

The Implementation of Indonesia's Three Principles of Higher Education Standard towards Increasing Competitiveness of Local Universities for ASEAN Economic Community

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ABSTRACT

This research examined the effectiveness of the implementation of Indonesia's three principles of Higher Education known as Tri Dharma Perguruan Tinggi comprising education and teaching, research and community service provided by the universities. More specifically, this research investigated the influences of leadership, strategic planning and human resources on the effectiveness of the implementation Tri Dharma Perguruan Tinggi as the standard setting in measuring Indonesian universities' performances. It is underlined that strong leadership, well-strategic planning and qualified human resources are essential for universities in providing quality education and teaching, research and community services. A sample consisting of 570 lecturers working and holding managerial position at universities in the Province of Sumatera Utara, Indonesia, were selected. Results of data analyses using partial least square (PLS) suggested that leadership, strategic planning and human resources influence the effective implementation of Tri Dharma Perguruan Tinggi. Meanwhile, the effective human resources serves as the pivotal driver that is needed for creating universities' competitiveness. Accordingly, an effective leadership determines the outcome of strategic planning required for achieving excellence competitiveness of the universities.

Keywords: Leadership; Strategic Planning; Human Resources; Three Principles of Higher Education

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INTRODUCTION

This year, Indonesia has participated in ASEAN Economic Community. It is of urgency that Indonesia be ready to face this

challenge. This is due to the fact that foreign products and labours have freely entered the Indonesian market. Indonesia, especially the North Sumatra region, is one of the closest international gates to the neighbouring countries such as Thailand, Singapore, and Malaysia. Therefore, it is necessary to equip Indonesian human resources with high capability and competitiveness qualities. In order to achieve this goal, both the government and the country's higher education should cooperatively play their roles to produce skilful human resources and competitive industries in Indonesia.

This is pursuant to the mandate of the Regulations of Republic Indonesia No. 12, year 2012, which states that the Three Principles of Higher Education are the obligation of universities to conduct education and teaching, research and community service. Based on this government's regulation, higher education institutions in Indonesia, especially in North Sumatra, are expected to have higher competitiveness in the labour market. The application of the Three Principles of Higher Education in North Sumatran universities is projected to improve their sustainable competitiveness based on Value, Rarity, Imitability and Organization (Barney, 1991). In addition, Bobe (2012) states that the three competencies in higher education include the activities of teaching, research and community service. In order to create sustainably competitive universities, the concept framework implemented in Barney's

work (2006, p. 129) needs to be reviewed. It suggests a form of heterogeneous relationships among resources: immobility: value, rarity, imitability and organisation towards sustainable competitiveness that can be summarised into a framework implemented in analysing any potential resources in company that lead to the ultimate sustainably competitive resources. A good university is capable of providing values to meet the needs of any industry to satisfy customers through their teaching and learning processes, applicative research for industrial needs, as well as applicative and practical research for community service.

Universities have to be able to conduct the Three Principles of Higher Education. In order to implement the three concepts in the universities, leadership and strategic planning are of necessity. Messah and Mucai (2011) explained some factors influencing the implementation of strategic management planning by its ruler such as the influence of managerial behaviour, appraisal management, resource allocation practices and institutional policy management. Leadership plays a major role in determining the quality of institutional resources in order to implement the three principles. Huang and Lee (2012) pointed out that human resource factors (including the lecturer's quality), process strength, organisational policy and curriculum are significant towards the development of competitive value in higher education institutions in Taiwan. In line with the previous statement,

Pesic et al. (2012) suggested that the VRIO (Value, Rarity, Imitability and Organisation) framework enables a wider opportunity for the institution manager to evaluate all activities conducted within Human Resource (HR) division. VRIO developed by Barney is based on Resource Based View (RBV) theory covering the principles of Value, Rarity, Imitability and Organisation (VRIO). Therefore, the VRIO framework may inspire the implementation of the Three Principles of Higher Education.

The impacts of effective human resources, leadership and strategic planning on organisation's competitiveness have gained significant interests from several scholars. Some of them have highlighted the interconnection among human resources, leadership and strategic planning (see for example, Fairholm, 2009; Messah & Mucai, 2009; Bobe, 2012; Pessic, 2012; Anstine, 2013; Kipto & Mwingi, 2014) highlighting direct and indirect relationships of effective human resources, leadership and strategic planning with organizational competitiveness. However, to the best authors' knowledge, there is little systematic research that has analysed the link between effective implementation of these three important aspects towards the creation of excellence competitiveness in higher-education organisation. This paper aims to investigate the effects of direct and indirect influences among effective human resources, leadership, strategic planning and universities' competitiveness reflected on

Barney's RBV framework (1991) at public and private universities in the province of North Sumatera. As the third largest province in the Republic of Indonesia, the North Sumatera Province has been set as the main gate of the nation to showcase the country for the international market. In particular, given the fact that ASEAN will soon implement the ASEAN Economic Community at the opening of 2016, the importance of having quality higher-educational services in Indonesia is pivotal in preparing the country to play a more active role in the region.

LEADERSHIP AND ITS CORRELATION WITH STRATEGIC PLANNING

Universities have to implement the three Principles of Higher Education. In order to implement the three principles, leadership and strategic planning are unavoidably vital. Messah and Mucai (2011) explained some factors influencing the implementation of strategic management planning such as managerial behaviour, appraisal management, resource allocation practices and institutional policy management. Morgan (2011) argued that in order to create a success in a complex environment, a leader should set interest priority to make sure that the relationship between the leader and strategic planning is based on the true leadership role and its responsibility to build up the basic strategic acts, as well as employ strategy as a form of plans to work. In

addition, Kipto and Mwingi (2014) asserted that leadership in an organisation is the key to a success where a leader should be able to achieve company's vision, mission and organisational objectives. The failure in leadership will affect the success of strategic planning. Fairholm (2009) claimed that leadership is a matter of planning that leads to specified managerial tasks. Hinton (2012) projects that leadership has to be crystal clear in terms of its process planning where a reliable leader in the planning stage will strengthen the institution commitment for that particular process.

Hypothesis 1: Leadership Influences Strategic Planning.

LEADERSHIP CORRELATES WITH HUMAN RESOURCES

The role of leadership role in higher education is crucial. A leader must be able to manage the existing human resources. The human resource management should reflect the Value, Rarity, Imitability and Organisation (VRIO) framework. Pesic (2012), based on the results of his study, claimed that a good leadership may produce valuable, rare and imitable human resource. Dunford, Snell, and Wright (2001) acknowledged that human resource management system would develop value and change towards intellectual/knowledge capital, shaping the core competence. Messah and Musai (2011) believe that poor managerial act in resource allocation significantly influences on the

implementation of strategic planning as it encompasses a key determining power for decision making in an institution. Terziovski (1999) explained that leadership category, human resource management and customer focus are significant predictors of a strong operational performance.

Hypothesis 2: Leadership Influences Human Resource.

STRATEGIC PLANNING WITH THREE PRINCIPLES OF HIGHER EDUCATION

In strategic planning, the implementation of the three Principles of Higher Education in universities is significant. Through cautious planning, activities such as teaching and learning, research and community service can be comprehensively conducted. Furthermore, the implementation of research results in the teaching and learning processes is necessary due to the need to develop and improve applicative learning. Kettunen (2011) observed that from the results of curriculum implementation, a betterment needs to be done for research based education and development in order to arrive at 'act' phase. OECD (2010) underlines that leadership in executive level is one of the determining factors. Active participation of faculty deans is also important because they are the key persons in decision making. They may create strategic approach, build and support community service, and maintain innovation in daily classroom practices. Bobe (2012)

suggests that leaders are to understand their institution's research capability, learning process and teaching and learning processes in their particular department.

Hypothesis 3: Strategic Planning Influences the Three Principles of Higher Education.

HUMAN RESOURCE AND THE THREE PRINCIPLES OF HIGHER EDUCATION

Higher Education institutions have potential Human Resources (Lecturers) that have to be able to properly implement the three higher education principles. Nowadays, a university's reputation and ranking are influenced by its research publication. According to Anstine (2013), the amount of journal publication and the research frequency conducted by lecturers affect greatly towards university ranking. Prasetianingrum, (2009) underlined particular issue indicating that for an educational institution, research is the main product from teaching and learning processes delivered from the lecturer to the students. The development of lecturers' knowledge can be observed by the amount of their published research. In addition, their ability to transfer knowledge to serve the community is a must. Accordingly, the lecturer has the important role at the university level needed to support the successfulness of the implementation of the three principles of higher education (Hidayat, 2008).

Bobe (2012) claimed that the basic competences comprise the activities of

teaching, research and community service. Power and McDougall (2005) identified five competences deemed to achieve competitiveness, namely, transferring technology from university to industry (measured by the number of company-industry having agreement and cooperation with the university); the income from Research and Development; faculty quality (measured by the amount of the lecturers' name being cited or quoted by other researchers); and the patents received by the university (Bobe, 2012).

Hypothesis 4: Human Resources Influence the Three Principles of Higher Education.

RESEARCH METHODOLOGY

This study was conducted in North Sumatera Province. The respondents were universities in that province. Based on data by the Directorate General of Higher Education, there are 35 private universities and 2 state universities in the province. This study applied questionnaires as the data collection instrument. The study respondents were all the functionaries comprising the 37 universities. The total sum of the respondents was 1,870 people. The respondents were asked to rate the questions in the Questionnaire on a five-point Likert scale (Ranging from 1 = Never and 5 = Always). According to Hair et al. (2010, p. 662), the bigger the sample in a study, the more stable the data will be. The total of the returned or answered questionnaires was 570. This study used Partial Least Square (PLS).

STUDY RESULTS

In order to observe the results of this study, there is a need to pay attention to Average

Variance Extracted (AVE), Composite Reliability, Cronbach Alpha, and Loading Factor in the application of PLS as stated by Hair et al. (2010).

Table 1
Composite Reliability, R Square, AVE and Cronbach Alpha

Construct	Composite Reliability	R Square	AVE	Cronbach Alpha
Leadership	0.950506		0.553121	0.957033
Strategic Planning	0.960988	0.756865	0.557363	0.910728
Human Resources	0.926045	0.816630	0.547390	0.943977
Three Principles in Higher Education	0.954057	0.821771	0.538102	0.948480

Evaluation of Research Model Structure

Based on the data in Table 1 above, AVE was above 0.5. According to Hair et al. (2010, p. 709), if the AVE score is above 0.5, the model is stated as good. Furthermore, the Cronbach Alpha and Composite Reliability were above 0.7. These mean that the tool is very high in reliability. The R Square

in model is above 70%, which could be interpreted as this variable giving significant influence on the implementation of the three Principles of Higher Education as much as 0.821771 or 82.18%.

Structural Model Results towards Hypothesis

To observe whether the hypotheses were accepted or rejected, the measurement of

Table 2
Path Coefficients (Mean, STDEV, T-Values)

Construct	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STERR)
Human Resources -> Three Principles In Higher Education	0.419872	0.420476	0.040025	0.957033
Leadership -> Human Resources	0.903676	0.902770	0.014042	0.910728
Leadership -> Strategic Planning	0.869980	0.870048	0.015552	0.943977
Strategic Planning -> Three Principles In Higher Education	0.520847	0.521689	0.036390	0.948480

hypotheses significance utilised T-statistics and T-table scores. If T-statistics score is

higher than T-table, the proposed hypothesis is accepted. In addition, if the T-statistic is (>1.96), the hypothesis can also be accepted. Table 2

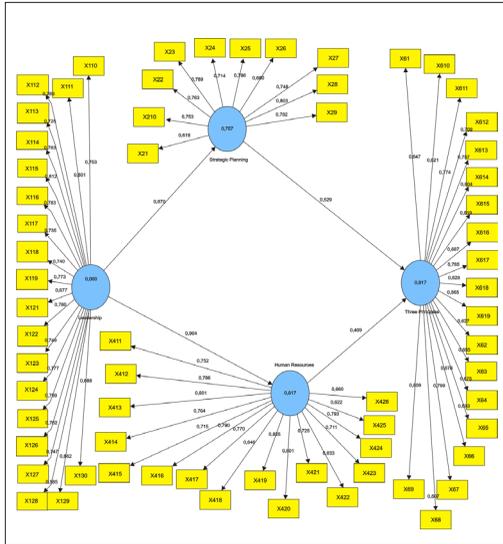


Figure 1. Evaluation Result of Structural Model

Based on the hypotheses in this data in Table 2 above, study are accepted. the T-statistic score The analysis for each variable is results in the form higher than 1.96, and of presented in the thus all the proposed following Figure 1.

As can be seen in Table 3, all measures are valid and reliable. All loaded factors are above the recommended threshold, ranging from 0.595 to 0.904. The statistical path coefficients and their level of significance indicated that H1, H2, H3 and H4 are supported in all the models. The path analysis results also proposed that effective

Table 3
Outer Model (Weights or Loadings)

Leadership		Strategic Planning		Human Resources		Three Principles	
X11	0,753	X21	0,618	X311	0,752	X41	0,647
X12	0,801	X22	0,753	X312	0,786	X42	0,627
X13	0,783	X23	0,763	X313	0,801	X43	0,655
X14	0,812	X24	0,789	X314	0,764	X44	0,675
X15	0,783	X25	0,714	X315	0,755	X45	0,653
X16	0,735	X26	0,796	X316	0,79	X46	0,678
X17	0,74	X27	0,68	X317	0,77	X47	0,799
X18	0,773	X28	0,803	X318	0,646	X48	0,807
X19	0,78	X29	0,782	X319	0,825	X49	0,809
X120	0,749			X320	0,804	X410	0,82
X121	0,777			X321	0,725	X411	0,774
X122	0,758			X322	0,633	X412	0,709
X123	0,702			X323	0,711	X413	0,757
X124	0,747			X324	0,7393	X414	0,804
X125	0,585			X325	0,622	X415	0,81
X126	0,662			X326	0,66	X416	0,687
X127	0,688					X417	0,785
						X418	0,828
						X419	0,565

human resources are the pivotal drivers to the creation of universities' competitiveness, while an effective leadership is needed towards developing the best strategic planning for further improving universities excellence competitiveness.

Leadership → Strategic Planning. From the previously conducted analysis on the influence of leadership towards strategic planning, the results showed that the parameter coefficient was 0.869980 and t-statistic was as big as 55.939578 (t-statistic score > 2.0). If the t-statistic score is above 2.0, the relationship between the two variables is significant, whereas the coefficient score of 0.869980 suggests some positive influences between the two variables. This study supports another research by Herlambang et al. (2013) which claims that leadership and strategic planning may influence higher education organisational performance. Furthermore, this study is in line with Kipto and Mwig (2014) who stated that leadership in an organisation is the underlying factor to determine success where leadership has to be able to regulate and achieve company's vision, mission and objectives. In addition, this study agrees with Hinton (2012) who has pinpointed that leadership should be clear in terms of planning process in which the leader will strengthen the institutional commitment for that particular process. Thoyib (2005) argues that leadership style implemented by a leader affects the decided strategy and employees' performances.

Leadership → Human Resources. In the case of the influence of leadership towards human resources, the study results showed that the parameter coefficient was 0.903676 and the t-statistic score was 64.354422 (t-statistic score > 2.0). The t-statistic score is above 2.00, showing that the correlation between the two variables is significant; whereas the coefficient score of 0.903676 suggests the positive influence between the two variables. This finding required that a leader has to have the capability to manage human resource available within his/her university. The existing human resource in an institution is a powerful asset to produce graduates with high competitiveness. The finding matches Narimawati's (2008) suggestion that a lecturer is the main asset owned by a higher education institution; therefore, there is a necessity to comprehend the importance of intellectual capitals such as competence, commitment and work control for lecturers in order to arrive at work synergy, leading to high quality of graduates with high competitiveness value in the labour market, as expected by the users. Sumardjoko (2010) asserts that leadership and organisational culture contribute significantly towards achievement of motivation. Samson and Terziovski (1999) stated that leadership category, human resource management and customer focus are the strongest significant predictors for operational performance.

Strategic Planning → Three Principles of Higher Education. According to the

third hypothesis test, it was concluded that strategic planning affects positively on the implementation of the three Principles in Higher Education. It was proven by the t-statistic score reaching 14.312865, which is above the required t-table score (>2.0) and the parameter coefficient of 0.520847. Therefore, the two variables in this research, the three Principles in Higher Education and strategic planning are positively and significantly correlated. This hypothesis can be proven when a leader has to implement the principles in developing his/her strategic plan. Bobe (2012) acknowledged that a leader should comprehend the development of research capability, as well as the teaching and learning processes in their department. Furthermore, in the teaching and learning processes, any research results should be put into practice and then the activity should deal with the necessity to develop and provide good services to community in general since the experience gained through the learning processes in university level will be brought to the future workplace. Apriani (2011) suggested that leadership and effective implementation of the three principles of higher education go in the same direction. If the leadership skill is improved, the implementation of the three principles will effectively increase as well.

Human Resources → Three Principles in Higher Education. Based on the results of the third hypothesis test, it is concluded that human resource affects positively towards the three Principles in Higher Education. This is proven by the t-statistic score reaching 10.490254 exceeding its

required t-table score, which is > 2.0 and its parameter coefficient of as much as 0.419872. Therefore, human resource and the three principles are significantly correlated. This finding is supported by Narimawati (2008) who claims that lecturers are the core asset in higher education institution; thus, it is necessary to comprehend the intellectual capital such as lecturers' competence, commitment and work control to shape work synergy as demanded by the users of the product. The lecturers are one of the determining factors to conduct knowledge based research as the learning material for university students. Therefore, applied research would produce high quality graduates who are easily absorbed in work field. In addition, human resources should have competence in designing learning processes. Mason et al. (2009) discovered that structured work experience and stakeholders' engagement in designing any degree programme would create a positive relationship towards the probability of the graduates' fast job gaining upon finishing their programme. Kandiko and Mawer (2013) argued that university students discuss their learning experiences. This requires proper management, high standard and quality of the courses for degree programme in a fine curriculum structure.

CONCLUSION

The study results showed that in order to arrive at competitiveness in higher education institution, the three Principles of Higher Education including education and

learning, research and community service needed to be effectively implemented. In order to achieve this goal, every university requires a reliable leader. Pesic (2012), based on his study's results, claims that leadership may produce valuable, rare, imitable human resources. Sadiq (2014) states that there is a positive relationship between transformational leadership and organisational excellence. Higher education institution excellence can be observed from the graduates' quality as the result of learning processes. In addition to the graduates' quality, the number of research quoted and cited by other academia also determines the ranking. Lecturers' quality might be measured by their implementation of the Three Principles. Jenita (2014) asserts that graduates' quality has a positive correlation with lecturers' performance; when lecturers' performance increases significantly, the quality of the graduates is also improved. The role of the leader and strategic planning are also significant. Hill and McGregor (2003), from their study, highlight that lecturers' quality and a supportive system for university students are indispensable factors that determine education quality.

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REFERENCES

- Anstine, J. (2013). Graduation rates at U.S colleges and universities: a large data set analysis. *Business Education & Accreditation*, 5(2), 55-64.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120.
- Bobe, B. J. (2012). Management control systems, strategy implementation and capabilities development in university academic units: impacts on performance (Doctoral dissertation, RMIT University). Retrieved from <https://researchbank.rmit.edu.au/eserv/rmit:160082/Bobe.pdf>
- Fairholm, M. R. (2009). Leadership and organizational strategy. *The Innovation Journal: The Public Sector Innovation Journal*, 14(1), 3-16.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7th ed.). Upper Saddle River, NJ: Pearson Education.
- Herlambang, T., Afnan T, E., Sudiro, A., & Noermijati. (2013). Analysis of Competitive Advantage in the perspective of Resources Based View. *IOSR Journal of Business and Management (IOSR-JBM)*, 10(1), 30-49. Retrieved from www.iosrjournals.org
- Hidayat, D.S. (2008). Strategi Membangun Kompetensi Organisasi Dalam Rangka Meningkatkan Kinerja Pengurusan Tinggi Swasta (PTS) Di Jawa Tengah. (Tesis, Program Pascasarjana). Universitas Diponegoro.

- Hill, Y., Lomas, L., & MacGregor, J. (2003). Students' perceptions of quality in higher education. *Quality Assurance in Education, 11*(1), 15-20. doi: 10.1108/09684880310462047
- Hinton, K. E. (2012). *A practical guide to strategic planning in higher education*. Ann Arbor, MI: Society for College and University Planning.
- Jenita, J. (2014). Analisis Pengaruh Motivasi Dan Pelaksanaan Strategi Sdm Terhadap Kinerja Dosen Serta Implikasinya Pada Kualitas Lulusan (Survey pada PTS di Provinsi Riau). *Jurnal Ilmiah Ekonomi dan Bisnis, 11*(2), 482-510.
- Kandiko, C. B., & Mawer, M. (2013). *Student expectations and perceptions of Higher Education*. London: King's Learning Institute.
- Kiptoo, K. K., & Mwirigi, F. M. (2014). Factors That Influence Effective Strategic Planning Process In Organizations. *IOSR Journal of Business and Management (IOSR-JBM), 16*(6), 188-195.
- Mason, G., Williams, G. C., & Cranmer, S. (2009). Employability Skills Initiatives in Higher Education: What Effects Do They Have on Graduate Labour Market Outcomes? *Education Economics, 17*(1), 1-30. doi: 10.1080/09645290802028315
- Messah, O. B., & Mucai, P. G. (2011). Factors Affecting the Implementation of Strategic Plans in Government Tertiary Institutions: A Survey of Selected Technical Training Institutes. *European Journal of Business and Management, 3*(3), 85-105.
- Morgan, S. L. L. (2011). Strategic planning and leadership: renewing the relationship to reclaim the rewards. *Cuadernos Latinoamericanos de Administración, 7*(12), 9-20.
- Narimawati, U. (2008). Peranan Modal Intelektual Dosen dalam Menciptakan Kualitas Lulusan. *Majalah Ilmiah Unikom, 6*(2), 143-156.
- OECD Publishing. (2010). *Learning Our Lesson: Review of Quality Teaching in Higher Education*. OECD Pub.
- Pesic, M. A., Milic, V. J., & Stankovic, J. (2012). *Application of VRIO Framework for Analyzing Human Resources Role in Providing Competitive Advantage*. In Proceedings of the Tourism and Management Studies International Conference Algarve (pp. 575-586).
- Powers, J. B., & McDougall, P. P. (2005). University start-up formation and technology licensing with firms that go public: a resource-based view of academic entrepreneurship. *Journal of Business Venturing, 20*(3), 291-311.
- Prasetyaningrum, I. D. (2009). Analisis Pengaruh Pembelajaran Dan Kualitas Pelayanan Terhadap Kepuasan Mahasiswa Dan Loyalitas Mahasiswa (Studi Kasus Pada Undaris Ungaran (Master's thesis). Universitas Diponegoro, Semarang, Indonesia.
- Sadiq, M. A. (2014). Transformational leadership, knowledge management, entrepreneurial orientation and organisational excellence in the higher education institutions in Nigeria (Doctoral dissertation). Universiti Utara Malaysia, Sintok, Kedah, Malaysia. Retrieved from <http://etd.uum.edu.my/4499/>
- Samson, D., & Terziovski, M. (1999). The relationship between total quality management practices and operational performance. *Journal of Operations Management, 17*(4), 393-409. doi: 10.1016/S0272-6963(98)00046-1
- Sumardjoko, B. (2010). Faktor-Faktor determinan Peran Dosen Dalam Penjaminan Mutu Perguruan Tinggi. *Cakrawala Pendidikan, 3*(3), 294-310.
- Thoyib, A. (2005) Hubungan Kepemimpinan, Budaya, Strategi, dan Kinerja: Pendekatan Konsep. *Jurnal manajemen dan kewirausahaan, 7*(1) 60-73.
- Wright, P. M., Dunford, B. B., & Snell, S. A. (2001). Human resources and the resource based view of the firm. *Journal of Management, 27*(6), 701-721. doi: 10.1016/S0149-2063(01)00120-9

