritime Universities In Semarang

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Abstract. Increasingly fierce competition causes university managers, both private universities (PTS) and public universities (PTN), to maximize existing resources. Not only on resource management but also must pay attention to the ability of each unit or part of the college that has selling value to the community, has something different from competitors and also pays attention, implements regulations from the government and has differentiation. Innovation gets the attention of maritime universities in Semarang by making continuous improvements. In addition to continuous improvement, they also make overall changes. The competitive advantage of maritime universities in Semarang is able to provide the best quality by getting a quality standard assessment from IMO, ISO, and having an international standard network. Maritime Universities in Semarang are universities that have differences compared to universities in general. It is something different and has a uniqueness, but like other universities, massively also has a strategy to increase competitive advantage, so the hope of maritime college in Semarang is to have many and sustainable students.

Keywords: Innovation, Competitiveness, Maritime Universities

BACKGROUND

The management of universities in general can be categorized into two, namely managed by the state and managed by the public or private. State universities may not be too much of a problem related to sustainability, employee welfare, and quality. In contrast to private universities, which must take into account the sustainability of universities, salaries, sources of funds managed, and many more problems that arise in line with regulations set by the government (Harahap, 2018). State universities and private universities have a common vision and mission, which is to participate in answering the social symptoms associated with and brightening the life of the nation. Higher education is defined as the level of education after secondary education which includes diploma programs, undergraduate programs, master programs, doctoral programs, and professional programs, as well as specialist programs, organized by universities based on Indonesian culture (Law of the Republic of Indonesia Number 12 of 2012 concerning Higher Education, 2012). Regarding the objectives of higher education, at least it is stipulated into four points through Law of the Republic of Indonesia

Number 12 of 2012 Article 5. Higher education is intended for the development of student potential, producing graduates who are experts for national competitiveness, the development of science and technology through research activities, and the realization of community service and benefits (Law of the Republic of Indonesia Number 12 of 2012 concerning Higher Education, 2012).

The phenomenon that occurs today is competition between state universities and private universities, namely in student capture techniques, services to students, and information on student needs after graduation. The competitive advantage possessed by universities pays attention to aspects of uniqueness, in contrast to competitors and continuous innovation. Another phenomenon that resulted in a decrease in the number of students was caused by high competition between universities. The development and progress of higher education is not without problems, the rise of universities has increased the intensity of competition in the world of higher education. Marketing wars by offering various promises and various conveniences have become common in an effort to attract prospective students. For private universities that are not ready for competition, they eventually go out of business or close their study programs because they are unable to compete.

Apart from all that, the phenomenon that occurs in maritime universities in Semarang, if carefully considered and focused on the values communicated with prospective students, the communication built by each maritime university is an added value to be maintained and developed at all times in order to achieve a competitive university. The increasingly fierce competition causes state universities and private universities managers to be good at maximizing existing resources. Not only in resource management, but must also pay attention to the ability of each unit or part of the university including selling points to the community, having something different from competitors, and also paying attention, implementing regulations from the government and having differentiation.

Universities differentiate with the aim of obtaining differences compared to competitors and are considered important. Differentiation allows colleges to offer uniqueness, due to value that cannot be found in competitors. Differentiation grows out of value chains because each chain of activity is a potential source for the uniqueness it offers and is attractive (Gallacher, 2006). Basically good differentiation cannot be imitated by competitors, hence innovation is needed. Innovation is a development or change made in whole or in part. Change as a whole is often referred to as *radical innovation*. The concept of *radical innovation* has the meaning of changing the whole of the existing one, while the changes made in part are referred to as *incremental innovation* (Jaworski & Kohli, 1993).

Innovation is a positive change in method or technology that is useful and departs from pre-existing ways of doing things. Innovation consists of two types, namely process innovation and product innovation. The innovation process is a change that affects the way output is produced, while product innovation itself has the opposite definition, namely changes in actual *output*, both goods and services (Bateman & Snell, 2009). Innovation is the creation of a combination of new products, technologies, and organizational technologies (Boer & During, 2001).

Farida and Setiawan (2022) examine competitive advantages influenced by innovation. The results of the study explain that innovation plays a strong role in increasing competitive advantage (Farida & Setiawan, 2022). Mose et al., (2018) examined competitive advantages influenced by innovation. The results of the study explain that dominant prices increase competitive advantage, after prices improve, innovation is needed (Moses et al., 2018). Andika et al., (2021) examined competitive advantages influenced by innovation, with the results of the study explaining that when the products sold in the market meet innovation standards, competitive advantages will increase (Andika et al., 2021).

Maritime universities in Semarang are universities managed by the public and private under the auspices of the Ministry of Education and Culture and the Ministry of Transportation which have international standard laboratory equipment and have international certificates of *International Maintenance and Operation* (IMO) and ISO are prepared for students as provisions after graduation. This is something different and unique, but like other universities, *it* also massively has a strategy to increase competitive advantage, so the hope of maritime universities in Semarang is to have many and sustainable students.

The decline in the number of new students that occurs is not in the existence of universities with all kinds of strategies and uniqueness, but when viewed from social symptoms, namely a fairly high level of competition and decreased public interest due to the value of excellence in maritime universities that have not been able to touch the bottom line of the Indonesian people who are known as countries with a very large sea area. The decline in student interest in maritime universities, especially in Semarang, is due to the excellence of the study programs offered. Another thing that triggers a decrease in the number of new students who register is the completeness of laboratories, training for students, and the ability of universities to explain to prospective students that maritime universities have specifications that cannot be found in other universities.

Maritime universities in Semarang are able to survive until now because they have competitive advantages, have differentiation and market orientation, in addition to being

market-oriented and differentiation, the competitive advantage of maritime universities in Semarang requires innovation. The innovation made by maritime universities in Semarang is by equipping laboratories that are integrated, IMO-certified and ISO certified, so that they cannot be found in other universities, especially in Semarang. Efforts made by maritime universities in Semarang so that competitive advantage increases are by innovating continuously.

Based on student registration data for 2020-2022, the number of registrants has decreased. Maritime universities in Semarang experience ups and downs, so maritime universities in Semarang develop various strategies so that the number of students who register increases. The problems faced by maritime universities, especially in Semarang, are about human resource management, especially students who experience fluctuations due to regulations that until now are still under the Ministry of Sea Transportation and BAN PT, so that in addition to the completeness of laboratories or training in accordance with Sea Transportation standards, it must adjust to the regulations of BAN PT.

THEORETICAL BASIS

1. Competitive Strategy

Kotler (1972) and Porter (2001) state that competition in the context of marketing is a condition in which companies in certain product or service markets will show their respective advantages, with or without being bound by certain regulations in order to reach customers (Kotler, 1972) (Porter, 2001). According to Kotler (1972) and Porter (2001), competition will occur in several groups of competitors who are not only in similar products or services, can be substituted products or services or competition upstream and downstream (Kotler, 1972) (Porter, 2001). Competition is a relentless work process on the ability of a company to find and maintain an advantage (Magretta, 2014).

Competitive strategy for maritime universities is an important aspect in which it is used to explain differentiation, market orientation, innovation and competitive advantage. Competitive advantage for maritime universities in Semarang is more about increasing sustainable excellence by using competitive strategies.

2. Competitive Advantage

Competitive advantage is an advantage over competitors obtained by offering consumers more value (Kotler & Amstrong, 2014). Competitive advantage is like achievements obtained in a competition, that's why companies must continue to formulate and carry out various strategies to achieve competitive advantage. When the company is able to

create superior value in competition, the company will get many benefits, ranging from a good view of consumers towards their products to increasing company profits, where the goal of a business is to get the maximum profit. The competitive advantage strategy can be used as a foundation for the progress of the company, *competitive advantage* is the most important thing in marketing. Building a *competitive advantage* means building a strong fortress in market competition so that competitors will find it difficult to seize the market and customers. *Competitive advantage* is an advantage over existing competition that cannot be done by competitors and can be applied over a long period of time (Pakpahan, 2016). Competitive advantage will create good value for the company for a long time, it will also be able to increase income for the company. Sudaryono (2016), suggests that competitive advantage *is a benefit that exists when a company has and produces a product or service that is seen from its target market better than the nearest competitors* (Sudaryono, 2016). When the company is able to create superior value in products compared to competitors, it will bring many benefits to the company, many benefits will be obtained such as a good image, consumer loyalty, and when able to increase sales, it has a great opportunity to obtain greater profits as well (Kotler & Armstrong, 2014).

Kotler and Armstrong (2014) also explain that competitive advantage, namely the achievements obtained through various strategies so that it has an advantage value compared to competitors. Consumers are selective in choosing prices when making purchases, consumers tend to choose the desired product that has a cheaper price, then companies that are able to attract more consumers will certainly be superior to competitors. Natasha and Devie (2013), also suggested, *competitive advantage* is a condition where companies can create a good defense position over their competitors (Natasha & Devie, 2013). From some of the opinions of experts above, it can be concluded *that competitive advantage* is an advantage that can be achieved by companies in competing with other companies, where companies implement strategies and products that have different values in competition.

3. Innovation

Innovation is one of the choices of corporations in facing market competition and sustainable management (Hauser et al., 2006). Freeman (2004), considers innovation as an effort from companies through the use of technology and information to develop, produce, and market products that are new to industry (Freeman, 2004). Innovation is the modification or discovery of ideas for continuous improvement and development to meet customer needs. Ahmed and Shepherd (2010), mentioned that company innovation can produce research and development (R & D), production, and marketing approaches and eventually lead to

commercialization of innovation (Ahmed & Shepherd, 2010). Thus, innovation is the process of realizing a new idea, which is different from the previous one, by means of production or by making it real, where innovation includes the generation of evaluation, new concepts and implementation. Where the use of new and different methods and technologies to improve quality costs or lower, to meet or exceed company targets.

Innovation is not limited to objects or goods produced, but also includes life attitudes, behaviors, or movements towards a process of change in all forms of community life (Ahmed & Shepherd, 2010). So in general, innovation means an idea, product, information technology, institutional, behavioral, values, and new practices that are not widely known, accepted, and used or applied by most citizens in a particular locality, which can be used or encourage changes in all aspects of community life in order to realize the improvement of the quality of each individual and all citizens concerned.

RESEARCH METHODS

In this study, the author used a type of qualitative descriptive research. According to Taylor et al., (1975), qualitative methods are research procedures that produce descriptive data in the form of words or words from people and observable behavior (Taylor et al., 1975). Qualitative research methods are problem-solving processes carried out through describing a research object clearly and in more detail, besides that qualitative research methods are used to draw generalizations that explain the variables that cause a symptom (Haeruman, 2021). The purpose of qualitative research is to obtain information on current conditions related to the variables in this study (Haeruman, 2021). In research using literature review conducted by reading and observing various reference sources or literature sources, such as books, journal articles, magazines, newspapers, and other sources that are still related to the research topic conducted.

RESEARCH RESULTS

Empirical studies conducted by several previous researchers explain that competitive advantage is built with various variables, including differentiation, market orientation, and innovation. Verbyani and Handoyo (2021) with the results of their research explained that innovation contributes positively to competitive advantage (Verbyani & Handoyo, 2021). Purchase and Volery (2020) also argue that innovation contributes to increasing competitive advantage (Purchase & Volery, 2020). The increase in competitive advantage is also

reinforced by differentiation. The differentiation carried out by maritime universities in Semarang lies in the absence of laboratories that are integrated and IMO certified.

The obstacle faced is that the costs incurred by universities tend to be high because of the completeness of laboratories and competency tests that must be provided by universities in accordance with the regulations set by the Sea Transportation Service. Another thing that needs to be provided by the campus is the IMO certificate.

Early studies explain that competitive advantage is influenced by differentiation and market orientation (Zahara et al., 2020). Akintokunbo (2018) also argues that the results of the research conducted explain that one of the increases in competitive advantage is caused by market orientation (Akintokunbo, 2018). Research conducted by Purchase and Volery (2020) explains that companies that adopt innovation will grow (Purchase & Volery, 2020). Rosyidah (2021) in the results of her research suggests that differentiation and innovation can increase competitive advantage, but the role of innovation is less than the role of differentiation (Rosyidah, 2021). Differentiation and innovation have an influence on competitive advantage, stated by Nugraha and Sukaatmaja (2020) in their research (Nugraha & Sukaatmadja, 2020). Herman et al., (2018), in the results of their research stated that innovation contributes to increasing competitive advantage (Herman et al., 2018). Another study conducted by Verbyani and Handoyo (2021) also states that innovation, entrepreneurial orientation, and market orientation affect competitive advantage (Verbyani & Handoyo, 2021). According to Daengs (2022), increased innovation will affect the increase in competitive advantage (Daengs, 2022). Competitive advantage will increase due to the role of differentiation, innovation, and price (Maryani & Chaniago, 2019).

Another study conducted by Farida and Setiawan (2022), states that the importance of performance and innovation to increase competitive advantage (Farida & Setiawan, 2022). Aniyati and Indayani (2023), suggest that market orientation and innovation can increase competitive advantage (Aniyati & Indayani, 2023).

From several previous research results, to improve the competitiveness of maritime universities in Semarang can be done through innovation. Some innovations that can be done include through differentiation strategy innovation, for example by offering differences in products, services, personnel, or images offered (Zahara et al., 2020). Price or cost innovation is also a dominant factor for increasing competitiveness (Moses et al., 2018). In addition, innovation through market orientation, which in this case is the community, can also increase competitiveness (Aniyati & Indayani, 2023). The importance of knowing the wishes of the

community (*stakeholders*) who will use college graduates and also the importance of knowing the orientation of competitors.

The competitive advantage of maritime universities in Semarang is able to provide the best quality by getting quality standard assessments from IMO and ISO which have international standard networks, information needs that can be felt quickly and *up to date* information. Competitive advantage creates good value for universities for a long time, so that the accuracy of the information needed and the speed of information can be accessed at any time. Maritime universities in Semarang have differentiation or differentiation when compared to universities in general, namely in the price section including competitive tuition fees compared to competitors and costs incurred by students comparable to the facilities obtained. Maritime universities in Semarang have a place by maximizing lecture halls in accordance with government standards and laboratories in accordance with international standards. In the part of the program offered to students is useful as well as training that is internationally certified.

Maritime universities in Semarang have *an image*, namely the logo of universities that are different from competitors and the logo of maritime universities in Semarang in accordance with government standards. Then on the staff section at the maritime college in Semarang is to provide opportunities to develop and be given opportunities for promotion. This means that all staff of maritime universities in Semarang will strive to work at their best.

The results of the study explain that empirical differentiation is strengthened by government-standard lecture rooms and laboratories with international standards so as to increase innovation by making changes as a whole and making changes continuously. Maritime universities in Semarang are oriented to the intended market by maximizing customer orientation by understanding customers for sustainability and understanding what customers feel. Then it is strengthened by competitor orientation that prioritizes competitor information as a reference to increase competitive advantage and interpretation with competitors as an effort to increase the competitive advantage of universities.

The differentiation for maritime universities in Semarang is the programs offered to useful students and internationally certified training programs. Maritime universities in Semarang offer competitive tuition fees when compared to competitors and tuition fees according to the facilities obtained by students. Maritime universities in Semarang have lecture halls that are in accordance with government standards and laboratories that are in accordance with international standards. This cannot be found in other universities, has a logo that is different from competitors and a logo that conforms to government standards.

Market orientation has a general mind, namely understanding customers for the sustainability of higher education and understanding what customers feel. Information needs for students are competitor information as a reference to increase competitive advantage and interpretation with competitors to increase competitive advantage so that the competitive advantage of maritime universities in Semarang becomes better. The results of the study explained that differentiation and market orientation are able to increase the competitive advantage of maritime universities in Semarang with the support of international standard lecture halls so that information needs can be felt by students and the information needed is always *up to date*.

Innovation for maritime universities in Semarang is by making changes continuously and making changes as a whole. Changes made to strengthen innovation are making partial changes or adding from existing ones to be more valuable. The role of innovation for increasing competitive advantage supported by strengthening differentiation, namely lecture rooms that are standardized with the government and international standards so that what is needed by students as an effort to support information is information needs, namely information needs that can be felt by students and information that is always *up to date*.

The speed of information in the context of opening new study programs and the speed of opening study programs are the responsibility for maritime universities in Semarang so that what is expected to increase competitive advantage is better. In addition to the speed of information that supports competitive advantage for the better, understanding customers for the sustainability of maritime universities in Semarang in particular and understanding what customers feel in order to increase competitive advantage.

CONCLUSION

Innovation contributes to increasing the competitive advantage of maritime universities in Semarang, this means that maritime universities in Semarang have made improvements and changes in part or all in order to achieve competitive advantage. Innovations that can be done such as innovations related to differentiation (programs offered, costs, places, facilities, and image), market orientation (customers and competitors), digitalization, and so on.

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