

# CHAPTER I

## INTRODUCTION

### **A. Background**

Today's world has become full of challenges and competition. According to the rapid and steady progress at the level of the state and society, developed and developing countries strive to achieve their development goals and provide better services at all levels. This can only be achieved if efforts are combined towards achieving the goals, and no one should lose sight of the important role played by higher education institutions in stimulating development.

Higher education institutions have evolved into multi-functional institutions that are open to their social and economic environments to boost their energy, efficiency, and effectiveness in their surroundings, as well as to maintain the highest quality standards in their performance. Furthermore, these institutions strive to be able to carry out their educational and social responsibilities (Arroyo & Paulina, 2017; Chatterton et al., 2000).

Research and development carried out by higher education institutions play a key role in the development of financial systems in any country that aspires to development and progress (Gibbons & Michael, 1998; Leal Filho et al., 2018). On the one hand, this necessitates tight collaboration between higher education institutions and diverse institutions in order to identify the capabilities of scientific and technical higher education institutions to identify the demands of society's diverse institutions in general, and productive institutions in particular. The goal of creating clear research routes can contribute to the progress and advancement of societies, as well as coordinating among different parties to achieve common aims

and objectives that benefit all parties involved (Johnson et al., 2016; Suleman, 2018).

Performance components, in this sense, change over time. The criteria used to evaluate performance, whether internal to the company or influenced by the external environment, are evolving. The elements that determine an organization's success in the first stage of market entry - launch - may not be applicable for evaluating an organization's performance as it grows or matures. (Grigoroudis et al., 2012). Furthermore, these components may be a specific combination of human, technical, financial, and organizational factors that result in excellent performance in one situation or condition but not in another because there are so many different combinations and they change with time. As a result, the difficulty for administrative executives is to discover the right balance of factors in order to achieve high performance (Gumusluoğlu et al., 2009). As a result, organizational performance is defined as the result of all of the organization's operations, and it is a reflection of how the organization uses and invests its resources in order to achieve its objectives. (Li et al., 2006; Langleley et al., 2009).

Organizational performance can be split into two categories based on the comprehensiveness criterion: The first is overall performance, which is expressed in the accomplishments that all of the organization's functions and sub-systems have contributed to without being solely a part or component of a unit in attaining them. It is possible to measure the level of the organization's achievement and achievement of its broad goals, such as continuity, expansion, and profitability, by looking at its overall performance (Johnson et al., 2001; Richard et al., 2009).

The second portion is partial performance, which refers to the results accomplished at the level of the organization's subsystems and basic functions, as each subsystem strives to meet its own goals. The overall performance of the organization is attained by obtaining the total performance of the subsystems to enable the institution to understand its capabilities, achieve its objectives and to ensure that the institution's final product reflects its image, environment, and future (Williams et al., 1941; Gupta et al., 2005).

Lately, During the Corona pandemic, many institutions and companies all over the world entered into financial and administrative crises. However, higher education institutions were the most agitated and suffered from many problems, including: The cessation of traditional education and the transition to distance education, the difficulty of managing and rationalizing its financial and material resources so that it can continue to present its societal mission in education. Even some universities were unable to fully pay the salaries of their teaching staff and administrative staff.

According to rector of the Jakarta Islamic University (UID) and also secretary general of Association of Indonesian Private Higher Education/Asosiasi Perguruan Tinggi Swasta Indonesia (APTISI), the COVID-19 pandemic began to affect the Indonesian economy from mid-2020 onwards, private universities have experienced a sharp downturn in enrolments – and the number of university dropouts is rising. This is causing a crisis in Indonesia's private university sector, which some fear could lead to mass closures of these institutions (Yamin, 2021).

The impact of the COVID-19 pandemic was even worse seen in private universities (PTS) and campuses with a very small number of students. This is

because most of their income comes from students' tuitions. There are almost half the number of private universities in Indonesia have experienced a decline in new students of at least 50%. PTS accounts 3,171 institutions (about 96% of the total universities in Indonesia) where nearly 4.5 million students learn (about 64% of the national total). Based on the scenario created by APTISI, Raihan said that this pandemic condition would result about 60% of the 4,500 campuses in Indonesia to survive.

On 6 February 2020 the Directorate of Higher Education and Culture Ministry (DIKTI) announced that 12 private universities in Jakarta had closed down due to lack of students and other problems. On 20 November 2020, the DIKTI bureau in North Sumatra announced the closure of four colleges due to lack of students and other problems related to COVID-19. In January, the DIKTI Central Java office announced that 20 universities, high schools and institutes would close down this year, mostly due to the lack of students. In Yogyakarta, Central Java, the number of new students in private universities is decreasing based on the data from Head of the Central Java DIKTI office.

At the same time the number of students dropping out of university due to financial problems has been on a rise since the pandemic spread to Indonesia in March 2020. A head of the Education Financing Service Centre of the Ministry of Education and Culture said that "the number of dropouts had reached 50% of the total student, mostly in private universities".

Given the uncertainty of the end of the COVID-19 pandemic and its impact on higher education, all campuses start thinking about long-term survival strategies.

"Even after the pandemic is over, school dropouts cannot go straight back to college because the economic recovery will take longer".

Despite the intervention of most governments to support higher education institutions, most educational institutions did not meet the approved standards to receive government support due to the lack of clear financial policies within the educational institution, the lack of high internal control, and the lack of financial transparency.

On the other hand, the Corona pandemic has also compounded some of the problems facing higher education in Indonesia, including performance problems. According to research by Saleh and Mujahiddin (2020) and Khan and Anwar (2021), private universities in Asia, including Indonesia, face four problems. These problems are: (1) expanding access to private campuses (increasing the number of students, providing college seats for the financially underprivileged and persons with disabilities), (2) varying quality of private universities, (3) high costs at private universities, and (4) difficulties to get financial support.

As in other developing countries, Higher education institutions in Indonesia are facing three serious challenges: (1) Poor quality compared to regional universities in ASEAN, (2) the limited participation rate and the disparity in access between the poor and the rich, and (3) the low internal efficiency. To overcome these three challenges, significant financial support is needed. However, if this expansion of access is not accompanied by an increase in quality, it is feared that it will increase the number of unemployed graduates (Harun et al, 2020; Pannen et al, 2021).

Previous studies are consistent with the research issued by Asian Development Bank (2012; 2015), which confirms that higher education institutions in South Asia, including higher education institutions in Indonesia, are confronted with three immediate and pressing needs: (1). Improve its quality, relevance, equity, efficiency, and governance. (2). Position higher education institutes properly to become an independent moral force to help drive democratization and sociopolitical reforms. (3). Meet new challenges arising from the construction of knowledge economies, internationalization and ever-increasing competition.

On this foundation, higher education institutions attempt to find new ways to adapt new changes and stay current with ongoing advances by obtaining new tools and technologies in order to achieve high productivity and efficiency, which aids in improving their financial performance.

Clearly, the performance of each of its functions must be evaluated. As a result, the institutions must examine the performance of each of its functions, whether it is reviewing its commercial, production, or financial performance in particular. Therefore, strategic planning is one of the initial processes and tasks in strategic management. It has to do with deciding the organization's future orientation, which entails defining the organization's mission and objectives based on an examination of the existing and future conditions of each of the surrounding environments, as well as its own capabilities. These objectives are subsequently turned into strategic programs and plans.

The most important sort of planning is strategic financial planning. Financial planning aids in the forecasting of financial demands well in advance of the actual need for funds, as well as the evaluation and comparison of potential

investment alternatives. As can be seen, the first point of financial planning is concerned with assessing the demand for finances, determining the sources from which funds may be obtained, and working to provide these monies in a timely and cost-effective manner (Bernanke et al., 1996; Blackwell, 2011). The second point to consider is the importance of proper resource utilization and employment, which entails carrying out all university activities at the lowest feasible cost while offering services that match specified criteria (Lowen et al., 1997).

Also, it is necessary to re-evaluate and exploit the material resources of the institutions, in terms of accounting-exploitation, use-consumption-storage, preservation-maintenance, repair-tracking, and control, it also focuses on arranging the rules, methods, and procedures for managing them. Materialism management refers to everything that is material in an educational institution, including real estate, permanent and mobile equipment, tools, and consumable and non-expendable material (Ibrahim et al., 2011).

The finance department is also responsible for the institution's financial aspects since it specifies the institution's resource capacities, their nature, methods of collection, and areas of spending. It also demonstrates how it is held accountable, tracked, and monitored, as well as how it facilitates administrative, procedural, and related activities (Krishnaveni et al., 2010; Sazonov et al., 2015).

On the other hand, the widespread adoption of the notion of information technology, as well as the variety of its applications at the corporate level, has given information a contemporary character. Information has gained a lot of traction as an ethical asset and a strategic resource that is just as vital as money and materials

(Bhise et al., 2013). It also directs the institution's critical functions, allowing it to fulfill its objectives more effectively and quickly.

The significance of developing an effective technical system for the organization emerges in order to bring everything connected to financial performance improvement, weaknesses, strengths, and future goals into the strategies pursued. To accomplish this, the business must create an information system that collects, processes, and disseminates information to the various levels of management as needed (Eason et al., 1996; Hubka et al., 2012).

According to two studies, Nasution & Yumitro (2020) entitled: "Governance of Autonomous Higher Education Institution" toward World-Class University: A Case Study at the Universitas Indonesia", and another by (Junny & Lynn, 2019) entitled "Higher education governance and reforms in Indonesia: are the matrices of autonomy appropriate?", higher education has two primary problems that are tied to each other: one is related to funding, and the other is related to the quality of higher education. Most institutions rely heavily on one financial resource which is tuition fees from students enrolled in, to develop their construction and academic services, as well as to develop and improve their laboratories and buildings and keep up with rapidly changing of technological developments. This is reflected in the decrease in the quality of education.

In light of the numerous changes the world is through, one of the most essential advancements in institutions for sustaining their competitiveness and continuity is the technical changes given by information technologies, communications, financial and accounting systems, and the growth of managerial



thoughts. As a result, institutions management's concepts, policies, strategies, and practices undergo a significant transformation.

When it comes to the relationship between innovation, higher education, and sustainable development, there are two factors to consider: the development aspect and the sustainability component. Starting with development, we can see that the development of any strategic unit, whatever it is, from the individual to the family, then the institution, the state, and finally the world at large - is the "action" that leads to the "growth, development, or change" of this unit and improves it, in a subject called targeted development, which can be economic, cultural, social, human, or related to it. (Jones et al., 2005).

Given the magnitude of the issues that higher education institutions face, standard techniques that have been in use for a long time are no longer adequate. As a result of significant changes, society's social, cultural, economic, and technological components have been changed as well. Because these institutions are preoccupied with their everyday concerns, multiply with the increase in society's demand for education, higher education institutions have responded to development plans with a limited level of cooperation. However, these institutions did not adapt to these developments in a way that was commensurate with the speed with which modern technologies and communications evolving around the world. As a result, universities' primary concern has become the performance of the everyday business, with no regard for future visions, prior planning, or the existence of a working mechanism that reacts to the challenges that universities and other educational institutions face (Jenkins et al., 2011; Enders, 2004).

Faced with all of these obstacles, university governance serves as a catalyst for change and problem-solving, as how institutions are managed is one of the most important components in attaining their objectives (Mok et al., 2010). The push for more openness and public accountability goes hand in hand with the push for greater independence (Briault et al., 1997). It is important to highlight that discussing resource sources and uses encompasses two fundamental issues that cannot be separated. The first issue is the necessity of diversifying the university's financial sources (Williams et al., 1998). The age of total reliance on the state and money allocated to pay the university's expenses has passed, as has the reliance on students' tuition fees that fall short of the university's minimal expenses (Massy et al., 1996).

Higher education institutions make extensive use of assets and resources, and their decisions are influenced by stakeholders. It has compelled higher education institutions to seek a framework that guarantees them radical solutions to address conflicts of interest and lack of credibility in managing their financial resources, to address a lack of funding and scarcity of financial resources, and to control the conduct of their work through clear regulations and laws that promote transparency, fair disclosure, and organizational efficacy.

Based on the above, the research problem can be raised with the following main question: **How can higher education institutions use strategic planning and innovative technology to improve their financial management system and the reflection of all these improvements on higher education performance?**

## **B. Problem Identification**

Many higher education institutions struggle to manage and rationalize their financial and material resources to continue to fulfill their societal educational goal. Given the magnitude of the issues that higher education institutions face, traditional methods that have been in use for a long time will no longer sufficient. Due to this occurrence, significant changes have occurred in society's social, cultural, economic, and technological components. This has caused many problems in managing the physical and financial resources in a way that can rationalize the effectively use and face the financial and economic crisis in addition to maintaining its competitiveness and continuity.

From the researcher's point of view, reasons that led to the exacerbation of the problem in higher education institutions are as follows:

From the researcher's point of view, reasons that led to the exacerbation of the problem in higher education institutions are as follows:

- **The first issue:** Relying heavily on one main financial resource, which is student fees, and not diversifying and developing financial resources. In addition to poor utilization of resources and their proper allocation and employment, which means implementing all university activities at the lowest possible cost while providing services that meet the established standards.
- **The second issue:** The failure of some higher education institutions to develop strategic plans related to determining the direction of the organization in the future. Which in turn involves defining each of the

organization's mission and objectives, based on an analysis of the current and future status of the surrounding environment and its own capabilities.

- **The third issue:** The failure of higher education institutions to keep pace with technical and technological developments, and to modernize their financial and administrative systems to keep pace with the rapid development in the world.
- **The Fourth issue:** Lack of interest in encouraging creative thinking and innovation, which is one of the most important elements for the development of higher education institutions, maintaining the quality of their outputs and keeping pace with the needs of the labor market.

### **C. Problem Formulation**

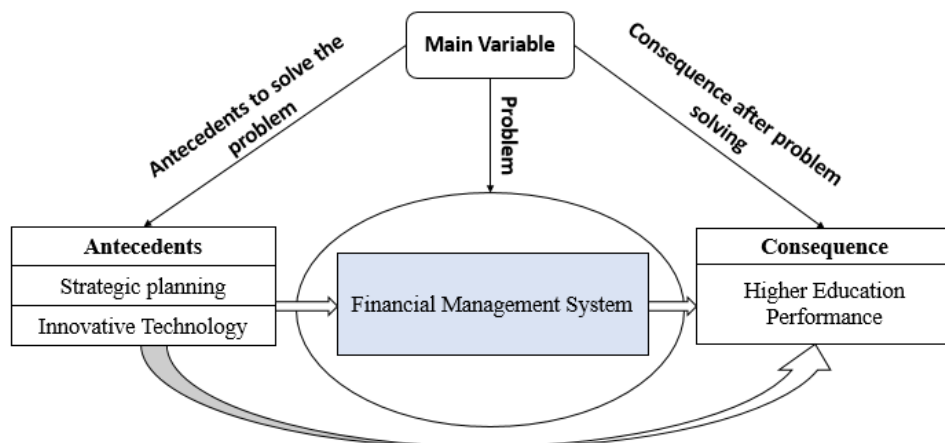
It should be recognized that discussing resources and usage encompasses three fundamental issues that cannot be separated. The first issue is the necessity of diversifying of the university's financial sources. The idea of entire reliance on the state to cover the university's expenses has been changed. This also includes relying on gifts and endowments as well as students' tuition fees that fall short of the university's minimal expenses. As a result, the university administration was tasked with diversifying and expanding these resources by adopting new financial policies.

The second issue is the importance of proper resource utilization and employment which entails carrying out all university activities at the lowest possible cost while providing services that meet established standards. The drive toward greater transparency and public accountability also runs in parallel with the

move toward greater independence. This requires the adoption of quality modern financial technology systems in information systems and accounting systems.

The third issue is the link between strategic planning, innovative technology, and financial management system related to the performance of higher education institutions that insure long-term development. It is considered one of the important pillars in developing the performance of higher education institution's performance and the maintenance of their competitiveness and continuity is the development of innovation, particularly innovative technology in addition to the provision of information and communication technologies and the adoption of modern financial and accounting systems.

All of the pervious literature must have an impact on the performance of higher education institutions. Therefore, strategic planning and innovative technology were used as antecedents and performance as consequence. This could summarize the formulation of the research in the following figure.



**Figure 1. 1.** Formulation of research problem

This study aims to investigate the main research question which is: How could higher education institutions use strategic planning and innovative techniques

to improve the financial management systems and their reflection on higher education performance? Therefore, this study was divided into three parts based on the main research question. The first part focuses on describing and analyzing the impact of strategic planning and innovative technology on improving the management of the financial system. The second part also focuses on describing and analyzing the impact of strategic planning, innovative technology, and management of the financial system on the performance of the university. While the third part focuses on the indirect impact of strategic planning and innovative technology on institutional performance through the management of the financial system, taking into account the differences in the direct and indirect impact of strategic planning and innovative technology on performance.

In light of the aforementioned, the main questions of this study could be formulated as follows:

- 1) Does strategic planning have any effect in financial management system?
- 2) Does innovative technology have any effect in financial management system?
- 3) Does strategic planning have any effect in higher education institution's performance?
- 4) Does innovative technology have any effect in higher education institution's performance?
- 5) Does financial management system have any effect in higher education institution's performance?
- 6) Does strategic planning have any effect in higher education performance through financial management system?

- 7) Does innovative technology have any effect in higher education performance through financial management system?

#### **D. Research Purpose and Use**

Based on the problem formulation, the main purposes of this study are:

- 1) Examining and getting empirical evidence to analyze the effect of strategic planning in financial management systems.
- 2) Examining and getting empirical evidence to analyze the effect of innovative technology in the financial management system.
- 3) Examining and get empirical evidence to analyzing the effect of strategic plaining in higher education institution's performance.
- 4) Examining and get empirical evidence to analyzing the effect of innovative technology in higher education institution's performance.
- 5) Examining and get empirical evidence to analyzing the effect of financial Management System in Higher education institution's performance.
- 6) Examining and get empirical evidence to analyzing the effect of the strategic plaining in higher education performance through financial management system.
- 7) Examining and get empirical evidence to analyzing the effect of innovative technology in higher education performance through financial management system.

In general, this research has many benefits for the higher education institutions, the Ministry of Higher Education, science researchers, decision-

makers, technology adoption, personal scientific benefits, and those interested in the affairs of higher education institutions. These benefits are divided into practical and theoretical as follows:

1) **Theoretical Benefits:** The importance of this study is to set a theoretical framework that helps higher education institutions to develop strategic plans related to determining the direction of the organization in the future. This in turn involves defining each of the organization's mission and objectives, based on an analysis of the current and future status of the surrounding environment and its capabilities. Furthermore, acquiring information technology that enables universities to improve financial management system. In addition, managers, especially group that works in the financial function or are interested in encouraging creative thinking and innovation. Both strategic planning and innovation in financial systems are the most important elements for the development and sustainability of higher education institutions. This also enables them to achieve accomplished goals during a period in a good and efficient way.

2) **Practical Benefits:** Likewise, this study is a try to provide a practical framework for higher education institutions to link Strategic planning, dimensions of information technology, innovative technology, and financial management system, as well as addressing the relationship between information technologies in all its dimensions to improve the management of the financial system. This study also determines the interaction dimensions among higher education different parties represented in an additional worthy of attention. In addition, setting a proposed methodological framework for transforming universities into integrated productive institutions that meet the needs of society.



## **E. Originality and Value of Research**

This study differs from previous studies in the following:

- There are limited researches examines the direct impact of innovative technology and strategic planning on the financial management system in higher education performance, especially in Indonesia.
- One of the first research that examines the indirect impact of innovative technology and strategic planning on higher education performance through the financial management system.
- Adding the financial policies indicator to the indicators of financial management system, which are information systems and accounting systems.
- The strategic planning is important as the primary factor to improve the financial management system of the institution on one hand, and the importance of the management of the financial system in the survival of the institution and the achievement of its objectives on the other hand.
- The innovative technology is important as the primary factor to improve the modern information, financial accounting systems and communication technologies through development of creative thinking and innovation of higher education institutions which is considered one of the important and modern topics that need more researches.
- Seeking to know the theoretical side of strategic planning and innovative technology, financial management system and its reality in higher education institutions.

- Attention to this topic to highlight its importance in the extent of the institution's success by using modern information technology in achieving goals.
- Attempt to enrich the research arena and literature review.