

The Entrepreneurial Transformation Assessment: Case Study in a Private University in Indonesia

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Abstract

The model of entrepreneurial universities is believed to be the main driving force for independence and innovation and appropriate response to environmental turbulence and rapid market changes. In addition to teaching and research, the accomplishment of becoming entrepreneurial is seldom immediate and requires a transformation process. This study aimed to assess the transformation process of a private university in Indonesia in becoming entrepreneurial. Its analytical framework was based on an entrepreneurial university model with six variables: actors, university governance, entrepreneurial activity, entrepreneurial output, support measures needed, and challenges. Using a descriptive-analytic method, the results obtained from the questionnaire administered to 541 respondents, belonging to various groups from within and outside the university indicated that University “A” is currently treading an entrepreneurial path. The assessment results for the perceived value from entrepreneurial indicators, at an average score above 4, implied a positive perception of entrepreneurial implementation. Subsequently, mapping the results into a transformation model positioned the university close to the entrepreneurial paradigm.

Keywords

assessment; entrepreneurial university; private university; transformation

1. Introduction

The adaptability of education systems is required to meet new challenges arising from the impact of rapid developments in the Fourth Industrial Revolution (Industry 4.0). Several institutions of higher learning have been significantly pressured by massive technological advances creating both challenges and opportunities. Advances in technology have propelled the teaching practice to become personalized and more accommodative to the needs of students. The emergence of Massive Open Online Courses (MOOCs), because of exploiting opportunities offered by technological developments, is a phenomenon that enables universities to operate entrepreneurially, and secure a high public value orientation (Wood et al., 2008).

There are 3,269 public and private colleges (Menristekdikti, 2019) in Indonesia, the 4th most populous country in the world (Indonesia Population, 2020). Having been ranked 40th in the global competitiveness index in 2020, HEIs in Indonesia face challenges in competing with the quality of graduates at the international level. Therefore, it is essential to encourage HEIs in Indonesia to produce graduates who meet the demands of the current world and utilize their entrepreneurial spirit to generate employment.

The entrepreneurship level in Indonesia is low, ranking 50th out of 80 surveyed countries (Entrepreneurship Rankings, 2020), with only 3.1% of the total population becoming entrepreneurs in 2018, estimated at 8 million according to the Indonesian Ministry of Industry. Compared to other ASEAN countries such as Malaysia and Singapore, this figure is relatively low. To execute the third mission of HEIs (Readings, 1996), universities in Indonesia should be encouraged to contribute significantly to the development of societal and economic growth through entrepreneurship development activities.

1.1 Objectives

A comprehensive assessment was carried out at a private university in Indonesia to assess the entrepreneurial characteristics and their position in the entrepreneurial transformation process. The name of the university is anonymized and will be referred to as University “A”. The case of University “A” was chosen because it is one of the leading private universities in Indonesia, entering the Top 1000 QS World University Ranking 2021. The global recognition of the university was marked by achieving international accreditation for programs, such as ABET, Tedqual, and AACSB. Recently, this university was crowned the outstanding winner of the Global MIKE Award 2020 (Most Innovative Knowledge Enterprise).

For this study, an entrepreneurial university model comprising six variables, as categories, was used to analyze the situational entrepreneurial position of a university (Novela et al., 2021). The six variables are 1) actors; 2) university governance; 3) entrepreneurial activity; 4) entrepreneurial output; 5) support measure needed, and 6) challenges. Each element consists of several indicators which are then processed to determine the driving force behind each element. The driving force refers to the most influential factor in the process of forming an entrepreneurial university. This framework was deemed appropriate for conducting the assessment in this study.

2. Literature Review

A case study suggested that the inherent motivation to conduct entrepreneurial activities is better than that of the top-down approach (Philpott et al., 2011). A university's journey in transformation inevitably faces challenges and obstacles (Clark, 1998), (Etzkowitz, 2004), (Thorp & Goldstein, 2010), (Kwiek, 2013). The biggest challenge is how to become more entrepreneurial and how to create an effective environment for developing staff and students into entrepreneurial capacities. Nevertheless, an effective way to overcome these obstacles involves applying efforts to transform its internal culture by ensuring a conducive and supportive environment to achieve the status of an entrepreneurial institution (Gustomo & Ghina, 2017). Undoubtedly, there is an increasing endeavor of entrepreneurial universities to find new ways to compete and succeed in an uncertain and unpredictable environment and seek new solutions to multiple challenges aimed at the progress of both local and global communities.

Several studies, both at home and abroad, have shown that the achievement of becoming an entrepreneurial university is prevalent among public universities since these have greater advantages by being aligned with government policies, owned management structures, and clear sources of funding, which lead naturally to entrepreneurial universities (Ahmad et al., 2018). The successes achieved by leading universities that serve as benchmarks include the Massachusetts Institute of Technology (MIT) (O’Shea et al., 2007), National University of Singapore (Wong et al., 2007), University of Twente Netherlands (Meerman, 2015), Swansea University UK (Hannon, 2013), Technology Universities Austria (Sperrer et al., 2016), IPB University (Mudde et al., 2017), Bandung Institute of Technology (Sakapurnama et al., 2019b), University of Indonesia, and Gajah Mada University (Sakapurnama et al., 2019a). Most of these are public universities.

3. Methods

The assessment conducted in this study involved several resources, both within and outside the university. The sample was taken using a non-probability sampling technique, where several categories were created to obtain responses. According to (Taherdoost, 2016), non-probability sampling is often associated with case study research design and qualitative research. Furthermore, target respondents have been divided into several categories: 1) university leaders, 2) academicians and staff, 3) students, 4) alumni and 5) external stakeholders. Using descriptive analysis, the unit analysis was individual, and the time horizon was cross-sectional. Descriptive analysis characterizes the world or a phenomenon – by identifying patterns in the data to answer questions about who, what, where, when, and to what extent (Loeb et al., 2017). The data collection technique was conducted using survey questionnaires. Data were collected between October and December 2021.

Considering that the target respondents were categorized based on different characteristics, the breakdown of variables and indicators was different for each category since all survey questions were not relevant to the existing group of variables.

As stated in Table 1., There are explanations of each variable and indicator for university leader respondents. Specifically, there were additional open-ended questions, following the structured one. They were asked questions related to factors that were not included in every question. In addition, two strategic questions were mandatory to

answer: 1) Three main achievements by the university and 2) three strategies implemented to support the achievements of the university.

Table 1. Operationalization of variables for university leader respondents

No	Variables	Variable Concept	Indicators	Scale
1	Actors	Stakeholders who act as drivers of change for the university, and always adaptive and produce real output	Top-level management, faculty & staff, student, alumni, parent, local government, regulators, industry, research institute, community, media	Likert
2	University governance	Governance that plays a role in university achievements	Vision & mission, strategic planning, leadership, organizational culture, collective entrepreneurial action, internal policies, entrepreneurial capabilities, spirit of independence & progress, TQM implementation, Good University Governance implementation	Likert
3	Entrepreneurial activities	Types and frequency of entrepreneurship-related activities on campus	entrepreneurship education, soft-skills learning, start-up business coaching, innovation activities, industrial collaboration, knowledge transfer, internationalization	Likert
4	Entrepreneurial output	The visible results of the process of entrepreneurial	business incubation, science and techno-park, number and quality of students and graduates who become entrepreneurs, commercialization, patent, copyrights	Nominal
5	Support measures needed	The influence of external parties supporting the university's achievement and its ability to answer the demands and challenges	Commitments that support the creation of university-industry-government cooperation (Triple Helix), infrastructure that supports adaptation to technological change, support from local and national research centers related to research outputs, industry involvement to absorb research outputs, the	Likert

			existence of accurate data, and adequate resources.	
6	Challenges	Obstacles that can hamper the university from achieving entrepreneurialism	Top management commitment, lack of university stakeholder trust, less supportive internal culture, inadequate entrepreneurial capacity, unsupported ranking system to be labeled entrepreneurial, unprepared technology infrastructure, stakeholders trust, reduced output from university	Nominal

The variables used for faculty, staff, students, and alumni respondents, differed from those used for university leaders, consisting of four variables, as listed in Table 2.

Table 2. Operationalization of variables for faculty, staff, students, and alumni respondents

No	Variables	Variable Concept	Indicators	Scale
1	Actors	Top management commitment	Adaptive, build a culture of innovation, produce entrepreneurial graduates, contribution to society	Likert
		Opportunities for university groups (lecturers, staff, students)	The role in making changes, self-development, create innovation, pouring creativity	Likert
2	University governance	Perceived life and behavior at the university	Vision & mission understanding, strategy, leadership, innovation culture, entrepreneurship culture, innovative behavior, achievement, reward and appreciation, funding source, capabilities	Likert
3	Entrepreneurial activities	Perceived entrepreneurship-related activities on campus	Entrepreneurship education, soft skills education, start-up coaching, collaboration with external, knowledge transfer, internationalization	Likert
4	Entrepreneurial output	The visible results of the process of entrepreneurial	Business incubator, student and alumni entrepreneur, science and techno-park, patent and copyrights	Likert

For the external stakeholder respondents, the operationalization of variables 1 to 4 is the same as that of faculty, staff, students, and alumni. The fifth variable added was support measures needed, as explained in Table 3.

Table 3. Operationalization of variables for external stakeholder respondents

No	Variables	Variable Concept	Indicators	Scale
5	Support measures needed	The influence of external parties supporting the university's achievement and its ability to answer the demand and challenges	Support from stakeholders: industry, government, society, regulator	Likert

4. Data Collection

Using a survey questionnaire, data were collected from a total of 541 respondents, with the following profiles and questionnaire results.

5. Results and Discussion

5.1 Respondent Profiles

The respondent profiles as displayed in Tables 4, 5, and 6, starting respectively from the gender, age, and job position of the respondents.

Table 4. Profile of respondents based on gender

Gender	Number	Percentage (%)
Female	284	52.5
Male	257	47.5
Total	541	100

Table 5. Profile of respondents based on age

Age	Number	Percentage (%)
20 years and below	35	6.5
21-30 years	405	74.8
31-40 years	48	8.9
41-50 years	26	4.8
51 years and above	27	5.0
Total	541	100

Table 6. Profile of respondents based on job position

No	Category	Job Position	Number	Total	Percentage (%)
1	University Leaders	Vice-Rector	2	7	1.3
		Director	5		
2	Faculty and Staffs	Faculty Member	25	74	13.7
		Faculty Member Structural	32		
		Staff	17		
3	Students	Student	360	360	66.5
4	Alumnus	Employee	40	68	12.6
		Businessman	25		

		Unemployed	3		
5	External Stakeholders	Businessman	25	32	5.9
		Employee	2		
		Job Seeker	3		
		Lecturer	2		
Total	Total		541	100	

5.2 Findings

The analysis of the responses to the questionnaire administered to university leader respondents indicated that most of the answers were positive, particularly in the perception category (Table 7.)

Table 7. The summary of questionnaire results from university leader respondents

Statement	Indicator	Score	Scale
The most powerful stakeholder as a driver of change and encourage the campus to be adaptive	Top-level management	5	Likert
Factors from university governance that influenced the achievement	Vision & mission	5	Likert
	Strategic planning	5	Likert
	Leadership	5	Likert
	Organization culture	5	Likert
The most prominent entrepreneurial activity	Collaboration with industry	4,86	Likert
The existence of entrepreneurial output	4 out of 6 outputs	85,70%	percentage
	5 out of 6 outputs	100%	percentage
The most external support needed	Technology infrastructure	4,86	Likert
Challenge	Internal culture	85,70%	percentage
	Entrepreneurial capacity	85,70%	percentage

The answers to the following two open-ended questions are presented sequentially, starting from the highest frequency:

The main achievements to date that exemplify the direction of transformation towards the university's version of an entrepreneurial university

- (1) The success of global implementation (6 respondents)
- (2) Strengthening internationalization and partnerships with industry (6 respondents)
- (3) Employability & entrepreneurship (6 respondents)
- (4) Achieving global recognition (6 respondents)
- (5) Achieving sustainability growth (4 respondents)
- (6) Achieving high-impact research (3 respondents)
- (7) Strengthening knowledge and innovation (3 respondents)
- (8) Becoming the university of choice by the community (2 respondents)
- (9) Achieving the target of the best in academic quality (1 respondent)

The summary of the strategies implemented by the university considered the most supportive of current achievements:

- (1) Good strategic partnership with stakeholders, particularly industry (3 respondents)
- (2) Implement a knowledge and innovation strategy in line with the vision and mission (3 respondents)
- (3) Implementation of entrepreneurial culture (curriculum, quality objectives, and output) (3 respondents)
- (4) Implementation of global employability & entrepreneurship (2 respondents)

- (5) Utilization of technological resources (2 respondents)
- (6) Adaptability to development (2 respondents)
- (7) Build reputation & achieve global recognition (2 respondents)
- (8) Differentiation in terms of quality (1 respondent)
- (9) Empowering human resources (1 respondent)

All the questions in the questionnaire to faculty, staff, student, alumni, and external respondents, use a Likert scale with scores from 1 to 5. Table 8 shows a summary of the results, in which the average answers are greater than scale 4 (tend to have positive perception).

Table 8. The Summary of questionnaire results from faculty, staff, student, alumni, and external

Variable	Faculty & Staff n = 74	Student n = 360	Alumni n = 68	External n = 32
Actors	4,40	4,28	4,09	4,52
University Governance	4,27	4,27	3,95	4,56
Entrepreneurial Activity	4,46	4,36	4,12	4,27
Entrepreneurial output	4,32	4,37	4,02	4,46
Support				4,41

5.3 Discussion

From the results of data processing, shown in Tables 7 and 8, it can be concluded that the perception of all groups in the university, from university leaders, faculty, staff, student, and alumni to external resources, were positive. These results indicated that most respondents were inclined towards more positive statements about the entrepreneurial characteristics of the university, as observed from the responses on a Likert scale scored above 4, further indicating a positive perception tendency. All these variables were perceived as positive roles by the top-level management, both in the form of commitment and leadership. Similarly, governance was perceived to enhance university life, strongly supporting innovative processes. Entrepreneurial activities and outputs were observable by all the university groups.

Furthermore, these results indicated that the university is on the path of transformation towards entrepreneurialism. Even though the university had not openly declared itself or its endeavor of becoming an entrepreneurial university, its operational efficiency exhibited adaptability and innovation in effectively managing the increasingly dynamic changes and its significant role in society, by helping the realization of economic development.

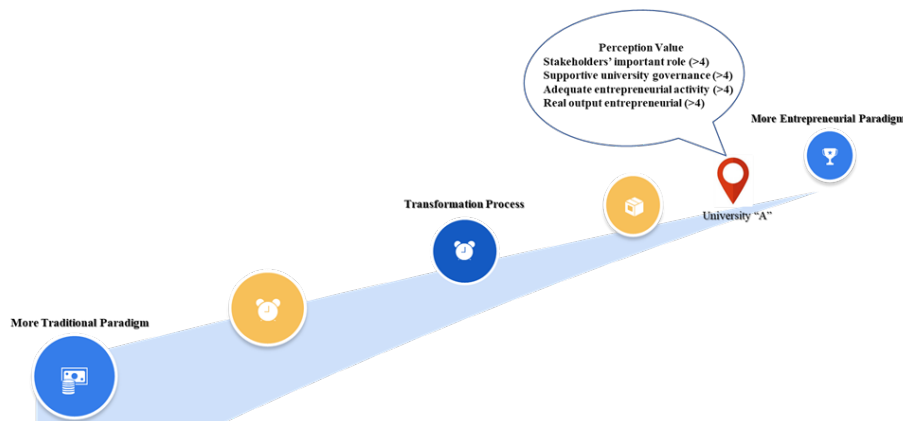


Figure 1: Mapping entrepreneurial positioning into transformation model

As described earlier, the spectrum of entrepreneurial activity shifts from traditional to entrepreneurial. The assessment result of University “A” was mapped into a transformation model, illustrating that the more it aligned with the entrepreneurial paradigm, the closer it was to its goal of transforming into an entrepreneurial university (Philpott et al., 2011).

Using the results of the survey, where the perceived value of several entrepreneurial indicators was above 4 (very good perception), the transformation position of University “A” was close to the entrepreneurial paradigm, as illustrated in Figure 1.

6. Conclusion

Higher education institutions are not enough to focus only on teaching and research, without realizing what society needs from the world of education. Therefore, they play a significant role in supporting economic development, both at regional and national levels. In addition, universities are expected to produce graduates who will adapt to future needs.

Becoming an entrepreneurial university is a direction that universities may choose as an adaptive response to demands in today's rapidly paced changing environment. Several universities have adopted entrepreneurial behavioral developments in mainstream education. The ability to respond to the demands of change through innovation and survive traditional patterns, whether through entrepreneurialism or other means, is necessary.

The assessment carried out involving all groups starting from the university leaders, faculties, staff, students, alumni, and external resources showed that University “A” is on the path of transformation to become entrepreneurial. The positioning of the university in the transformation model was closer to the entrepreneurial paradigm, which means that it is closer to becoming an ideal entrepreneurial university.

The achievements until 2021 as mentioned by respondents indicated that although teaching and research remained the main focus for the University “A”, prioritizing quality and adapting to changing times with the awareness that technology plays an important role in today's digital era also received equal importance.

The results of this empirical research indicate that universities do not have to openly declare themselves as entrepreneurial universities, or as transitioning into an entrepreneurial university. Instead, the behavior they implement demonstrates that adaptability and innovation are pivotal in meeting the increasing demands of dynamic changes and encouraging the community to contribute to realizing economic development.

From the results of this case study, it can be inferred that entrepreneurial universities tend to excel in internal and external achievements. This raises the hypothesis that the resulting performance is a product of the ongoing entrepreneurial transformation, which can be explored through further research.

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Biography

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