

## The Significance of Competitive Advantage at Universities in Indonesia

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— *Review of* —  
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### ABSTRACT

The increasingly fierce competition requires a university to have a competitive advantage in order to have distinctive characteristics, so it can be distinguished from the other universities. Therefore, universities should design and implement appropriate and sustainable strategies. The purpose of this research was to examine and analyze the competitive advantage of universities in Indonesia, so the importance of competitive advantage can be seen. This research was a qualitative descriptive survey with a sample of 157 universities obtained using power analysis approach. For data collection, this study used questionnaire instruments that have been tested for validity and reliability, which were complemented by interview and observation. Respondents of this research were the deans, vice-rectors, vice chairpersons, deputy of directors, and students. The results showed that universities in Indonesia in general have a competitive advantage in a sufficient condition, which means that they are still not excel in competition. They have sufficient innovation and have considerable costs when the quality of service they provide is good. Among the three strategic competitive advantages of the universities, the quality of service is the most superior strategy, which is followed by the cost strategy and the innovation strategy.

Keywords: advantage, competitive, competitive advantage, strategy.

### 1. INTRODUCTION

The increasingly tougher competition in education dictates a university to have a competitive advantage. As stated by Carlucci and Marr (2004), Bontis et al (2000), and Zhou and Fink (2003), one of many crucial aspects in improving the competitive advantage is human resource, the characteristics of which are not easily copied by other people; it has innovation; and it creates values. Competitive advantage is the core of company performance in a competitive market. Competitive advantage in general grows from value or benefit that can be created by the company for its customers. If the company could create competitive advantage through one of its strategies, then it will gain the competitive advantage (Porter, 1985; Aaker, 1989). To face competitive challenges, universities must have the ability to be better than those of competitors, and innovation is the result of competitive aggressiveness of rapid response to meet the challenge (Kahn, 1998; Ferrier, 2001).

In connection with the level of competition in the ASEAN Economic Community (AEC), the quality of Indonesian workers is still relatively low compared to the workforce in other ASEAN countries. In terms of education and productivity, Indonesia is still unable to compete with workers coming from Malaysia, Singapore, and Thailand. In this case, the foundation of the industry makes Indonesia ranked fourth in ASEAN. Human resources or Indonesian workers who are not competent and do not have the

ability to compete for jobs would be harmed and marginalized (Baskoro, 2013). This also becomes a challenge for higher education that is considered as a producer of scholars who are ready to compete.

The phenomenon of the development of higher education in Indonesia internationally, shows that universities in Indonesia are still not able to compete optimally. This is evident from the data disclosed by Webometrics in 2013, where public or state universities in Indonesia are in the world ranking in the top 500, while private universities (PTS) is ranked in the top 800 (Directorate General of Higher Education, 2010; Indiyati, 2014).

Another phenomenon shows a reality at work: about 30% of PTS in Indonesia were closed down because they were unable to compete with other universities, including with state universities (Akhmadi, 2008). This is corroborated by the statement from Wayah, the Secretary General of APTISI, saying that those PTS could no longer operate because they were unable to adjust to the needs of the society and the people. It is suspected that those PTS had yet to be maximal in creating and innovating, while, in fact, to compete with others, creativity and innovation are needed. For instance, the creation of curriculum that is adjusted to the needs is required to produce graduates with the skills and competence needed by the employers (Akhmadi, 2008; Indiyati, 2014). Based on several problems discussed earlier, it is interesting to do research on the competitive advantage. In this way, the objective of this research is to examine and analyze the competitive advantage in private universities, where this research is a preliminary analysis of the competitive advantage that will be associated with the performance of universities.

## 2. LITERATURE REVIEW

Competition is described as a company cycle that is determined by the competition four components (4C), namely company, customers, competitor, and change (Kotler, 2010). To win the competition of business today, companies must have a good strategy. There are many opinions regarding strategies, one of which is the opinion of Johnson and Scholes (2003) which say that "Strategy is the direction and scope of an organization over the long term: which achieves advantage for the organisation through its configuration of resources within a challenging environment, to meet the needs of markets and to fulfill stakeholder expectations". The essence of this approach is that to maintain a long-term business, the company should be able to align the resources owned by the market which will be penetrated and environmental conditions. In addition, the company must also be able to compete to provide more value to customers (stakeholders). The company that implements strategies rapidly and accurately is a company that has a competitive advantage to win the competition,

A discussion of the competitive advantage of a company is mostly developed from the concept of Porter (1985), where the concept is referred to as Porter's five forces, a model that analyzes various threats and opportunities in an industry. Porter (1985), the expert in strategic management, states that competitive advantage is the ability to earn returns on investment consistently above the average for the industry. The characteristics of their competitive advantage are imitability, durability, and easiness to be equal. In contrast, some experts, such as Thompson and Strickland (2003); Teece et al. (1997), suggests that "A business strategy is powerful if it produces a sizable and sustainable competitive advantage; it is weak if it results in competitive disadvantage".

Competitive advantage is defined as the ability of an organization to make a

defensive position against competitors, a capability that allows organizations to differentiate itself from its competitors and is the result of critical management decisions. Measurement of competitive advantage can be seen from several aspects such as price / cost, quality, delivery dependability, product innovation and time to market (Li et al, 2006; Tracey et al, 1999). In line with that, competitive advantage is a strategy designed by the company to create something new and distinguishable, able to create added value for customer that cannot be copied by the competitors (Barney and Hansen, 2007; Noe et al, 2010). Competitive advantage is the kinds of strategies to assist the company in maintaining its viability and enhance its performance (Ferdinand, 2003; Day and Wensley, 1988). Moreover, Strandskov (2006) measures competitive advantage using four variables: firm specific advantages, localization specific advantages, relationship specific advantages and competitive strengths.

OECD (2005) defines innovation as the implementation of new products or to increase significantly (goods or services), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations. Innovations can be classified using the criteria of the four types of innovation, the innovation of products that involve significant changes in the ability of goods or services, either an entirely new goods and services and significant improvements to existing products. Innovation process is a significant change in the production and delivery methods. Organizational innovation refers to the adoption of a new organizational method. It could be a change in business practices, in workplace organization or external relations companies

A Competitive strategy that can be used by an organization to achieve competitive advantage is popularized by Porter (1985) and developed by Schuller and Jackson (2006). It consists of innovation strategy, quality strategy, and expense strategy. Developing Porter's strategy, the researcher formulated a construct of competitive advantage that is made by the phenomenon in the university:

***Innovation Strategy*** is defined as a change that is offered by the company to the people (product/service innovation) as well as the ways to create and deliver the change (process innovation). The ability of the company to create innovation can be in the form of product/service, process and management. Product/service innovation is the ability of the company to offer different new services or products into a market to achieve customer's satisfaction. Process innovation is the ability of the company to produce a process of manufacture of service that is better than the recent process. Management innovation is the ability of the company to boost its performance through the implementation of new rules, systems and managerial methods (Liao et al, 2007).

In order for companies to survive in an increasingly dynamic market, companies must constantly innovate on an ongoing basis to create competitive advantage. Innovation is expressed as a key competitive advantage (Droge et al, 2008). Innovation is defined as a means to explore new ideas successfully to enhance the growth of the existing business value. Companies can achieve competitive advantage through innovation, which is composed of four types: product and service innovation, process innovation, material innovation and innovation in business practices (Korth, 2005).

Product innovation is one important strategy that the company can still survive in the competition, and can adapt to the market and technology, is a strategy that can be used to increase the value of the products, can provide opportunities for companies to get customers, which is considered as one of the key elements success of companies and

brought the company achieve competitive advantage. Innovative products are believed to be able to achieve a better market share (Droge et al, 2008; Henard and Szymanski, 2001; Dougherty and Hardi, 1996).

**Service Quality Strategy:** In conjunction with the fact that the research object in this study is university, which offers services, therefore what is meant by the quality of this study is the quality of service. It leads to the concept of service that is proposed by Kotler (2010) that is Tangible, Empathy, Reliability, Responsive, and Assurance. Tangible is defined as a physical appearance, in the form of physical facilities and equipments. Empathy is understanding and paying attention to the needs of the customers. Reliability means the ability to provide an accurate, immediate and satisfying service. Responsive is to provide a service fast or to be quick in response. Last, Assurance is the presence of certainty or a characteristic of honest.

**Expense Strategy:** The characteristics of the company that adopts expense strategy are running overhead minimization principles, conducting tight control, and achieving economic scale.

### 3. METHODOLOGY

This research is qualitative descriptive-survey, with a sample of 157 universities, which is obtained by using power analysis approach. For data collection, this study used a questionnaire that had been tested for validity and reliability, complemented by interview and observation. The respondents of this study were the deans, vice-rectors, vice-directors, vice presidents and students.

### 4. RESULT AND DISCUSSION

#### Validity Test and Reliability Test

Using corrected total item correlation, all validity indexes is higher than critical value 0.30. Therefore, it can be concluded that all statement of the items that were used to measure the three variables are already valid so that they can be used for the next stage of analysis. Next, it can also be seen that reliability coefficients are higher than 0.70, and therefore all statement items are reliable.

Here is described an analysis of competitive advantage at private universities (PTS), that include quality of service, innovation and cost.

**Table 1. Competitive Advantage at Private Universities**

| Sub Variable                 | Min value    | Max value    | Variance     | Mean         | Category |
|------------------------------|--------------|--------------|--------------|--------------|----------|
| Quality of service           | 3.000        | 5.889        | 0.326        | 4.325        | Good     |
| Innovation                   | 2.167        | 5.667        | 0.365        | 4.025        | Adequate |
| Cost                         | 2.667        | 6.000        | 0.396        | 4.172        | Adequate |
| <b>Competitive Advantage</b> | <b>2.704</b> | <b>5.778</b> | <b>0.286</b> | <b>4.194</b> | Adequate |

Source: Primary Data

Based on the above table it can be stated that, in general, private universities have a adequate condition of competitive advantage.

To test the hypothesis of “private universities have a high competitive advantage”, the t-test statistic was used. Based on descriptive statistics, the statistical hipotesis could be translated into:

$H_0 : \mu_{CA} \leq 4.31$  Private universities do not have a high competitive advantage.

$H_1 : \mu_{CA} > 4.31$  Private universities have a high competitive advantage

**Table 2. Descriptive Hypothesis testing on Competitive Advantage**

| Variable              | Mean   | Variance | Standard Error | t –stat    | t-table  | Decision    |
|-----------------------|--------|----------|----------------|------------|----------|-------------|
| Competitive Advantage | 4.1945 | 0.2858   | 0.042531       | -2.9507888 | -1.97539 | H0 Accepted |

**Source: Result of Data Processing**

The calculation shows that the value of t-stat is much smaller than the value of t-table so that the right-tailed hypothesis testing, the result is that the null hypothesis is accepted. In other words, the hypothesis that the private universities have a high competitive advantage is not approved. It means that the private universities do not have a high competitive advantage.

The Company is said to excel in competition, if the company has the ability to create something new and different to the market, can not be imitated by competitors, is rewarded with more value by customers and accepted by the market, and can benefit (Noe et al, 2010).

The findings of this study stated that private universities are still not excel in competition, because it has sufficient innovation and has a considerable cost, but the good quality of service. Among the three strategies of competitive advantage in PTS, it appears that the quality of service is a superior strategy, followed by the cost strategy and innovation strategy. This is in accordance with the opinion of Cravens (2000), that the quality of services provided, the better, resulted in increased competitive advantage. These findings are also in accordance with the opinion from Ham and Hayduk (2003), which states that in order to achieve competitive advantage colleges, one factor that became global issues is service quality.

Description analysis about Quality, Innovation and Cost at PTS is described in more detail as follows.

**Quality of Service at Private Universities**

Here is described an analysis of the quality of service at PTS, which include reliability, responsiveness, assurance, empathy and facilities.

Based on the table.3, it can be stated that PTS provides services with good quality. It is based on the power of a fast response, high empathy, and high assurance of the quality of its graduates, although its reliability and its facilities are in adequate condition.

According to Kotler (2010), the service quality will be superior if it delivers a superior quality of service, so that it can be said PTS do not have yet a superior quality of service, but are able to compete in the market.

**Table 3. Service Quality at Private Universities**

| No | Description  | Min         | Max         | Mean        | Variance    | Criteria        |
|----|--|-------------|-------------|-------------|-------------|-----------------|
| 1  | Services promised by PTS (speed)                         | 2.33        | 6.00        | 4.31        | 0.57        | Adequate        |
| 2  | Services promised by PTS (accuracy)                      | 2.33        | 6.00        | 4.20        | 0.67        | Adequate        |
| 3  | Services promised by PTS (satisfaction)                  | 2.33        | 6.00        | 4.36        | 0.60        | Satisfactory    |
|    | <b>Reliability</b>                                       | <b>2.78</b> | <b>6.00</b> | <b>4.29</b> | <b>0.42</b> | <b>Adequate</b> |
| 4  | Response/responsiveness to students'/ customers' demands | 2.50        | 6.00        | 4.34        | 0.62        | Fast            |
|    | <b>Responsiveness</b>                                    | <b>2.50</b> | <b>6.00</b> | <b>4.34</b> | <b>0.62</b> | <b>Fast</b>     |
| 5  | Quality assurance of graduates                           | 2.00        | 6.00        | 4.39        | 0.61        | High            |
|    | <b>Assurance</b>   | <b>2.00</b> | <b>6.00</b> | <b>4.39</b> | <b>0.61</b> | <b>High</b>     |
| 6  | Empathy to the problems of students'/ customers          | 2.00        | 6.00        | 4.39        | 0.60        | High            |
|    | <b>Empathy</b>   | <b>2.00</b> | <b>6.00</b> | <b>4.39</b> | <b>0.59</b> | <b>High</b>     |
| 7  | Infrastructure of PTS                                    | 2.00        | 6.00        | 4.09        | 0.79        | Adequate        |
| 8  | Facilities of PTS  | 2.33        | 6.00        | 4.34        | 0.66        | Adequate        |
|    | <b>Facilities</b>  | <b>2.56</b> | <b>6.00</b> | <b>4.28</b> | <b>0.44</b> | <b>Adequate</b> |
|    | <b>Service Quality</b>                                   | <b>3.00</b> | <b>5.89</b> | <b>4.33</b> | <b>0.33</b> | <b>Good</b>     |

Source: Result of Data Processing

According to Kotler (2010), a company has a high reliability when it is able to provide fast, accurate and satisfactory services. The PTS provide adequate reliability as it provides satisfactory service, but adequate promptness/speed and accuracy, so it is said that PTS is adequately reliable in their services.

Based on the observations, this occurs because of the facility information system has not optimally run. In some ways, it is already online, but in some other ways it is still manual, so the system is still semi-online. Thus, on certain parts related, it can not be fast in making decisions. Since the students do the tutelage, tuition is already online, because the payment can be done through a bank (ATM). However, it is not directly online to the system. Ideally, students should be able to register online to attend the lecture, so that the program can immediately decided to study the number of classes and the number of faculties, as well as test cards, and also test scores, it can directly online to the transcript.

The company can be said to be responsive, if the company is quick to respond to customer requests and complaints (Kotler, 2010). It means that private universities are responsive because they are quick to respond to the student requests and complaints, such as request permission of research papers, transcripts, and information of still studying. The company is also said to give high assurance if it can provide assurance to the customers so that they can be trusted (Kotler, 2010). This means that the PTS can provide a definite assurances the quality of graduates, because the curriculum is clear and definite, where the curriculum is evaluated every four years, and learning materials on the curriculum are evaluated once every year.

Companies with a high empathy can give attention to customers, both their personals as well as their needs (Kotler, 2010). This means that PTS have empathy because they can give high attention to the needs of the customers.

The tangible evidence provided by the company comprises the physical facilities. The facilities are good if they provide the adequate facilities (Kotler, 2010). PTS have the adequate infrastructure but good learning facilities. Based on the observation, it can be caused by a lecturing room is not in accordance with the number of students, a parking lot that has not been able to meet all the visitors, as well as the library, and also the availability of infrastructure for student activities is not maximized. It also appears that some of the infrastructure is still not meeting up to the cleanliness.

Among the five types of service quality on PTS, it can be seen that the quality assurance of graduates and empathy to customer complaints are the most excellent services (4.39), followed by responsiveness, reliability and finally the facilities.

### Innovation at Private Universities

Here is described an analysis of innovation at private universities, that includes uniqueness in product, uniqueness in the process, and uniqueness in management.

**Table 4. Innovation at Private Universities**

| No | Description                        | Min         | Max         | Mean        | Variance    | Criteria        |
|----|------------------------------------|-------------|-------------|-------------|-------------|-----------------|
| 1  | Courses offered                    | 1.00        | 6.00        | 3.88        | 1.01        | Adequate        |
| 2  | Curriculum adopted                 | 1.00        | 6.00        | 3.94        | 0.99        | Adequate        |
|    | <b>Product Innovation</b>          | <b>2.00</b> | <b>6.00</b> | <b>3.91</b> | <b>0.65</b> | <b>Adequate</b> |
| 3  | Teaching learning method developed | 2.33        | 6.00        | 4.15        | 0.54        | Adequate        |
| 4  | Process services developed         | 1.00        | 6.00        | 3.99        | 0.85        | Adequate        |
|    | <b>Process Innovation</b>          | <b>1.67</b> | <b>5.67</b> | <b>4.07</b> | <b>0.51</b> | <b>Adequate</b> |
| 5  | Organizational structure           | 2.00        | 6.00        | 4.20        | 0.68        | Adequate        |
| 6  | Management system                  | 1.33        | 6.00        | 4.00        | 0.63        | Adequate        |
|    | <b>Management Innovation</b>       | <b>2.50</b> | <b>5.67</b> | <b>4.10</b> | <b>0.43</b> | <b>Adequate</b> |
|    | <b>Innovation</b>                  | <b>2.17</b> | <b>5.67</b> | <b>4.02</b> | <b>0.37</b> | <b>Adequate</b> |

Source: Result of Data Processing

Based on above table, it can be interpreted that the private universities have adequate in product, process, and management innovation. It illustrates that the PTS have the adequate ability to innovate. A company has ability to innovate, it means innovative. The company does the innovation, it means that the company can create something new and is different from its competitors or has uniqueness (Zimerrer and Norman, 1996; Liao et al, 2007). Thus, the findings of this study stated that PTS can be quite innovative; it means that it has enough ability in determining the newer strategy than the last but doesn't have real difference from the other universities. Based on interviews, it is said to be quite innovative because of delays in funding/budget, because it is still dependent on student tuition revenue, environmental organization that is not maximal, regulations and the demands of the foundation. PTS have sufficient ability to create a unique product or has a product that is quite unique, because it has one or more courses of study are more different and better, although there are no obvious difference compared with other courses in other PTS (can be regarded as excellent courses), as well as the curriculum. Based on observations and interviews, only a few universities develop excellent courses, such as dual degree programs, and competency-based

curriculum.

In this case, the universities have sufficient ability to create innovation in the process, which has sufficient capability in developing innovative methods of teaching and learning process (TLP), for developing methods of TLP may be newer but not yet apparent differences with other universities. Based on interviews, teaching method developed largely is Student Centre Learning (SCL) and the E-Learning, then only a few private universities develop the TLP because it has ISO certified. There are some private universities running the management of the college less from five years or there are some universities newly established, or there is the possibility that the universities implement other strategies other than the ISO standardization.

Universities have innovation in the management under sufficient conditions, which means that its management is quite an innovative or unique enough for developing a more recent organizational structure, but the difference is not noticeable, as well as the management system.

Good organizational structure is an organizational structure that is flexible or adaptive, so it can adjust to the changing environment (Daft, 2010). The organizational structure in private universities is said to be quite good, because they implement organizational structure or a mixture of organic semi-mechanical. Then in management, only a few private universities implement a system of Total Quality Management (TQM). It is associated with the presence of some PTS newly established, or they manage the university less than five years, so that the universities have not been possible to do development on their organizational structure, and the universities are also conducting the process of preparing their management system.

Among the three innovations in the private universities, it can be seen that the private universities have a strategy that is more innovative in their management, followed by the innovative in the process, and finally innovative in the products.

The results of this study support the findings from Valencia et al (2016), that innovation in management is a better strategy to improve the company's competitive advantage. These findings also support the research results from Tiago et al (2014), that the strategy is working to strengthen the company's competitive advantage is innovation, organizational, compared with product innovation and process innovation. However, the findings in this study is different from the findings from Lau et al (2010); Han et al (1998) and Droge et al (2008), that product innovation is believed to be better in gaining market share, due to product innovation is one of the most important competitive factor for the company's success.

**Cost Strategy**

Here is described the analysis of innovation in the private universities, which includes control of the program of work, minimizing overhead costs and economies of scale.

**Table 5. Cost Strategy at Private Universities**

| No | Description                | Min         | Max         | Mean        | Variance    | Criteria        |
|----|----------------------------|-------------|-------------|-------------|-------------|-----------------|
| 1  | Control of program of work | 2.00        | 6.00        | 4.25        | 0.58        | Adequate        |
| 2  | Minimizing overhead costs  | 2.33        | 6.00        | 4.09        | 0.62        | Adequate        |
| 3  | Economies of scale         | 2.33        | 6.00        | 4.17        | 0.62        | Adequate        |
|    | <b>Cost</b>                | <b>2.67</b> | <b>6.00</b> | <b>4.17</b> | <b>0.40</b> | <b>Adequate</b> |

Source: Processed from Primary Data

Based on the above table, it can be interpreted that the university has been quite good in running cost strategy. It is based on the adequacy of the control work program, on minimizing overhead costs, and on the achievement of its economies of scale.

Companies that run strictly control the work program means doing good control, so that the target of the work program can be achieved (Schuller and Jackson, 2006). It also means that private universities have sufficient capacity to carry out control over the work program, although there are several programs that have not been reached. Based on the interview, this is because in making the work program, the coordination between the leadership in the relevant work units, has not done optimally. This can be seen in the descriptive analysis that universities do enough integration and sufficient in sharing their knowledge.

Private universities run overhead cost minimization principle quite well. This means private universities run their overhead cost minimization quite efficiently. According to Schuller and Jackson (2006), if companies follow the principle of minimization of overhead costs efficiently, it can be said to be favorable. In this case, the university has run the minimization principle is quite favorable. In general, universities can perform efficiency on telephone expenses, but the efficiency of electricity and water consumption cannot be controlled optimally, as well as efficiency in conducting the meeting.

The achievement of economies of scale in the private universities are in a reasonable condition, because the management class has not run optimally, with regard to rules set by BAN PT, that the ratio of lecturers to students, in the course of exact sciences is 1: 25, and the program non-exact is 1: 30. Based on observations and interviews, there are still some private universities run courses, where a lecturer foster subjects with less than 25 or less than 30 students. To run cost strategy, at first, a private university run the control strategy of the program of work, followed by strategies for achieving economies of scale, and run the overhead cost minimization strategies.

### Comparison of Competitive Advantage among Forms of Private Universities

Here, the comparison is shown Competitive Advantage in each form of higher education.

**Table 6. Comparison of Competitive Advantage among Forms of Private Universities**

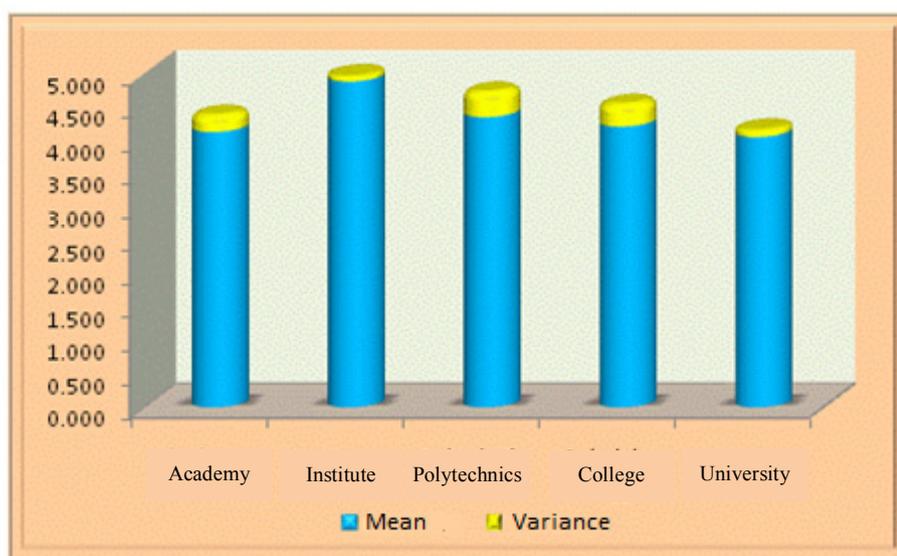
| Form of HE | Academy | Institute    | Polytechnic  | College | University   |
|------------|---------|--------------|--------------|---------|--------------|
| Mean       | 4.132   | <b>4.887</b> | 4.354        | 4.213   | <b>4.056</b> |
| Variance   | 0.248   | <b>0.086</b> | <b>0.373</b> | 0.330   | 0.106        |

Source : Results of Data Processing

Of the five forms of higher education, it seems that the institute has a competitive advantage that is higher than polytechnics, high school, college and university or institute have the competitive advantage of the most high because it shows the highest average, as well as the relatively most equitable level of diversity, followed by technical colleges, high schools, colleges, and the last one is the university.

This happens because there are several institutes that are already well established, has experienced longer in the management of the college, which is about 5-10 years and

more than 15 years. The university showed the lowest average score, because the university's academic and education programs or professionals in several disciplines of science, technology and or certain arts (Government Regulation No. 60 of 1999 on Higher Education), and the university has several faculties and programs study more. The number of students are also more, so the university management becomes more complex, more complicated determination of service standards, including the achievement of its uniqueness, and efficiency on costs .



**Figure.1. Mean and Variance of Competitive Advantage based on the Form of Higher Education**

## 5. Conclusion and Recommendation

Private universities in Indonesia generally have quite a competitive advantage which means they have not excelled in the competition, because of the quality of services that it provides are good, but the innovation and cost has not been good. Among the three strategic competitive advantages that run at universities, it appears that the quality of service is a superior strategy, followed by the cost of strategy and innovation strategy.

Of the five forms of higher education, the institute has a higher competitive advantage than polytechnics, colleges, academy, and universities. Private universities should increase the quality of its services strategy by implementing customer service training and product knowledge on a regular basis and on an ongoing basis. The innovation strategy must also be increased, either in the products, management or processes, by creating and improving co-operation, as well as the cost strategy, by providing leadership training for universities and for the daily executor on how to control more effectively and efficiently. For next researchers, the results of this study can be extended by adding a variable of university performance.

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