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# Sustainable Competitive Advantage in Private Higher Education Institutions in Indonesia

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## ABSTRACT

In the rapidly changing environment, every organization have to exploit sustainable competitive advantage. However, relevant research to date is mostly conceptual, little empirical evidence has been found in investigating the factors to achieve sustainable competitive advantage. This study aims to investigate the influence of leadership and dynamic capabilities to sustainable competitive advantage mediated by knowledge management in Private Higher Education Institutions (HEIs). Data collected from population of 10,213 lecturers from 318 Private HEIs with academic hierarchy except professor. The data collected from the survey applied to Structural Equation Modelling (SEM) using SmartPLS 3.0.M3. From the study found that Leadership significantly affects Knowledge Management; Leadership does not significantly affect to Sustainable Competitive Advantage; Dynamic Capabilities does not significantly affect to Sustainable Competitive Advantage; Dynamic Capabilities significantly affects to Knowledge Management and Knowledge Management significantly affects to Sustainable Competitive Advantage. This study concluded that Leadership and Dynamic Capabilities significantly affect Sustainable Competitive Advantage Mediated by Knowledge Management.

**Keywords:** leadership, dynamic capabilities, knowledge management, sustainable competitive advantage.

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### **INTRODUCTION**

According to the results of the 2010 Indonesia census, age groups of school children in Indonesia amounted to 66 million or about 28% of the population. Of these amounts, 30% or about 20 million attend colleges or higher educations. School-age population in higher education is facilitated by the 374 state Higher Education Institutions (HEIs) and approximately 3,917 private HEIs. According to data from HIEI's Coordinator Region III Jakarta, there are 318 active private HEIs spread in areas of West Jakarta, Central Jakarta, North Jakarta, East Jakarta, South Jakarta, Bekasi, Depok and Tangerang which comprises from 53 universities, 13 institutions, 126 high schools, 119 colleges, and 7 polytechnics. But of the hundreds of private HEIs, only a few that have good quality. HEIs rest survived with various issues, including as many as 201 HEIs organizers faced an internal crisis. This internal crisis could have been avoided, if the management of HEIs effectively perform the development of leadership and good governance. Internal conflicts in the management of education in general occur because of poor leadership (Sulisworo, 2012; Simamora, 2013).

To achieve the competitive advantage of the organization, leadership role is very important because it is the backbone of the organization's and the main source for obtaining competitive advantage (Khan, 2013). Meanwhile externally private HEIs as institutions of education providers experienced a very tight competition, domestic and global in scope. In facing the competition and win it, HEI as an organization is required to leave the paradigm of resource-based competitiveness, and start to use the paradigm of knowledge-based competitiveness as the foundation of a new form of exploitation, and the management of knowledge that exist in every human resources, and technology. This phenomenon is called the concept of Knowledge Management. In addition to knowledge management, according to reference (Teece *et al.*, 1997: Barusman, 2013), the factors that cause an organization to survive in the long term there are three things, the first is the dominant paradigm for the 1980s, called the development of a competitive approach (Porter, 1985). Second, is a strategic conflict approach (Shapiro, 1989), and the third is a resource-based view (Resource Base View, RBV). Development of this last approach, namely RBV, called dynamic capabilities.

Sustainability of an organization supported by sustainable competitive advantage is the element of strategic management for organizations including the HEIs. Reference Kafelnikov (2011) stated that in general the competitive advantages possessed by an organization having the attributes valuable, rare, imperfectly imitable, and non-substitutable. These four attributes commonly abbreviated to VRIN. Sustainability of an organization which is supported by sustainable competitive advantage is the element of strategic management for organizations including the HEIs. Administratively HEI's sustainability must be supported by the achievement of accreditation. Based on data from Private HEIs Coordinator, in 2012 accredited state and private universities totaled 14 in 2013 amounted to 30, and in 2014 amounted to 18. The program of study that is not accredited, will be threatened various sanctions, such as are not entitled to hold a graduation student as in (Nguyen, 2009) will reduced service from HEIs Coordinator form of dismissal of scholarships to the operational license revocation as in Madhani (2009). To meet the requirements of accreditation HEIs must be supported by good

leadership, dynamic capabilities, and knowledge management. This study aims to investigate the influence of leadership and dynamic capabilities to sustainable competitive advantage mediated by knowledge management in Private Higher Education Institutions (HEIs).

In Indonesia, there are about 20 million college students, 70 percent of them accommodated by private HEIs. In Jakarta, there are 318 active private universities (HEIs) spread in areas of West Jakarta, Central Jakarta, North Jakarta, East Jakarta, South Jakarta, Bekasi, Depok and Tangerang which comprises from 53 universities, 13 institutions, 126 high schools, 119 colleges, and 7 polytechnics. But of the hundreds of private HEIs, only a few that have good quality. HEIs rest survived with various issues, including as many as 201 HEIs organizers faced an internal conflict, which is in the management of education in general occur because of poor leadership. An administrative basis, to manage and maintain the quality, then according to the rules of all study programs in every private HEIs should conduct accreditation renewal and registration periodically to the National Accreditation Board of Higher Education. In 2012 for various reasons Coordinator of Private HEIs Region III Jakarta has closed about 39 study programs, one of the causes is late to take the accreditation process. Sustainability of an organization supported by sustainable competitive advantage is the element of strategic management for organizations including the HEIs. To have sustainable competitive advantage, organizations must be supported by good leadership, dynamic capabilities, and knowledge management. Therefore, the research questions in this study are:

- Does Leadership affect to Knowledge Management?
- Does Dynamic Capability affect to Knowledge Management?
- Does Knowledge Management affect to Sustainable Competitive Advantage?
- Does Leadership affect to Sustainable Competitive Advantage?
- Does Dynamic Capability affect to Sustainable Competitive advantage?

This paper is organized as follows : Section 2 reviews the literature; Section 3 lays out the methodology; Section 4 contains a discussion of the empirical findings; and Section 5 provides conclusions and implications.

# LITERATURE REVIEW

## **Transactional and Transformational Leadership**

Reference (Almeda *et al.*, 2010), based on the theory of leadership, Transactional Leadership and Transformational Leadership are included in the Management Leadership Theory (Al-Zegaier, 2012). Transactional leadership be simply summarized as a transaction between leaders and subordinates, in an effort to improve performance generally defined as the leadership that based on transactions between managers and workers (Bass, 1990).Reference (Bass, 1990) describe in detail Transactional Leadership as changes in the level or marginal improvement that can be seen as a result of the leadership of the process of exchange: a transaction in which subordinates achieve performance, and achieve the explicit or implicit contract with its leadership. The same definition of reference (Bromley and Kirschner-Bromley, 2007) explains Transformational leadership is recognized and was originally developed (Nguyen, 2009) and recently developed fully (Porter, 1985; Shapiro, 1989). Reference (Porter, 1985) describes the transformational happens when leaders broaden and elevate the interests of the workers, when they create awareness and acceptance of the goals and mission of the group, and when they integrate the workers to look further than just self-interest for the good of the group.

Both transactional and transformational leadership have four characteristics each (Hamilton, 2010). In order to have an understanding of both types of leadership, it is important to review all eight. All eight characteristics work together to create the full range of leadership skills. The first four characteristics described below are transactional leadership characteristics. The first characteristic of transactional leadership is contingent reward, which (Bass, 1990) explains leaders exhibit when they "contract exchange of rewards for effort, promises rewards for good performance, (and) recognizes accomplishments. The second characteristic is management by exception (active) which is when a leader "watches and searches for deviations from rules and standards, (and) takes corrective action. The third characteristic, management by exception (passive) is when a leader "intervenes only if standards are not met" The final transactional characteristic is laissez-faire leadership when a leader "abdicates responsibility (and) avoids making decisions" Transformational leadership is also composed of four characteristics: Charisma / Idealized Influence, Inspiration, Intellectual Stimulation and individualized Consideration, that build upon those of transactional leadership (Dvir et al., 2002). The first characteristic being Charisma, which (Bass, 1990) explains is when a leader "provides vision and sense of mission, instills pride, (and) gains respect and trust." This same characteristic is also described as Idealized Influence (Macher and Boerner, 2012). Idealized Influence is defined as a leader who "consider(s) followers' needs over his or her own needs," and "behaves in a manner consistent to articulated ethics, principles and values (Macher and Boerner, 2012). The term Idealized Influence has been utilized in place of Charisma in various situations, such as training Bass (1999). (Bass, 1990) does use Charisma in defining the transformational leadership characteristics.

In theory, transactional and transformational leadership looks like two different concepts, but it is difficult to separate the two forms of these two leaderships in its use. Studies found that these two concepts are closely related and both are necessary for effective leadership (Judge *et al.*, 2004). Transactional leadership is effective leadership to motivate and increase employee satisfaction. While the transformational leadership needed for self-development, development of others, and connect workers into the system that enables and perpetuates a learning organization.

## **Dynamic Capabilities**

Reference (Teece *et al.*, 1997) define the concept of "dynamic capabilities" as "the firm's ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments". Reference (Ambrosini *et al.*, 2009) stated the following:

Dynamic capabilities have been defined as "the capacity to renew competencies so as to achieve congruence with the changing business environment" by "adapting, integrating, and reconfiguring internal and external organizational skills, resources, and functional competencies". Reference (Eisenhardt, 2000) describe dynamic capabilities as processes that firms can use to obtain, integrate, reconfigure and release resources, leading to new resources and resource configurations (or new positions, in Teece's terms). Dynamic capabilities have a direct effect on firm performance and competitive advantage, as well as an indirect effect through resource reconfiguration.

Although (Eisenhardt, 2000) view competitive advantage as more difficult to achieve through dynamic capabilities than does Teece, their basic chain of logic is very similar to that of (Teece, 2007). In all of these treatments, organizational processes play a central role. It is therefore suggested that dynamic capabilities 'jumps directly to', modeling the change–performance relationship' without considering underlying organizational factors.

## **Knowledge Management**

Knowledge Management is defined as systematic approaches that help emerging and flow of information and knowledge to the right people at the right time to create value. Knowledge management is a process to identify, acquire, organize, and disseminate intellectual assets that are important for long-term performance of an organization (Budiastuti, 2013). Reference (Nguyen, 2009) stated that Knowledge Management includes acquisition process: the ability to seek and obtain entirely new knowledge or create new knowledge out of existing knowledge through collaboration (Inkpen, 1996); conversion process: the ability to make existing knowledge useful' application process: How knowledge is actually used and applied, and protection process: the ability to secure knowledge from inappropriate or illegal use or theft (Hamilton, 2010). Further description, Acquisition-oriented KM processes are those oriented toward obtaining knowledge which can be described by many other terms such as acquire, seek, generate, create, capture, and collaborate, all with a common theme - the accumulation of knowledge (Gold et al., 2001). According to (Chakravarthy, 2005) 'knowledge is accumulated when units within the firm or the organization as a whole gains new understanding'. Conversionoriented KM processes are those oriented toward making existing knowledge useful (Gold et al., 2001) which can be enabled by several processes such as organize (Davenport et al., 1998; Gimenez, 2003); integrate (Grant, 2006), combine, structure, coordinate (Sanchez and Mahoney, 1996) or distribute knowledge (Davenport et al., 1998). Application-oriented KM processes are those oriented toward the actual use of the knowledge (Davenport et al, 1998), making knowledge 'more active and relevant for the firm in creating value' (Bhatt, 2001). Process characteristics that have been associated with the application of knowledge in the literature include storage, retrieval, application, contribution, and sharing (Almeida, 1996). Knowledge protectionSecurity - oriented KM processes are those oriented toward the protection of knowledge within an organization from illegal or inappropriate use or theft (Gold et al., 2001). Specifically, protection encompasses activities that seek to maintain the proprietary nature of a firm's knowledge stocks which include seeking legal protection (via patents, trademarks and copyrights), designing policies to limit turnover, and educating employees

about the types of knowledge they should not share with their peers in other organizations. Firms can also develop technology that restricts or tracks access to vital knowledge (Gold *et al.*, 2001)as well as take a variety of actions to shape characteristics of their knowledge base which increase 'stickiness' and imitation barriers, including tacitly, complexity, and specificity (Dierickx and Cool, 1989; Doz, 2001). When knowledge is applied to existing ends, the size and durability of a firm's CA will be defined by how well protected its knowledge is (Chakravarthy, 2005). It is because knowledge as an asset is the source of a CA only when it is rare and inimitable (Barney, 1991). Therefore, protection processes are very important for an organization at this point, or distribute knowledge (Davenport *et al.*, 1998; Davenport *et al.*, 1996; Kogut *et al.*, 1992).

## Sustainable Competitive Advantage (SCA)

Reference (Coplin, 2002)stated that SCA is a resource and capability of the company and should be difficult to imitate, not easy to be replaced by other resources or capabilities. Reference Nuh (news.okezone.com, 2012) stated that the SCA is a sustainable strategy that regulates the organization away from its competitors. Reference (Madhani, 2009) stated that a resource must meet the criteria of 'VRIN' (valuable, rare, inimitable, and non-substitutable).

Reference (Kotelnikov, 2011) mentions competitive advantage includes a unique, difficult to imitate, superior to the competition, sustainable, and can be applied to various situations. Competitive advantage consists of three parts, the first basic competitive advantage (BCA). Second, revealed competitive advantage (RCA) is reflected by market share. Third, sustainable competitive advantage (SCA).

Generally, competitive advantage has been defined as an advantage, one firm has over a competitor or group of competitors in a given market, strategic group or industry (Kay, 1993). (Fahey, 1989) defines competitive advantage as anything that favorably distinguishes a firm or its products from those of its competitors, from the viewpoint of its customers or end-users. However, the focus here is not merely on the issue of firm's competitive advantage, but to understand its sustainability over time. Sustainability does not refer to a particular period of calendar time, neither does it imply that advantages persist indefinitely (McGrath, 2007) but rather it depends on the possibility and extent of competitive duplication. Conceivably possessing competitive advantage is not the only objective of the firm, but to sustain it is more meaningful and paramount.

Further, the term "sustainable competitive advantage" is used to describe a superior performer's attributes and resources that are unable to be duplicated or imitated by its current or potential competitors poised to enter an industry. Sustainability of the competitive advantage of a firm therefore depends on the possibility of competitive duplication (Barney, 1991). Reference (Barney, 1991) defines competitive advantage as the implementation of a value creating strategy which is not simultaneously being implemented by any current or potential competitors; whereas sustainable competitive advantage is viewed as an implementation of a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy Barney (1991).

#### **Conceptual Framework and Hypotheses**



Figure 1. Conceptual Framework

Conceptual Framework needed to propose the hypotheses, namely:

- H1: Leadership affects to Knowledge Management.
- H2: Dynamic Capabilities affects to Knowledge Management.
- H3: Knowledge Management affect to SustainableCompetitive Advantage.
- H4: Leadership affects to Sustainable Competitive Advantage.
- H5: Dynamic Capabilities affects to Sustainable Competitive Advantage.

Reference (Hamilton, 2010) explain that there are three steps to test the mediation effect. First, to test the effect of each exogenous variables Leadership and Dynamic Capabilities to endogen variable Sustainable Competitive Advantage are not significant. Second step to test the effect of exogenous variables to Knowledge Management as mediating variable are significant. The last step to test the effect of mediating variable to endogen variable is significant.

#### **METHODOLOGY**

A survey conducted at Private Higher Education Institutions (HEIs) in Jakarta. The population is lecturers of 318 private HEIs with academic hierarchy except professor (assistant of expert, lector, and associate professor) totally 110,463 lecturers. The samples determined using triple stage sampling. First stage the sample was calculated by Slovin Formula as in (Sulisworo, 2012);  $n = N/(1+Ne^2)$  where n is sample size, N is total population, and e is 10% margin of error, resulted 100 samples. Second stage the sample of HEIs determined with the same formula from 318 HEIs resulted 77 HEIs. The last stage is proportional random sampling to determine distribution of 100 samples to 77 HEIs.

The data collected from the survey applied to Structural Equation Modelling (SEM) using SmartPLS 3.0.M3. PLS is a powerful method analysis and often referred as soft modelling because it negates Ordinary Least Square (OLS) regression assumptions such data must be multivariate normal distribution and the absence of an exogenous multicollinearity

problems. Reference (Ghozali and Latan, 2015), PLS consists of five steps consecutively: (1) Conceptualization of the model is the first step in PLS - SEM analysis. At this stage of development and conceptual constructs measurement is to review the literature and previous research and then determine the domain constructs. Further specification constructs a conceptual theme to determine the characteristics and construct dimensionality. (2) Define Algorithm Analysis Methods by path or structural weighting. In this step define the sample size to be fulfilled. PLS do not require large amounts of sample, the minimum recommended 30 to 100. (3) Define Resampling Method, uses bootstrapping or jackknifing. The bootstrap procedure is estimating the statistical accuracy from the data in a single sample. The idea is to mimic the process of selecting many samples in order to find the probability that the values of their test statistics fall within various intervals. The samples are generated from the data in the original sample. The data are copied an enormous number of times, say a billion of each group. Samples then are selected in random and the test statistic is calculated for each sample. The distribution of the test statistic for the bootstrap sample can be treated as if it was a distribution constructed from real samples. Therefore, bootstrapping method uses all of the original samples to do resampling. Jackknifing resampling is to assess the effect of each of the groups into the data have been divided, not by the result from that group alone, but rather through the effect upon the body of data that results from omitting that group. SmartPLS 3.0 program only provides a resampling method that is bootstrapping with three alternatives: No Sign Changes, Individual Sign Changes, and Construct Level Changes. (4) Draw Path Diagram to be estimated. It recommended to use nomogram reticular action modelling (RAM) with under the condition: theoretical constructs drawn in the shape of a circle or ellipse, observed variables drawn in the square shapes, asymmetrical relationships drawn in single headed arrow, and symmetrical relationship drawn bay double headed arrow. (5) Model Evaluation to evaluate measurement model by convergent and discriminant validity and composite reliability test of latent construct and to evaluate structural model by R-Square to test the goodness-fit model.

#### **RESULT AND DISCUSSION**

The respondent's characteristics were classified in four categories: gender, working period, academic hierarchy, and education. A majority of the respondent were male (62%), working period 0-5 years 34%' 6-10 years 15%' 11-15 years 16%, 16-20 years 12%, and above 20 years 23%. The academic hierarchy 36% assistant of expert, 39% lector, and 25% associate professor. the majority of respondents have the academic hierarchy assistant of experts. The education of the respondent 28% from undergraduate and 72% from graduate program.

Model Evaluation by SmartPLS 3.0 in measurement model (outer model) was to evaluate outer model includes convergent validity and discriminant validity (Ghozali and Latan, 2015). The validity of the test results can be seen from the loading factor for each indicator of constructs. Rule of thumb typically used between 0.6 - 0.7 for the exploratory research. In this model all dimensions have loading factors > 0.6 except Management by Exception-Active (MBEA) has loading factor 0.410, and Cost Leadership (CL) has loading factor 0.489 those mean that almost all of the dimensions meet convergent validity except Management by Exception-Passive (MBEP) and CL.Discriminant validity relates to the principle that manifest variables of a different construct should not be highly correlated. To test the discriminant validity is the value of average variance extracted (AVE) must be > 0.5. Most of the dimensions have AVE > 0.5 except APL, and AQU (0.477), IC (0.499), II (0,429), and OFC (0.475). These mean majority of dimensions meet discriminant validity except APL, AQU, IC, II, and OFC. For the last five dimensions have some indicators that can be dropped out from the model by bootstrapping process. In addition to the validity of the test, measurement models were also conducted to prove the accuracy, and consistency of the instrument in measuring the construct. In SmartPLS 3.0 program to measure the reliability of a construct done in two ways, namely by Cronbach's Alpha and Composite Reliability. However, the use of Cronbach 's Alpha to test the reliability of a construct would give a lower value (under estimate) so that more advisable to use Composite Reliability (Ghozali, 2012). From the data analysis using SmartPLS 3.0 found that all of the dimensions have Cronbach's Alpha > 0.5 concluded that all of the constructs are reliable. Perfect reliability with Cronbach's Alpha > 0.9 were Knowledge Management (0.931), and Leadership (0.933). High reliability with Cronbach's Alpha 0.7 - 0.9 were Acquisition (AQU) (0.778), Changing and Renewal Capability (CRC) (0.769), Product Differentiation (DIFF) (0,706), Dynamic Capability (DYCAP) (0.887), Environmental Sensing Capability (ESC) (0.765), Individual Consideration (IC) (0,751), Individual Inspiration (II) (0.778), Inspirational Motivation (IM) (0.750), Laisez Faire (LF) (0.751), Protection (PROT) (0.815), Sustainable Competitive Advantage (SCA)(0.829), and Technological Flexibility Capability (TFC) (0.833). Moderate Reliability with Cronbach's Alpha 0.5 - 0.7 were Management by Exception-Active (MBEA) (0.679), Management by Exception-Passive (MBEP) (0.678), and Organizational Responsiveness (OR) (0.659). In terms of Composite Reliability, all of the variables and dimensions have Composite Reliability > 0.7 therefore it confirmed that all of them are reliable.

The other model evaluation was structural (inner) model evaluation. It was measured by coefficient of determination  $R^2$  (R-Square). R Square used to describe the effect of exogenous latent variables to endogenous latent variable does have a strong influence, moderate, or weak.  $R^2 0.75$  (strong), 0.50 (moderate), and 0.25 (weak) (Hair, 2011) in Ghozali (2012). The variables and dimensions have  $R^{2>} 0.75$  (strong) are APL, AQU, CONV, DIFF, II, and KM while  $R^{2<} 0.25$  (weak) are CL (0.239), and MBEA (0.168). Others have  $0.5 < R^{2} < 0.75$ (moderate). It means that only Management by Exception-Active have small effect to Leadership, and Cost Leadership have small effect to Sustainable Competitive Advantage. The weakness of the use of the coefficient of determination is biased against the number of independent variables included in the model. Each additional independent variable, then the R-square is definitely increasing no matter whether these variables significantly influence the dependent variable. Therefore, it is recommended to use the adjusted R-square value. Unlike R square, adjusted R-square value can go up or down when one independent variable is added into the model. In this study  $R^2$  adjusted values decrease compared to  $R^2$  values.

 $F^2$  is also used to evaluate the structural model. It interprets that latent variable predictor has small effect (0.02), medium effect (0.15), and strong effect (0.35). to level structural. In this study, majority  $F^2 > 0.35$  except DYCAP  $\rightarrow$  SCA 0.000 and LEADERSHIP  $\rightarrow$  SCA 0.001.

It concluded that almost all of variables and indicators have strong effect to the model except Dynamic Capabilities to Sustainable Competitive Advantage and Leadership to Sustainable Competitive Advantage have small effect to the model.

A model which is formed by using intervening variables or moderating, then a multiple regression model cannot resolve this issue. Proper analysis technique is path analysis. Path analysis makes it possible to directly examine the relationship between variables and indirect relationships between variables in the model. From the path analysis found that Leadership has strong and positive effects to Contingency Reward (CR), Individual Consideration (IC), Idealized Influence (II), Inspirational Motivation (IM), Intellectual Stimulation (IS), Management by Exception-Passive (MBEP), Laissez Faire (LF), indicated by path coefficient consecutively 0.865, 0,816, 0.803, 0.821, 0.728, and 0.728, while the effected to Management by Exception-Active (MBEA) weak positive 0.41 Dynamic Capabilities affected the four dimensions strong and positive to Organizational Flexibility Capability (OFC), Technological Flexibility Capability (TFC), Changing and Renewal Capability (CRC), and Environmental Sensing Capability (ESC) consecutively shown by path coefficients 0.803, 0.799, 0.804, and 0.857. Knowledge Management affected to Acquisition Process (AOU), Conversion Process (CONV), Application Process (APL), and Protection Process (PROT) strong and positive shown by path coefficients 0.878, 0.819, 0.905, and 0.812. Sustainable Competitive Advantage strong and positively affected to Product Differentiation (DIFF), Organizational Responsiveness (OR), and Supply Chain Management (SCM) shown by path coefficients 0.880, 0.825, and 0.753, weak and positively affected Cost Leadership (CL). From path coefficient also shown that Leadership has weak and positive direct effect to Knowledge Management indicated by path coefficient 0.034 (H1). This did not match to the mediating model that H1 should be significantly affected Knowledge Management (KM) as the mediating variable. Dynamic Capabilities has strong and positive direct effects to Knowledge Management indicated by path coefficient 0.860 (H2). This matched to the mediating model that H2 significantly affects Knowledge Management (KM) as the mediating variable. Knowledge Management (KM) has significant effect to Sustainable Competitive Advantage (SCA) indicated by path coefficient 0.879, this is in accordance with H3 that Knowledge Management (KM) significantly affected Sustainable Competitive Advantage (SCA). The effect of Leadership directly to Sustainable Competitive Advantage did not significant indicated by path coefficient -0.028, this is in accordance with H4, should be did not significant. The effect of Dynamic Capabilities (DYCAP) directly to Sustainable Competitive Advantage did not significant, either. It indicated by path coefficient -0.022. This is in accordance with H5 should be not significant. Figure 2 showed R Square, and Path Coefficients before bootstrapping.

The bootstrapping process resulted all outer weight significance T-statistics > 1.65 and concluded that all of the constructs are valid, from the outer loadings concluded that all of reflective construct are valid with T-statistics > 1.65. Leadership significantly affects Knowledge Management with path coefficient 0.834; T-statistics 2.409 and p-value 0.003; Leadership does not significantly effect to Sustainable Competitive Advantage with path coefficient -0.028, T-statistics 0.304 and p-value 0.761; Dynamic Capabilities does not significantly effect to Sustainable Competitive Advantage with path coefficient 9.022, T-statistics 0.169

and p-value 0.866; Dynamic Capabilities significantly effects to Knowledge Management with path coefficient 0.860; T-statistics 11.517 and p-value 0.000; and Knowledge Management significantly effects to Sustainable Competitive Advantage with path coefficient 0.879, T-statistics 7.279 and p-value 0.000.



Figure 2 SmartPLS 3.0 Output Before Bootstrapping



Figure 3 SmartPLS 3.0 Output After Bootstrapping

# **CONCLUSION AND IMPLICATION**

To identify the research hypotheses from bootstrapping process could be concluded that all outer weight significance T-statistics > 1.65 and concluded that all of the constructs are valid, from the outer loadings concluded that all of reflective construct are valid with T-statistics > 1.65. Leadership significantly effects Knowledge Management with path coefficient 0.834; T-statistics 2.409 and p-value 0.003; Leadership does not significantly effect to Sustainable Competitive Advantage with path coefficient -0.028, T-statistics 0.304 and p-value 0.761;

Dynamic Capabilities does not significantly effect to Sustainable Competitive Advantage with path coefficient -0.022, T-statistics 0.169 and p-value 0.866; Dynamic Capabilities significantly effects to Knowledge Management with path coefficient 0.860; T-statistics 11.517 and p-value 0.000; Knowledge Management significantly effects to Sustainable Competitive Advantage with path coefficient 0.879, T-statistics 7.279 and p-value 0.000. Figure 3 shown T-Statistics after bootstrapping.

Overall concluded that Leadership and Dynamic Capabilities significantly affect Sustainable Competitive Advantage Mediated by Knowledge Management. After all step of the study completed, there are two dimensions that does not effect to the model i.e. Management by Exception-Active which has four indicators (leaders control lecturers' performance, trace errors, correct misappropriation, and take corrective action). It implied that the leaders of higher educations have to do these actions more intensive to encourage the lecturers as their subordinates to achieve sustainable competitive advantage. The second dimension that does not effect to the model is Cost Leadership. It is a strategy where the company (organization) sells products and services to customers at prices lower than its competitors. In this study Cost Leadership has two indicators, to compete with the competitor with low cost, and give high value to the customer with low cost. Firms (organizations) that succeed in cost leadership have internal strength: access to the capital required to make a significant investment in production assets, this investment represents a barrier to entry that many firms may not overcome, skill designing product for efficient manufacturing, high level of expertise in manufacturing process engineering, and efficient distribution channel (Porter, 2010). HEIs can fulfill theseinternal strengths by building all infrastructures needed to conduct operations especially rooms complete with the sophisticated equipment, increase efficiency, recruitexpert and educate human resources (employees and lecturers), and organize effective distribution channel throughout the country.

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