

RECOGNIZING HOW UNIVERSITY SUSTAINABLE PERFORMANCE WITH STRATEGIC AGILITY AS A MEDIATING VARIABLE

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Abstract

Universities in Indonesia, in a phase of very tight competition in higher education services, of course, good management of higher education organizations is needed without neglecting its special aspects, not only through the application of the marketing concept, every individual in the organization must be able to see the vision and mission to be achieved. . Then supported by the preparation of the right tactical strategy so as to create a competitive advantage for tertiary institutions. This study aims to determine the effect of the relationship between Competitive Advantage, Digital Transformation and Resource Advantages on Sustainable Performance in tertiary institutions through Strategy Agility as a mediating variable. This research method was carried out by path analysis using Partial Least Square (Smart-PLS) software version 3.0 with a population of 66 private tertiary institutions located in the LLDikti III environment, namely private tertiary institutions, 198 respondents were taken using the random sampling method. The results of the study prove that Competitive Advantage has a positive and significant effect on Strategic Agility, Digital Transformation has a positive and significant effect on Strategic Agility, Resource Excellence has a positive effect on Strategic Agility, Competitive Advantage has a positive and significant effect on Higher Education Sustainable Performance, Digital Transformation has a positive effect and significant effect on Higher Education Sustainability Performance, Resource Advantage has a positive and significant effect on Higher Education Sustainability Performance, Strategic Agility has a positive and significant effect on Higher Education Sustainability Performance.

Keywords: Competitive Advantage, Digital Transformation, Resource Advantages, Strategy Agility, Sustainable Performance of universities

1. INTRODUCTION

The challenges of universities in facing changes in the business environment that occur globally trigger an increasing intensity of competition between higher education service providers, so that each higher education service provider will try to offer quality higher education services, (Rohman et al., 2022; Soeltonet al., 2022). According to Law Number 12 of 2012, higher education as part of the national education system has a strategic role in educating the nation's life and advancing science and technology by paying attention to and applying humanities values as well as sustainable cultivation and empowerment of the Indonesian nation. In facing the competition for higher education services, it is necessary to have proper management of

universities and not leave an ideal foundation, not only through the application of marketing concepts, every individual in higher education must be able to see the vision and mission which is then supported by the preparation of the right tactical strategy so as to be able to create a sustainable competitive advantage for universities. In the LLDIKTI III area, based on the LLDIKTI report, it shows that of the 66 universities, none of them are included in the highest cluster, namely cluster I, but only 18 colleges (universities) or 27% of the total are included in cluster II. There are 18 colleges (universities) with a score range that is included in cluster II, namely 1,600 to 2,700. It can be concluded that there are not many universities that have not maximized sustainable performance. For this reason, more in-depth knowledge is needed to understand what factors are the causes of the increase in Sustainable Performance of universities. According to the Harvard Business Review (2012) to be able to improve the Sustainable Performance of Higher Education in a sustainable manner, Higher Education must create growth conditions that require joint attention. Helping employees to grow and remain enthusiastic at work but also can improve higher education's Sustainable Performance in a sustainable manner. To improve performance, universities can focus on resource advantages and competitive advantage strategies (Soelton et al., 2021; Rohman et al., 2022; Ferdinand et al., 2012). The resource advantage theory builds on the fallacy of focusing on higher education strategies in the pursuit of higher education excellence. Traditionally, universities have tended to focus on industry competition. The ability to create these three conditions will generate profits and improve sustainable university performance (Ferdinand et al., 2012). According to Hunt (2011) briefly, the theory of resource advantage emphasizes the importance of (a) market segments, (b) heterogeneous tertiary resources (c) comparative advantages/weaknesses in terms of resources (d) competitive advantage/weakness market position.

Given the increasingly difficult demands and challenges of society, many parties hope that tertiary institutions will have professional and quality human resources. At present the need for university graduates who have a global (world-class) paradigm with Indonesian national identity and the ability to build networks that are able to seize competition in the future is felt. Thus, tertiary institutions must be based on the idea that education with a paradigm in the identity of the Indonesian nation will be stronger and able to compete compared to education with only a local paradigm. Therefore, the role of a leader who has high knowledge, capability and creativity in an effort to improve self-quality to give birth to better performance. To achieve the above, many efforts must be prepared by the government to advance the world of higher education. These efforts can be seen in improving the curriculum, adding facilities and infrastructure to support the teaching and learning process, and developing lecturers. However, the efforts made to improve the quality of education in solving problems that occur in society are inadequate and still need to be studied. Nationally, the challenges for universities in the future can actually be seen as follows: (1) the challenge for survival is that universities must be able to synergize with industry and the government. (2) The challenge of regional autonomy requires a workforce capable of working together to develop the region. (3) The challenge is to look at the problem from an interdisciplinary perspective, the development of higher education is no longer fixated on a scientific focus but has widened in a sectoral context. (4) Challenges related to the role of the government are increasingly reducing its financial role in organizing

higher education. (5) The challenge for the entry of foreign universities into Indonesia is unstoppable, while the industry will find it easier to find competent workers. Education organizers and leaders, especially private tertiary institutions win the things described above, and have the ability to deal with them (Ramli & Soelton, 2018; Rohman et al., 2022; Asiah, 2017).

Meanwhile, competitive advantage is also one of the strategies to improve higher education's Sustainable Performance. According to Porter in Buldan (2020) states that to carry out the right strategy, tertiary institutions must pay attention to consistency tests as follows: (a) internal consistency, tertiary institutions must set goals that are rational and affordable. It must also have a policy that supports target prohibition, which governs the college pathway as a whole. (b) Environmental adaptation, targets and policies to be set must be able to create opportunities and adapt resources relative to challenges. Universities have to threaten the right time against the current environment and to deal with external interests. (c) Adjustment of resources, the availability of resources must be equal to the superiority of competitors and the implementation strategy must be timely so that universities are able to make changes. (d) Communication and implementation, goals and objectives of tertiary institutions must be truly understood by all members. There must be mutual agreement between targets and policies relative to strategy implementation. Managers must be able to execute strategies efficiently and effectively. This is also supported by several previous studies (Ramli & Soelton, 2018; Sari et al., 2021; Magnusson et al., 2009; Seggie & Griffith, 2009) which states that resource advantage theory is a competition theory developed and applied in the marketing strategy literature and is a factor for can improve Sustainable Performance. Previous research revealed several findings related to sustainable performance. Some of the things that affect sustainable performance include competitive advantage, digital transformation, resource advantage, and strategic agility. The notion of competitive advantage itself has two different but interrelated meanings. The first definition is an emphasis on superiority or superiority in terms of resources and expertise possessed by universities. Universities that have competence in marketing, manufacturing, and innovation can be used as a source to achieve competitive advantage. According to Martini (2017) through these three competency areas, universities can develop strategies to produce products that sell well in the market. While the second meaning is the emphasis on excellence in service so far. This understanding is related to the university's position compared to its competitors. Universities that continue to pay attention to the development of their performance and seek to improve this performance have the opportunity to achieve a better competitive position. This research is only limited to the sphere of influence of Competitive Advantage, Digital Transformation and Resource Advantage on the performance of universities in the LLDIKTI three region with Strategic Agility as the mediation variable.

2. LITERATURE REVIEW AND HYPOTHESES

This research aims to develop a new concept that can be used to bridge the gap of the influence of strategic management in maintaining a sustainable performance of higher education to improve the Sustainable Performance of university. Based on the literature review and the

development of the hypothesis previously stated, the conceptual framework of research that can be proposed is as follows:

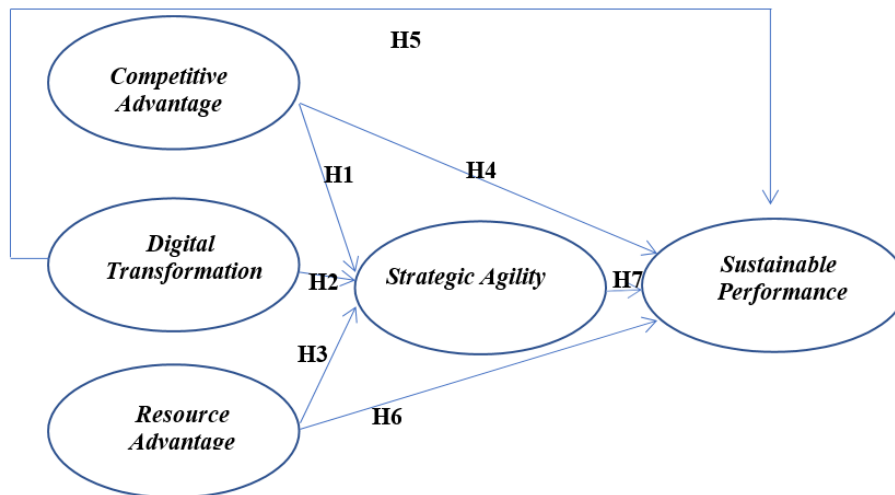


Figure 1: Conceptual Framework of Research

Research Hypotheses follows:

1. **H1:** Competitive Advantage has a positive and significant effect on Strategic agility
2. **H2:** Digital Transformation has a positive and significant effect on Strategic agility.
3. **H3:** Resources Advantage has a positive and significant effect on Strategic agility
4. **H4:** Competitive Advantage has a positive and significant effect on the Sustainable Performance of Higher Education. On the Sustainable Performance of Higher Education.
5. **H5:** Resources Advantage has a positive and significant effect on the Sustainable Performance of Higher Education.
6. **H6:** Digital Transformation has a positive and significant effect the Sustainable Performance of Higher Education.
7. **H7:** Strategic agility has a positive and significant effect on the Sustainable Performance of Higher Education.

3. RESEARCH METHOD

This research was conducted at universities in the LLDIKTI III area and in this process it takes time for the research to be carried out from January 2020 to December 2022. The population in this study is university leaders who are permanent lecturers of universities in the LLDIKTI III region, namely rectors, vice-rectors and deans or deputy deans. According to Higher Education Statistics data in LLDIKTI Region III as of November 10, 2021, there are as many as 66 universities, especially private universities. Saturate samples was taken by making the

population in the LLDikti III Jakarta area as a sample, consisting of 66 rectors, 66 vice-rectors and 66 deans, so that the total sample used was 198 respondents. And the design of this study is a combination of inferential causal explanatory research. The explanatory research method was used because in this study the relationship between the variables studied using the PLS-SEM (Partial Least Square-Structural Equation Modelling) method. In the study, there are variables that will be studied consisting of freely bound and mediated variables. The free variables in this study include Competitive Advantage, Digital Transformation and Resources Advantage.

The measurement scale used is an interval scale or often called a likert scale with a data collection method; Observation, Questionnaire, Literature Study. The data analysis method in this study uses Component or Variance Based Structural Equation Modeling where in data processing using the Partial Least Square (Smart-PLS) program version 3.0 PLS (Partial Least Square) is a method of Variance Based SEM.

4. RESULTS

The sample units taken were structural officials or leaders of universities who are permanent lecturers of universities in the LLDIKTI III area, including 198 questionnaires with a population of 66 Private Universities located in the LLDikti III area and The number of statements is 68 types of statements with a choice of answers on a scale of 1-5, so it can be known that the description of each indicator is as follows:

Table 1: Description of Research Variables

Variable Position	Variable	N	Minimum	Maximum	Mean	Std. Deviation
Exogenous Variables	CA	198	11	45	36.197	5.43317
	DT	198	33	90	70.5303	9.27343
	RA	198	22	90	69.2626	11.96915
Mediation Variables	SA	198	8	30	24.1061	3.96096
Endogenous Variables	SP	198	35	85	67.6667	8.78219

To test the normality of the distribution of data used in the analysis, researchers used statistical tests that have been provided in the Partial Least Square program, namely with the outer model test. According to Avkiran and Ringle (2018) assessing the assumption of normality is met if the Critical Value (skewness) value is smaller than the value of ± 2.00 and the kurtosis value is not more than 7. It can be seen that neither the number of values in the Skewness column is greater than ± 2.00 nor is the kurtosis value greater than 7 therefore there is no evidence that the distribution of this data is abnormal.

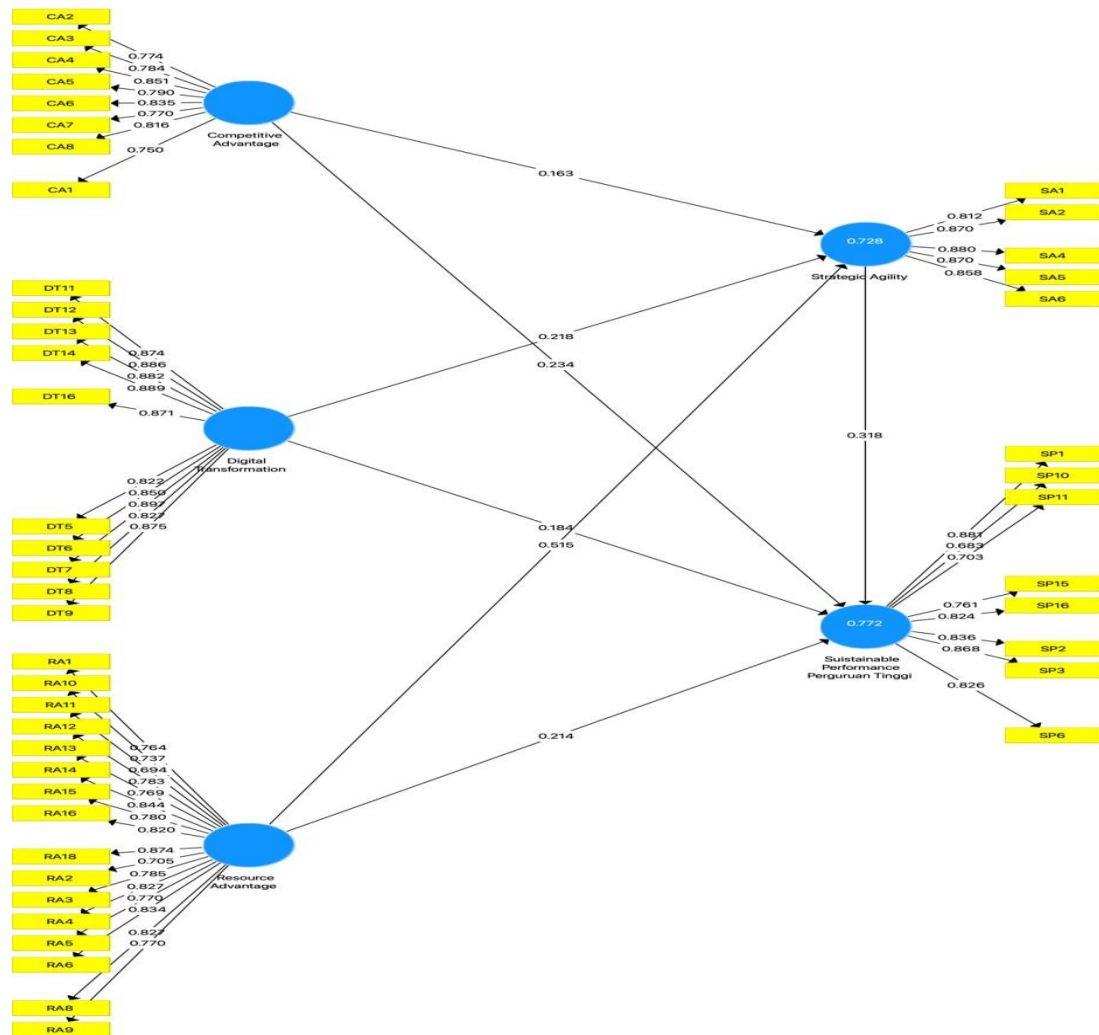


Figure 2: Test Results of PLS Algorithm Modification Procedure

The method to see discriminant validity is to look at the square root value of average variance extracted (AVE) of each construct with the correlation between the construct and other constructs in the model, then it can be said to have a discrimina value.

Table 2: AVE Test Results

	Average Variance Extracted (AVE)
Competitive Advantage	0.635
Digital Transformation	0.753
Resource Advantage	0.621
Strategic Agility	0.737
Sustainable Performance College	0.641

Based on the table, the average variance extracted (AVE) is above 0.50 so it can be said to be valid and canbe used to measure each of the latent variables.

4.1 Discussion of Research Results

This study aims to determine the influence of Competitive Advantage, Digital Transformation and resource advantage on strategy agility and its impact on sustainable performance of universities. The exogenous variables assessed in this research model are Competitive Advantage, Digital Transformation and Resource Advantage. Meanwhile, the endogenous variables assessed in this research model are Strategy Agility and Sustainable Performance of universities.

Table 3: Hypothesis Testing Results

Original Sample (O)		T Statistics (O/STDEV)	P Values	Conclusion
Competitive Advantage -> Strategic Agility	0.163	1.976	0.049	Positive and significant
Competitive Advantage -> Sustainable Performance College	0.234	3.415	0.001	Positive and significant
Digital Transformation -> Strategic Agility	0.218	2.436	0.015	Positive and significant
Digital Transformation -> Sustainable Performance of Higher Education	0.184	2.565	0.011	Positive and significant
Resource Advantage -> Strategic Agility	0.515	4.695	0.000	Positive and significant
Resource Advantage -> Sustainable Performance College	0.214	1.988	0.047	Positive and significant
Strategic Agility -> Sustainable Performance of Higher Education	0.318	3.673	0.000	Positive and significant

The Table of values of the inter-construct path coefficient shows the value of the path coefficient for S strategy Agility against Sustainable Performance of 3.673 with a p value of 0.000 (<0.05). This shows that there is a positive influence of Strategy Agility on the Sustainable Performance of universities. Thus the first hypothesis stating that the Strategy Agility program has a positive effect on Sustainable Performance, is accepted.

The value of the path coefficient for college sustainability interaction shows the value of the path coefficient for Competitive Advantage to Strategy Agility of 1.976 with a p value of 0.049 (<0.05). This shows that there is a positive influence of Competitive Advantage on Strategy Agility. Thus the second hypothesis stating that the Competitive Advantage program has a positive effect on Strategy Agility, is accepted. The value of the path coefficient for higher education sustainability interaction shows the value of the path coefficient for Competitive Advantage to Sustainable Performance of 3.415 with a p value of 0.001 (<0.05). This shows that there is a positive influence of Competitive Advantage on Sustainable Performance. Thus the third hypothesis stating that Competitive Advantage has a positive effect on Sustainable Performance, is accepted. The value of the path coefficient for college sustainability interactions shows the value of the path coefficient for Digital Transformation to Strategy Agility of 2,436 with a p value of 0.015 (<0.05). This shows that there is a positive influence of Digital Transformation on Strategy Agility. Thus the fourth hypothesis stating that Digital Transformation positively affects Strategy Agility, is accepted. The value of the path coefficient for higher education sustainability interaction shows the value of the path coefficient for Digital Transformation to Sustainable Performance of 2,565 with a p value of 0.011 (<0.05). This shows that there is a positive influence of Digital Transformation on Sustainable Performance. Thus the fifth hypothesis stating that Digital Transformation has a positive effect on Sustainable Performance, is accepted. The value of the path coefficient for college sustainability interaction shows the value of the path coefficient for Resource Advantage to Strategy Agility of 4,695 with a p value of 0.000 (<0.05). This shows that there is a positive

influence of Resource Advantage on Strategy Agility. Thus the sixth hypothesis stating that Resource Advantage has a positive effect on Strategy Agility, is accepted. The value of the path coefficient for higher education sustainability interaction shows the value of the path coefficient for Resource Advantage to Sustainable Performance of 1,988 with a p value of 0.047 (<0.05). This shows that there is a significant positive influence of Resource Advantage on Sustainable Performance. Thus seventh hypothesis stating that Resource Advantage has a positive effect on Sustainable Performance, is accepted.

4.2 Discussion of Research Results

This Study aims to determine the influence of competitive advantage, digital transformation and resource advantage on strategy agility and its impact on the sustainable performance of universities. The exogenous variables assessed in this research model are competitive advantage, digital transformation and resource advantage. Meanwhile, the endogenous variables assessed in this research model are strategy agility and sustainable performance of universities. Based on the discussion above, one by one the Determinants of Sustainable Performance of Regional Universities LLDIKTI III with Strategic Agility as a Mediating Variable (Review of Organizational Commitment Analysis, Competence and Performance) explained as follows:

1. The Effect of Competitive Advantage on Strategic Agility

The results of this study show that competitive advantage factors with strategic agility have an influence on the sustainability of an organization. Based on the test results on the effect of competitive advantage on strategic agility has a path coefficients value of 0.163 which is close to the value of +1, the value of T-Statistic 1.976 (>1.96), and the value of p-value 0.049 (<0.05), so it can be concluded that the first hypothesis (H1) is accepted and competitive advantage has a positive and significant effect on strategic agility. It can be concluded that the level of competitive advantage that a university has can encourage strategic agility or agility of strategy in a university. This ability is a source of competitive advantage, where in facilities at universities and faculties in universities have used websites or social technologies to realize competitive advantages, besides that the faculty also has operator services, provides e-learning classes, strives for a sense of communication, set an agenda of routine competency activities, provide media for various knowledge, provide the creation of internationalization culture, hold international cooperation and provide international programs

2. The Effect of Digital Transformation on Strategic Agility

Based on the test results on the influence of digital transformation on strategic agility, there is a value of path coefficients of 0.218 which is close to the value of +1, the value of T-Statistic 2,436 (>1.96), and the value of p-value 0.015 (<0.05), so it can be concluded that the second hypothesis (H2) is accepted and digital transformation has a positive and significant effect on strategic agility. It can be concluded that the high level of digital transformation owned by a university will further encourage strategic agility in a university.

3. The Effect of Resource Advantage on Strategic Agility

Based on the test results on the effect of resource advantage on strategic agility, there is a value of path coefficients value of 0.515 which is close to the value of +1, the value of T-Statistic 4.695 (<1.96), and the value of p-value 0.000 (>0.05), so it can be concluded that the third hypothesis (H3) is accepted and resource advantage has a positive and significant effect on strategic agility. It can be concluded that the high level of resource advantage that a university has, cannot encourage strategic agility in a university. This is because in efforts to develop strategic agility, resource excellence is not the main factor where an important concern is innovation which is the main determining factor in strategic agility. A high level of unemployment if you have good resources, of course, it will strengthen to take quick actions in order to maintain sustainability in universities, besides that resource advantage is also needed high innovation to be able to compete with other universities. It can be concluded that there are other driving factors such as innovation to create resource excellence that can increase strategic agility. Because the superiority of resources directly affects the strategic agility of universities.

4. The Effect of Competitive Advantage on Higher Education Sustainability Performance

Based on the test results on the effect of competitive advantage on the sustainable performance of universities, there is a value of path coefficients of 0.234 which is close to the value of +1, the value of T-Statistic 3.415 (>1.96), and the value of p-value 0.001 (<0.05), so it can be concluded that the fourth hypothesis (H4) is accepted and competitive advantage has a positive and significant effect on the sustainable performance of universities. It can be concluded that the high level of competitive advantage that a university has will further encourage the sustainable performance of the university.

5. The Effect of Digital Transformation on College Sustainable Performance

Based on the test results on the effect of digital transformation on Sustainable Performance, universities have a path coefficients value of 0.184 which is close to the +1 value, a T-Statistical value of 2.565 (>1.96), and a p-value of 0.0111 (<0.05), so it can be concluded that the fifth hypothesis (H5) is accepted and digital transformation has a positive and significant effect on the Sustainable Performance of universities. In the findings of this study, it was produced that digital transformation in universities can realize sustainable university performance can be done with several activities, including: conducting routine work monitoring activities, doing work through digital devices that do not use paper in the process, implementing ERP systems, conducting digital marketing; using the system in processing error data. It can be concluded that digital transformation can encourage sustainable performance in universities. The results of this study are in line with research conducted by Abu Khalifeh and Som (2013) and Nasomboon (2014) which found that digital transformation has a positive and significant effect on the Sustainable Performance of universities.

6. The effect of Research Advantage on College Sustainable Performance

Based on the test results on the effect of resource advantage on Sustainable Performance, universities have a path coefficients value of 0.214 which is close to the +1 value, the T-Statistical value of 1,988 (>1.96), and the p-value of 0.047 (<0.05), so it can be concluded that the sixth hypothesis (H6) is accepted and the resource advantage has a positive and significant effect on the Sustainable Performance of the college. It can be concluded that the high resource advantage of a university will further encourage the sustainable performance of the university.

7. The Effect of Strategic Agility on Sustainable Performance of Higher Education

Based on the test results on the effect of strategic agility on Sustainable Performance, universities have a path coefficients value of 0.318 which is close to the value of +1, the value of T-Statistic 3.673 (>1.96), as well as a p-value of 0.047 (<0.000), so it can be concluded that the seventh hypothesis (H7) is accepted and strategic agility has a positive and significant effect on the sustainable performance of universities. It can be concluded that strategic agility can encourage the sustainable performance of universities. The concept of strategic agility also poses challenges for universities, as in today's digital economy that seeks to be ahead of the competition, very digitally agile (Ndlovu and Mariussen, 2015). The whole concept of competitive advantage and agility suggests that colleges that can maintain leadership in front of predecessors who develop in ambiguous situations and are able to cope with the fluidity of change, always ride the peaks of market change in front of their peers and often in front of consumer preferences, one of the ways to maintain competitive advantage and stay in the lead is to systematically leapfrog the competition (Ndlovu and Mariussen, 2015).

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The research conducted aims to analyze the factors that determine or influence the Determinants of Sustainable Performance University (Private University) Region LLdikti III with Strategic Agility as a Mediating Variable. The findings in this study show that out of the ten hypotheses that have been proposed, all hypotheses are supported

1. Strategic agility affects the sustainable performance of universities, where when universities have high strategic agility, sustainable performance can directly increase. The concept of strategic agility also poses challenges for universities, as in today's digital economy that seeks to be at the forefront of the competition, very digitally agile. The whole concept of competitive advantage and agility suggests that colleges that can maintain leadership in front of predecessors who thrive in ambiguous situations and are able to cope with the fluidity of change, always ride the pinnacle of market change in front of their peers and often in front of consumer preferences, one way of maintaining competitive advantage and staying in the lead.

2. Competitive advantage affects strategic agility, where when universities have a high competitive advantage, they can directly form strategic agility that is able to adaptively compete with universities. In addition, of the three existing factors, competitive advantage is the factor that has the greatest influence on strategic agility. It can be said that the management of universities is an effort by universities to keep up with the times, requiring a standardization to maintain the sustainability of their performance. Standardization is a reference to all management carried out by universities, all universities must meet the standardization that has been set in order to continue to maintain their existence.
3. Competitive advantage affects the Sustainable Performance of universities, where when universities have a high competitive advantage, they can directly improve sustainable performance. Competing competition is a condition that universities have that exceed their competitors. So that universities can assets, capabilities, organizational processes, college attributes, information, knowledge and others that are controlled by universities that allow universities to understand and implement strategies to increase the efficiency and effectiveness of universities.
4. Digital transformation affects strategic agility, where when universities have decided to switch to digital transformation, it can directly form strategic agility that is able to adaptively compete with universities.
5. Management in the management of digital transformation is an integral component and cannot be separated from the overall educational process, without good management it is impossible for educational goals to be realized optimally, effectively and efficiently. This concept applies to every educational institution or institution that requires effective and efficient management. The effective and efficient intention is to be effective and effective. That is, that the management that managed to achieve the goal with the saving of labor, time and costs. Likewise, a good educational process requires adequate facilities and infrastructure or facilities, either directly or indirectly.
6. Digital transformation affects Sustainable Performance, where when universities have decided to switch to digital transformation, it directly improves sustainable performance. Of the four factors that affect sustainable performance, digital transformation is the biggest factor in influencing the sustainable performance of universities. In light of the challenges of digital transformation and the need to keep their industries competitive, college leaders must formulate and execute strategies that include the implications of digital transformation and drive towards better operational performance. Universities need digital transformation oriented towards innovation and creativity to remain competitive.
7. Resource advantage affects strategic agility, where universities that have superior resource advantages, will produce innovations in doing their work. In addition, a factor that is no less important to maintain the sustainability of higher education is innovation in the use of technology, so that it can lead to the implementation of strategic agility.

Competitive competition can be understood by instilling an understanding that universities are made up of heterogeneous and immovable elements. To maximize competitive advantage, universities must meet four criteria, namely valuable, rareness, inimitability and non-substitutability. Barney stated that the perspective of Resource-Based Theory, firm resources include all assets, capabilities, organizational processes, attributes of universities, information, knowledge, and others that are controlled by universities that allow universities to understand and implement strategies to improve the efficiency and effectiveness of universities. Resource advantage affects the sustainable performance of universities, where when universities have high resource advantages, sustainable performance can directly increase. The valuable power possessed by a large number of competing universities cannot be regarded as a source of competitive advantage or continuous competitive advantage. Colleges enjoy a competitive advantage when implementing value creation strategies not simultaneously implemented by a large number of other universities. If the resources of a particular college are valuable to belong to a large number of colleges, then each of these colleges has the ability to plot resources in the same way, thus implementing a general strategy that does not give one college a certain competitive advantage.

From the results of research and hypothesis tests that have been carried out by researchers, it was found that there is competitive advantage, resource advantage, and digital transformation, which are important factors in influencing sustainability performance in private universities in the LLDikti III Jakarta area, this can happen because to maintain the sustainability of a university so that it can compete with foreign universities that enter to the capital and in order to survive with good quality will be influenced by the excellence of each university itself and reliable digital transformation, besides that every high school in competing should have a superior product of choice of department or faculty offered to the community. In addition, the resource advantage factor is also important in maintaining the sustainability of a university. For the excellence of human resources, it is important for the development and maintenance of a university which will also be supported by the application of adequate information technology. Digital transformation is also important in maintaining sustainability in universities, especially private universities located in the LLDikti III Jakarta area. The most powerful factor in terms of sustainability performance is the variable resource advantage. Meanwhile, Strategic agility is a good mediator between competitive advantage, digital transformation, and resource advantage to sustainability performance.

5.2. Recommendations

Based on the results of the study, the following are some implicative suggestions that can be implemented by universities in the LLDikti III region as follows:

1. The importance of digital transformation in an effort to maintain the sustainability of private universities, especially universities, one way is to innovate blended learning in higher education, especially in private universities located in the LLDikti III Region.
2. High education is expected to pay attention to the competitive advantage factor which can be realized by holding international cooperation which is expected to be a strategy

for universities to maintain sustainable performance to maintain higher education competition.

3. High teachers should pay attention to the resource advantage factor, by developing new methods in work so that they can still compete with competitors, especially those who must pay attention to the amount of costs incurred to be more efficient.
4. We recommend that higher education pay more attention to the strategic agility factor by making innovations such as redeployment strategies or reassignment mutations to fill new positions, which can be used as a quick way to maintain the sustainability of the university.
5. The Ministry of Cultural Education, Research and Technology, in order to consider several factors related to factors that can improve the sustainability of higher education performance so that it is expected that the quality of performance of universities, especially private universities in the LLDIKTIII region, will continue to increase. One of the variables of concern is strategic agility to maintain the sustainability of performance in universities, so that it can compete with other universities in Indonesia.
6. Universities, especially universities in the LLDikti III Region, can build strategic agility as a means to innovate business models and influence college performance. College meetings are considered a response to organizational change and to increase competitive activity. In fact, agility is recognized as a new paradigm for competitive organizations and colleges. Strategic alignment is a central element of strategic planning, the process by which an organization develops and implements a competitive long-term strategy in which internal resources are integrated into external opportunities.

5.3 Manager Implications

The results of this study provide new thought proposals for private universities in the LLDikti III region in maintaining the sustainability of universities, and if possible can be practiced in other LLDikti regions in Indonesia. The existence of a private higher education in Indonesia, especially in the LLDikti III area, is currently directed at improving the quality and effectiveness and efficiency of higher education institutions. Therefore, the management of higher education in Indonesia as an extension of the government bureaucracy is time to be directed at efforts to maintain the sustainability of higher education itself (sustainability performance) by paying attention to several supporting factors including competitive advantage, digital transformation, resource advantage and also strategic agility.

There is a better program in maintaining the existence of universities and maximizing their roles and responsibilities in advancing the implementation of modern higher education so that they can compete with foreign universities entering the capital.

To maintain the sustainability performance of universities, they can apply reliable information technology, considering that currently the development of the world of education is quite strict.

5.4 Novelty

Based on the results of the research conducted, there are several important things that can contribute to the proposal of new thoughts that are beneficial for private universities located in the LLDikti III Jakarta area in the development of sustainability performance strategies, contributing to new thinking in creating competitive advantage in higher education with strategic agility variables, which can be described below.

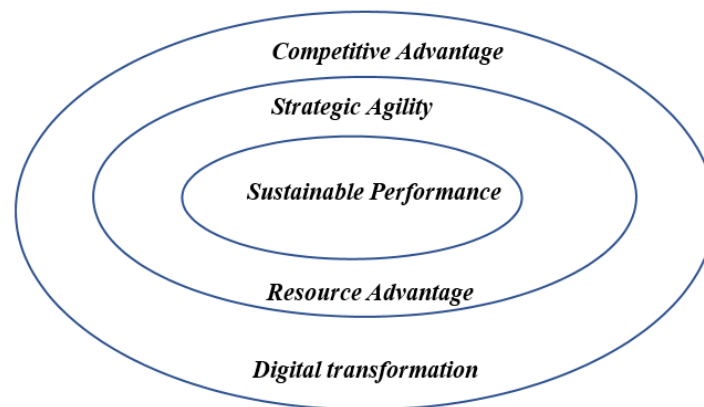


Figure 3: Development of a Conceptual Thinking Framework

References

1. Alamri, M. M., Almaiah, M. A., & Al-Rahmi, W. M. (2020). Social media applications affecting students' academic performance: A model developed for sustainability in higher education. *Sustainability (Switzerland)*, 12(16), 1–14. <https://doi.org/10.3390/su12166471>
2. Argento D., Einarson, D., Mårtensson, L., Persson, C., Wendin, K., & Westergren, A. (2020). Integrating sustainability in higher education: a Swedish case. *International Journal of Sustainability in Higher Education*, 21(6), 1131–1150. <https://doi.org/10.1108/IJSHE-10-2019-0292>
3. Awwad, A., Khattab, A., and Anchor, J. (2013). Competitive Priorities and Competitive Advantage in Jordanian Manufacturing. *Journal of Service Science and Management*, 6, 69–79. <https://doi.org/10.4236/jssm.2013.61008>
4. Baldwin, E. A. (1999). *Edible Coatings for Fresh Fruits and Vegetables: Past, Present, and Future*. Lancaster. Technomic Publ. Co. Inc.
5. Barney, J. B., (1991). Firm resources and sustained competitive advantage, *Journal of Management*, Vol. 17, pp.99-120.
6. Beringer, A., Wright, T., & Malone, L. (2008). Sustainability in higher education in Atlantic Canada. *International Journal of Sustainability in Higher Education*, 9(1), 48–67. <https://doi.org/10.1108/14676370810842184>
7. Burdon, S., Kang, K., & Mooney, G. (2017). Decoding success factors of Innovation Culture. In *Enterprise information systems and the digitalization of business functions* (pp. 258-271). IGI Global.
8. Chen, I. J., Paulraj, A., & Lado, A. A. (2004). Strategic purchasing, supply management, and firm performance. *Journal of operations management*, 22(5), 505-523.

10. Choi, T. Y., & Eboch, K. (1998). The TQM paradox: Relations among TQM practices, plant performance, and customer satisfaction. *Journal of Operations Management*, 17(1), 59-75.
11. Dikti.kemdikbud.go.id. (2020). Directorate General of Higher Education Announces Clustering of Indonesian Universities in 2020 – Directorate General of Higher Education, Ministry of Education and Culture of the Republic of Indonesia. <https://dikti.kemdikbud.go.id/kabar-dikti/kabar/direktorat-jenderal- pendidikan-tinggi-umumkan-klasterisasi-perguruan-tinggi-indonesia-tahun-2020/>
12. Eryc, E. (2022). The Effect of The Impact of Digitalization and Utilization of Information Technology on MSME Performance. *Journal of Education and Counseling*, 4(4), 1693-1704.
13. Fauzi, F., & Irvansyah, R. (2022). Digital Transformation in the Archival System in SMAN 1 Takengon, Central Aceh Regency. *Education Management*, 17(1), 36-49.
14. Freeman, R. E., Wicks, A. C., & Parmar, B. (2004). Stakeholder theory and “the corporate objective revisited”. *Organization science*, 15(3), 364-369.
16. Griffin, Jill. 2003. *Customer Loyalty: Growing and Retaining Customers*. Erlangga Publishers. Jakarta. Gulati, R., & Garino, J. (2000). Get the Right Mix of Bricks and Clicks. *Harvard Business Review*.
17. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks. Sage.
18. Hambrick, D.C. (1987). The top management team: Key to strategic success. *California Management Review*, 30(1), 88-108.
19. Handayani, B. D. (2011). Measuring Organizational Performance with a Balanced Scorecard Approach at the Kebumen District Hospital. *JDM (Journal of Management Dynamics)*, 2(1).
20. Junni, P., Sarala, R. M., Tarba, S. Y., & Weber, Y. (2015). The role of strategic agility in acquisitions. *British Journal of Management*, 26(4), 596-616.
21. Kaplan, Robert S. and David P. Norton, (2000). *Balanced Scorecard: Implementing strategy into action*, Erlangga, Jakarta.
22. Katayama, H., & Bennett, D. (1999). Agility, adaptability and leanness: A comparison of concepts and a study of practice. *International Journal of Production Economics*, 60–61, 43–51.
23. Kemenristekdikti. (2019). Clustering of Indonesian universities in 2019. Ministry of Research, Technology and Higher Education of the Republic of Indonesia, April. <https://ldikti12.ristekdikti.go.id/2019/08/17/menristekdikti-umumkan-klasterisasi-perguruan-tinggi-indonesia-2019-fokuskan-hasil-dari-perguruan-tinggi.html>
24. Kossowski, J., Lenz, A., Heumüller, E., & Richter, S. (2020, April). Digital fitness-The goal of digital transformation. In *UK Academy for Information Systems Conference Proceedings*.
25. Lldikti6.kemdikbud.go.id. (2020). The Directorate General of Higher Education announced the clustering of Indonesian universities in 2020. <https://ldikti6.kemdikbud.go.id/2020/08/17/direktorat-jenderal- pendidikan-tinggi-umumkan-klasterisasi-perguruan-tinggi-indonesia-tahun-2020/>
26. Miles, R. E., Snow, C. C., Meyer, A. D., & Coleman Jr, H. J. (1978). Organizational strategy, structure, and process. *Academy of management review*, 3(3), 546-562.
27. Miller, D., & Le Breton–Miller, I. (2014). Deconstructing socioemotional wealth. *Entrepreneurship Theory and Practice*, 38(4), 713-720.
28. Mumpuni, K. H., & Raharja, R. (2013). *The Effect of Intellectual Capital on Business Performance (Study of Employee Perceptions of PT BPR Setia Karib Abadi Semarang)* (Doctoral dissertation, Faculty of Economics and Business).

29. Nugroho, T. T., Najib, M., & Kirbrandoko, K. (2018). Determination of Competitiveness Based on Core Competency Analysis (Case Study on Mangrove Ecotourism in East Java). *Matrix: Journal of Management, Business Strategy and Entrepreneurship*, 25-32.
30. Putra, W. B. T. S., & Ardianto, B. (2022). Why Does Risk Communication Matter? Preventive and Excessive Health Behavior among Uninfected People. *South Asian Journal of Social Studies and Economics*, 13(2), 56–72. <https://doi.org/10.9734/sajsse/2022/v13i230355>
31. Pei Zhao, Sara Sintonen, H. K., Currie, K. L., & J.Courduff. (2015). The pedagogical functions of arts and cultural-heritage education with ICTs in museums. *International Journal of Instructional Technology and Distance Learning*, 7.
32. Petkovics, I. (2021). Digital Transformation of Higher Education. *Transforming Higher Education Through Digitalization*, 145–171. <https://doi.org/10.1201/9781003132097-9>
33. Porter, M. E. (1985). *Technology and competitive advantage*. Journal of business strategy. Porter, M. E. (1990). *The Competitive Advantage of Nations* The MacMillan Press.
34. Purnama, S. (2016). *Strategy to Achieve Sustainable Competitive Advantage Based on a Resource-Based View Model (Analytical Descriptive Study at SMA Santa Maria 3 Cimahi)* (Doctoral dissertation, UNPAS).
35. Ramayah, T., Cheah, J., Ting, F. C. H., & Memon, M. A. (2017). Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 3.0: An Updated and Practical Guide to Statistical Analysis. *Practical Assessment, Research and Evaluation*, 4(October), 291.
36. Rohman, F., Noermijati, N., Soelton, M. & Mugiono, M. (2023). The role of quality assurance in improving the distribution of organizational performance. *Uncertain Supply Chain Management*. Vol 11 (2023) 237–248 Growing Science Ltd. All rights reserved. <https://doi.org/10.5267/j.uscm.2022.10.003>
37. Rohman, F., Noermijati, N., Soelton, M. & Mugiono, M. (2022). Model altruism in improving organizational performance in social welfare institutions ministry of social affairs of the republic of Indonesia. *Cogent Business & Management*, Vol 9: Issue 1, 2151678, DOI: 10.1080/23311975. 2022.2151678
38. (13 December 2022) To link to this article: <https://doi.org/10.1080/23311975.2022.2151678>
39. Saluy, A. B., Abidin, Z., Djamil, M., Kemalasar, N., Hutabarat, L., Pramudena, S. M., & Endri, E. (2021). Employee productivity evaluation with human capital management strategy: The case of covid-19 in Indonesia. *Academy of Entrepreneurship Journal*, 27(5), 1-9.
40. Saluy, A. B., Prawira, B., & Buntaran, D. F. A. A. (2019). The influence of leadership, working culture, and working environment for the ministry of administrative reform and bureaucracy. *International Journal of Business and Economic Affairs*, 4(5), 224-234.
41. Saluy, A. B., Abidin, Z., Djamil, M., Kemalasar, N., Hutabarat, L., Pramudena, S. M., & Endri, E. (2021). Employee productivity evaluation with human capital management strategy: The case of covid-19 in Indonesia. *Academy of Entrepreneurship Journal*, 27(5), 1-9.
42. Nuryanto, U.W., Djamil, M., Sutawidjaya, A.H., Saluy, A.B. The roles of green competitive advantage as intervention between core competence and organisational performance; *International Journal of Innovation, Creativity and Change*, 2020, (6), pp. 394–414
43. Sihite, Mombang, Poerwoko, Bambang, Asrunputri, Aisyah P (2021). *Strategy Transformation, Advanced Strategic Management*. Bogor: IPB Press
44. Smith, W. A., Vosloo, L. P., Van Niekerk, C. H., & Theron, F. P. (1991). Effect of free gossypol in whole cottonseed on the semen quality of Holstein bulls. *South African Journal of Animal Science*, 21(1), 16-20.
45. Soelton, Mochamad; Noermijati, Noermijati; Rohman, Fatchur; Mugiono, Mugiono. 2021. Improving The Performance Non-Profit Organizations?. *Academy of Strategic Management Journal*; Vol 20,(2021): 1-13

46. Soelton, Mochamad; Noermijati, Noermijati; Rohman, Fatchur; Mugiono, Mugiono. 2021. Conceptualizing the Role of Organizational Performance in Indonesia. *Journal of Asian Finance, Economics and Business*. Vol 8 No 6 (2021) 1151–1160 1151 Print ISSN: 2288-4637 / Online ISSN 2288-4645.
47. doi:10.13106/jafeb.2021.vol8.no6.1151
48. Soelton, Mochamad; Noermijati, Noermijati; Rohman, Fatchur; Mugiono, Mugiono, Aulia, I. Noviandy and Siregar, R. Efendi. 2020. Reawakening perceived person organization fit and perceived person job fit: Removing obstacles organizational commitment. *Management Science Letters* Vol. 10 Issue 13 (2020) 2993–3002 homepage: www.GrowingScience.com/msl
49. Srisatyatama., Saluy,A,B., Novawiguna kemalasar...ANALYSIS OF INDIVIDUAL ATTITUDES AND PERCEPTIONS OF PERSONNEL PERFORMANCE WITH MOTIVATION VARIABLES AS INTERVENING IN THE DIRECTORATE FOR SECURITY OF VITAL OBJECTS AT POLDA XYZ; The seybold report Vol,17. Issue, 10. Page1040-1052
50. Sugiyono. (2014). *Educational Research Methods Quantitative, Qualitative, and R&D. Approaches Bandung*: Alfabeta.
51. Sugiyono. (2015). *Mix Methods*. London: Alfabeta
52. Thompson A.A and Strickland A.J. (2003). *Strategic Management: Concepts and Cases*. 13th ed. New Delhi: Tata MacGraw-Hill Company Publishing Limited.
53. Tilman, L. M., & Jacoby, G. C. (2019). *Agility: How to navigate the unknown and seize opportunity in a world of disruption*. Tom Rath.
54. Tjiptono, F. (2007). *Marketing Strategy*. First Edition. Andi Offset, Yogyakarta.
55. Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal*, 5(2), 171-180.
- Whetten, D. A., & Cameron, K. S. (2011). *Developing Management Skills*. Prentice Hall.
56. Winarno, W., & Widiastuti, S. W. (2014). The Effect of Human Capital and Organizational Learning on Performance Mediated By Organizational Competence (Empirical Study on Pts Kopertis V Yogyakarta). In *Proceedings of National Seminar And Call For Papers Nau 3* (pp. 311-323). Upn "Veteran" Yogyakarta, Upn " Veteran " East Java, Upn " Veteran " Jakarta.
57. Y Ramli, M Soelton. 2018. Implementing Innovation Management on Market Attractiveness and Unique Resources to Enhance Business performance on Organic Fertilizier Industries in Indonesia. *Academy of Strategic Management Journal*. 17 (April), 1-12
58. Yudistira, D. N. L., & Ali, H. (2020) Factors influencing Information Systems, Organizations, and Strategies: Organizational Culture, Internal and External Environment, and Competitive Advantage. *ACADEMIA. Accelerating the world's research*. Pp: 1-5
59. Zhang Y-X, Barry JG, Moore DR, Amitay S (2012) A New Test of Attention in Listening (TAIL) Predicts Auditory Performance. *PLoS ONE* 7(12): e53502. doi:10.1371/journal.pone.0053502