Management Challenges in Higher Education Institutions in the Era of Industrial Revolutions 4.0 and Society 5.0 in Islamic High School Sumatera Medan

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Abstrak

Tujuan penelitian ini adalah untuk menganalisis tantangan manajemen lembaga perguruan tinggi era revolusi industry 4.0 dan society 5.0 di STAI Sumatera Medan. Metode peneltian kualitatif dengan teknik observasi, wawancara dan studi dokumen. Temuan penelitian ini adalah Tantangan manajemen perguruan tinggi STAI Sumatera Medan terdapat pada persoalan kurikulum yang berlum terintegrasi, Proses yang masih belum terintegrasi dengan teknologi, dosen dan karyawan yang mayoritas strata dua (S2) dan adanya dosen yang tidak linier, sarana prasarana yang belum optimal, kualitas manajemen belum sampai pada gaya kepemimpinan transcendental (berbasis nilai), sumber pembiayaan yang relative murah, akreditasi belum mencapai unggul, unit kegiatan mahsiswa yang tidak berjalan, kerjasama masih belum sampai pada level kerjasama internasional, alumni yang bekerja tidak sesuai disiplin ilmu. Implementasi era revolusi industry 4.0 di STAI Sumatera Medan dengan menerapkan adiministrasi berbasis online system, desain modul pembelajaran e-elarning, penerapan pembelajaran e-learning. Tantangan society 5.0 di STAI Sumatera Medan adalah sumber daya manusia, fasilitas pendukung, aritifcial intelligence buatan sendiri, kelengkapan big data.

Kata Kunci: Manajemen, Revolusi Industry 4.0 Dan Society 5.0, Lembaga

Abstract

The purpose of this study was to analyze the challenges of higher education institution management (the era of the industrial revolution 4.0 and society 5.0 at STAI Sumatra Medan. Qualitative research methods using observation, interview and document study techniques. curriculum that has not been integrated, processes that have not been integrated with technology, lecturers and employees who are mostly undergraduates (S2) and lecturers who are not linear, infrastructure that is not optimal, management quality has not reached a transcendental (value-based) leadership style, resources relatively cheap financing, accreditation has not reached excellence, student activity units are not running, cooperation has not yet reached the level of international cooperation, alumni work is not in accordance with scientific disciplines Implementation of the 4.0 industrial revolution era at STAI Sumatra Medan by implementing an online system-based administration , design of e-learning learning modules, implementation of e-learning learning. The challenges of society 5.0 at STAI Sumatra Medan are human resources, supporting facilities, self-made artificial intelligence, completeness of big data.

Keywords: Management, Industrial Revolution 4.0 and Society 5.0, Institutions

Introduction

Article 3 Law of the Republic of Indonesia No. 22 of 1961 concerning Higher Education stated that the administration of higher education was carried out by the government and the private sector. Producing an intellectual society is certainly not enough just by relying on the very limited role of State Universities (PTN), but also the role of Private Universities (PTS) is also needed. Even employees who have worked for certain government or private agencies are more likely to target PTS, because some PTS offer morning and evening lectures, and besides that PTS also provides many conveniences in terms of completing campus administration. The presence of PTS really helps the government's recommendations regarding life distance of education because the knowledge possessed by a person will still be owned for the rest of his life. Government Regulation (PP) No.

The existence of foundations that occupy positions as supervisors of private tertiary institutions often creates various problems that have a direct impact on the management efficiency of PTS (Private Higher Education). PTS must submit to the Ministry of Research and Technology and Higher Education of the Ministry of Religion for PTKIS (Private Islamic Religious College) academically, but administratively it is subject to foundations. Law (UU) Number 16 of 2001 which was later amended by Law Number 28 of 2004 concerning Foundations, foundations have a strong legal basis. So far, the establishment of foundations in Indonesia has only been based on custom in society and the jurisprudence of the Supreme Court. There is a tendency for people to establish foundations with the intention of not only being a forum for developing social, religious, humanitarian activities, but also for the purpose of enriching the founders themselves, administrators and supervisors. In the end, various problems arose, such as the activities of the foundation that were not in accordance with the Articles of Association (AD), disputes between the management and the founders, and the foundation being used to accommodate wealth obtained by way of breaking the law.

A foundation as a private legal entity has aims and objectives that are social, religious and humanitarian. In its activities, the foundation is solely not for profit, although in fact the element of profit cannot be ignored. One of the foundation's social activities is organizing higher education through universities or high schools. In general, the management of activities in the field of education is carried out by the board of the foundation. This research is focused on managing activities in the field of higher education in the form of PTS. The chancellor election system in PTS is regulated in the statutes (AD) of each university. Statutes in detail regulate institutions, rights and authorities of tertiary institutions including the working relationship of foundations and rectors, foundations with existing resources. This statute is generally a modification and refers to laws and regulations that have been stipulated by the Government through Government Regulation No. 60 Th. 1999 concerning Higher Education.

(Mesiono 2022)PTS established by foundations are similar to family companies, including personnel who occupy positions in PTS management who are still in kinship ties, so that PTS appear to be privately owned or belong to a group. Problems arise when the foundation and PTS management deviate from the direction and goals of the college itself, so that it is easy to be tempted massively and compactly to deviate from its original purpose. Foundations tend to and are easily lulled into interests that are purely business oriented, family interests, relatives' interests, the interests of their associates and the interests of their group, even though PTS is managed professionally and pretends to be a noble industry. That's why the Government feels the need to regulate this, through the Foundation Law (UU No. 16 of 2001 which was later amended by Law No. 28 of 2004),

(Fadhli 2019)There are quite a lot of problems with private universities in Indonesia. According to accreditation data for private tertiary institutions in Indonesia, there are still many who are at level C. The reason is that many PTS do not have standards in accordance with statutory provisions. Another factor is the problem of foundations that are not in accordance with the provisions of UU No. 28 of 2004, where PTS is more likely to be managed by families whose capacities and capabilities are not in accordance with applicable regulations. The problem of

leadership dualism is also a factor that not least hinders the progress of PTS, even as a result of the dualism of leadership in PTS there are those that have to be permanently closed by Kopertis because they haven't found the best solution to solving the problem. The small number of professors from private universities is also a problem for private universities to promote higher education. The standardization of lecturer salaries in PTS is no less worrying because it is almost immeasurable. PTS's toughest challenge is quality orientation, PTS is required to maintain quality while maintaining the flexibility offered so that its users do not abandon it.

PTS must improve so that the process of organizing the Tri Dharma of Higher Education which includes education, research and community service can continue while prioritizing quality and responding to the challenges and demands of changing times. These efforts must be supported by human resources consisting of educational staff, laboratory assistants and other more professional supporting staff, as well as administrative staff and adequate infrastructure. Improving the quality of private tertiary institutions cannot be separated from: clear outcomes, healthy PTS organizations, management of private universities that are open, transparent and accountable, curriculum adjustments to the needs of the labor market, skills and capabilities of reliable and professional human resources both academic and non-academic,

The challenges of tertiary institutions in Indonesia today are increasingly complex, the burden borne by universities to educate the nation is increasingly being felt as a very heavy job which has given rise to a variety of skewed opinions from the public due to the not optimal role being carried out as it has been thought so far that universities 'like an ivory tower' that can only bring forth smart ideas in various scientific forums and activities while it is very difficult to do. This assumption is an assumption that must be straightened out.

The 5.0 century which is characterized by globalization in all aspects of life places universities as one of the spearheads for preparing competitive Indonesians, therefore the management of higher education institutions must be aimed at anticipating a life full of uncertainty, paradox and full of competition. Most of them think that universities are social or non-profit organizations, a small number are more likely to be called commercial companies like other business companies. Higher education management as a form of management of social or non-profit activities. The university corporation can also be seen as an institution, a company, and an agent or intermediary.

Islamic College of Religion (STAI) Sumatra Medan is one of the PTS under Kopertais which also has various problems in carrying out its functions. For this reason, this mini-research serves as a reference for improving higher education management and identifying existing challenges so that they can be solved and able to carry out the Tri Dharma of Higher Education properly. The challenges of industrial revolution 4.0 and society 5.0 at the Medan North Sumatra STAI School can be seen from the practice of lectures. All academic and non-academic activities within the STAI Sumatra Medan environment seek to utilize technology to maximize their role as a higher education institution.

Method

The research approach is qualitative. The qualitative approach in Kirk and Miller's view stems from the qualitative observation that qualitative methodology is a particular tradition in social science that fundamentally depends on human observation in its own uniqueness. Qualitative research is generally descriptive in nature which tends to use inductive analysis, is carried out in natural settings and the data collected is generally of a qualitative nature. Qualitative application with consideration of the possibility of data obtained in the field in the form of data in the form of facts and the need for in-depth analysis. So a qualitative approach will encourage more in-depth data collection, especially with the involvement of the researchers themselves in the field. This study aims to analyze the challenges of private tertiary institutions (Case Study of STAI Sumatra Medan). All the problems and challenges that exist in the tertiary institution will be mentioned in this research and then given a solution to the problem.

To determine the validity of the data, scientists create validity standards which include: Credibility, transferability, dependability, and confirmability. Another thing to do to check the wetness of the data is to triangulate the data or informants until the data is redundant.

Data analysis in qualitative research moves inductively, namely data/facts are categorized towards a higher level of abstraction, performing synthesis and developing theory when necessary.

Results and Discussion
Challenges of Management of Higher Education Institutions STAI Sumatra Medan.

STAI Sumatra Medan has quite complex challenges in the management of higher education institutions. As one of the private high schools under the auspices of the STAI Sumatra Medan foundation, it is managed by people with different human resources, both in terms of educational level and culture. This is a challenge for managers to equalize perceptions in order to achieve institutional goals that have been set both in the short, medium and long term. STAI North Sumatra which only focuses on educating students in religious fields and studies is also a challenge in the management of education where today Islamic higher education institutions must be able to be on par with other tertiary institutions. Some of the challenges in the management of STAI Sumatra Medan higher education institutions are as follows:

a. Curriculum

The curriculum at STAI Sumatra Medan is still not varied and developing into a scientific integration curriculum where one of the mainstay programs is to increase the competitiveness of institutions. In accordance with the existing study programs under the auspices of STAI Sumatra Medan, it still refers to the Islamic education curriculum in accordance with existing study programs, namely Islamic religious education, Islamic Education Management, Sharia Banking, and Early Childhood Education. This has not found a curriculum that leads to scientific integration which is a new style in Islamic higher education.

b. Process

The teaching and learning process at STAI Sumatra Medan consists of organizing an academic introduction program for new students; periodic evaluation and curriculum development; development of syllabus, SAP and teaching materials; integrated lecture scheduling, academic registration (KRS and KHS); printing of the list of lecture participants before the lecture period begins; periodic monitoring of lectures; on-line assessment of lecturer performance by students at the end of lectures; organizing final exams on a scheduled basis; timely value entry corrections; improving the quality of thesis guidance, research assignments, service assignments and other academic tasks. Challenges in carrying out academic and non-academic processes at STAI Sumatra Medan have not fully used information technology to make guidance effective.

c. Quality of Lecturers and Employees

Lecturers and employees of STAI Sumatra Medan are the locomotives of higher education institutions. From the field data, several challenges were found related to the quality of lecturers at STAI Sumatra Medan, which consisted of 28 permanent lecturers with Masters (S2) education levels and no permanent lecturers at STAI Sumatra with Masters (Doctoral) education. To solve this problem, STAI Sumatra Medan provides permission and opportunities for permanent lecturers to continue studying the doctoral program. Besides that, there are 4 non-permanent lecturers at STAI Sumatra Medan, who have the last education in the doctoral program (S3) as a way to improve the quality of teaching staff in the STAI Sumatra Medan environment. Another thing that is no less important is that there are still several lecturers who do not match the academic qualifications they have teaching subjects in certain study programs, for example teaching science of preaching and communication in the Islamic Education Management study

program. To anticipate this, STAI Sumatra Medan provides opportunities for lecturers to study according to the subjects they teach and carry out future recruitment according to what is needed. Non-academic employees consist of administrative managers, general and financial departments who are appointed according to their respective expertise. STAI Sumatra Medan provides opportunities for lecturers to study according to the subjects they teach and carry out future recruitment according to what is needed. Non-academic employees consist of administrative managers, general and financial departments who are appointed according to their respective expertise. STAI Sumatra Medan provides opportunities for lecturers to study according to the subjects they teach and carry out future recruitment according to what is needed. Non-academic employees consist of administrative managers, general and financial departments who are appointed according to their respective expertise.

d. Infrastructure
Infrastructure facilities at STAI Sumatra Medan consist of lecture buildings, administrative buildings and other supporting facilities. Other supporting facilities such asInternet access facilities via hot spots are available on all STAI Sumatra Medan campuses. This facility is provided to students and employees free of charge. Adequate library and laboratory. There is still a lot that needs to be done to improve infrastructure, such as a mini bank for Islamic banking study programs. STAI Sumatra Medan carries out continuous improvements to perfect the infrastructure by including it in the STAI Sumatra Medan strategic plan.

e. Management Quality
The management applied at STAI Sumatra is quality-based management with democratic leadership. Everyone in the STAI Sumatra Medan environment must have performance standards in accordance with what is required. The annual program is made into an operational plan (Renop) which is prepared annually and is a derivative of the strategic plan (Renstra) which is made for a period of five years. The management function which consists of planning, organizing, leadership, and evaluating is carried out in a structured, systematic, collaborative, and mutually complementary way for all stakeholders in the STAI Sumatra Medan environment. Weaknesses in the management process can sometimes be found in terms of direct coordination and communication, especially during the pandemic and post-pandemic times because many face-to-face activities have been replaced with online or hybrid ones.

f. Financing
The source of operational funding at STAI Sumatra Medan is sourced from student education financing donations (SPP). The amount of student tuition fees is still relatively low due to the economic situation of students. This is a consideration for stakeholders and policy makers at STAI Sumatra Medan. Besides that, there are many students who independently pay for their studies without help from their parents or family. To anticipate this, the STAI Sumatra Medan cooperates with government agencies and the private sector to help students' financial situation by providing scholarships. The principle of efficiency in financing absolutely must be implemented so that budget leakage does not occur in the operational plan that has been determined.

g. Study Program Accreditation
According to data from the Higher Education Data Manager (PDDikti) of the Ministry of Education, Culture and Higher Education (Kemendikbuddikti) the accreditation obtained by STAI Sumatra Medan is good with active status. This is a challenge for STAI Sumatra Medan to improve accreditation to be superior (A) or at least be able to maintain the accreditation that has been achieved amidst the highly competitive competition

of religious private campuses located in the city of Medan. Instruments for improvement are continuously being made as outlined in the Strategic Plan (Renstra) which is a reference for five-year activities such as accreditation.

h. Extracurricular Activities / Student Activity Units

Student extracurricular activities at STAI Sumatra Medan or known as student activity units (UKM). There are six UKM STAI Sumatra officially registered at STAI Sumatra Medan, namely: Student Council (DM), Student Regiment (Menwa), Campus Arts and Sports Agency (BKOK), Campus Journalists (Jurkam), Campus Da'wah Organization (LDK), Students Nature Lovers (Mapala). Active UKMs are student councils that routinely carry out both academic and non-academic activities on and off campus. There are still many other UKM activities that join other universities and are mostly carried out outside the campus. UKM STAI Sumatra Medan is still not running effectively considering that many students come from the working class.

i. Cooperation between educational institutions and non-educational institutions

Collaboration carried out by STAI Sumatra Medan with educational institutions such as cooperation with the State Islamic University of North Sumatra Medan (UINSU Medan) which is a university in the same science cluster as STAI Sumatra Medan. Collaboration with educational institutions is carried out in three ways, namely: guest lecturers, research and community service. Guest lecturers (expert lecturers) are brought in to give lectures for students. Collaboration in the field of research is collaboration carried out by lecturers together with lecturers from other tertiary institutions. Meanwhile, collaboration in the service sector is the collaboration between STAI Sumatra and educational institutions such as schools for students to carry out field work practices (PKL) or real work lectures

(KKN). Cooperation with non-educational institutions is a collaboration carried out by STAI Sumatra Medan with institutions such as the Regional Amil Zakat Agency for North Sumatra Province to provide scholarships for the underprivileged and achievers. Cooperation with non-educational institutions is also built with the government which provides scholarships for STAI Sumatra Medan students.

j. Student Quality

STAI Sumatra Medan whose management is quality oriented in the framework of carrying out the tri dharma of higher education makes students one of the important objects in quality improvement. Alumni who are university output will be mapped whether they work according to their discipline or not. In the lecture process students are also provided with not only increased knowledge but other abilities such as training to become da'wah interpreters in the midst of society. This is done as the embodiment of the vision and mission of an Islamic tertiary institution. In addition to mastering academic skills in their disciplines, students are also expected to be able to become a torch for the community in the field of religion where they live.

Implementation of the Industrial Era 4.0 at STAI Sumatra Medan.

a. Online System Administration

Administrative activities such as registration of new students, preparation of study plan cards, study results cards, internship reports, real work lecture reports, final assignments or theses are made and reported online system. Besides that, there are also manual ones to anticipate students who want to get direct services on campus. Lecturers are also required to have an account connected to the STAI Sumatra Medan account which aims to report lecture activities such as student attendance, syllabus, KKN reports, service reports and other activities both academic and non-academic.

b. E-Learning Learning Module

The learning model designed at STAI Sumatra Medan by integrating web-based learning in face-to-face learning programs. The face-to-face learning process is carried

out using the Student Centered Learning (SCL) approach through group work. Each lecturer and teaching staff at STAI Sumatra Medan has their own account which is used to optimize the lecture process. The concept of e-learning based learning at STAI Sumatra requires interesting and attractive material so that it motivates students to more easily understand the material presented

c. Application of E-Learning Learning
In addition to learning modules made in the form of e-learning, lectures are also implemented using a hybrid and online system. The implementation of the online system in lectures at STAI Sumatra Medan was first carried out during the Covid-19 pandemic which prohibited activities in the form of crowds.Implementation using e-learning by using e-mail and electronics that have been connected to the network, so that students can access via smartphones, tablets, laptops. The application of e-learning at STAI Sumatra Medan can be done by embedding documents in the form of Word, Excel, PPT and PDF on a blog or website via Google Docs.

Challenge of Sociaty 5.0 at STAI Sumatra Medan.

STAI Sumatra Medan with all the limitations of technology trying to adapt to the demands and developments of the times. The era of society 5.0, which inevitably enters STAI Sumatra Medan, will still have challenges that are quite complex, including:

a. Human Resources
The determining factor in the success of society 5.0 at STAI Sumatra Medan is the source of human data consisting of lecturers, staff and other supporting staff. Academically, the lecturers in the STAI Sumatra Medan environment already have undergraduate academic qualifications (S2), but mastery of the latest technology still needs training and deepening by presenting external trainers. Lecturers as teaching staff must be the first to recognize and develop the use of technology and then transfer it to students as agents of change.

b. Supporting facilities

The supporting infrastructure for society 5.0 at STAI Sumatra Medan is still lacking. Internet access which is still limited is also an obstacle in the implementation of society 5.0. Cooperation with telecommunications providers has also not been carried out.

There is no artificial intelligence made by STAI Sumatra Medan

All artificial intelligence that is used and used in the lecture process and student data collection still uses artificial intelligence made by other people. For example, Google form, grab and others. Dependence on artificial intelligence STAI Sumatra is actually very high, for that it is needed in the future homemade artificial intelligence products.

Incomplete big data from student and lecturer data collection is also not perfect. Big data as required in society 5.0 still needs improvement, especially student data that is valid and integrated with population data. This is to make it easier to provide a national diploma number (PIN), which is one of the requirements for college alumni today.

Conclusion

The challenges of managing the STAI Sumatra Medan tertiary institution are in curriculum issues that are not yet integrated, processes that are still not integrated with technology, the majority of lecturers and employees are strata two (S2) and there are non-linear lecturers, infrastructure that is not yet optimal, management quality has not reached on a transcendental (value-based) leadership style, relatively cheap sources of financing, accreditation has not reached excellence, student activity units that do not work, cooperation has not yet reached the level of international cooperation, alumni who work do not fit the disciplines. Implementation of the 4.0 industrial revolution era at STAI Sumatra Medan by implementing an online system-based administration, designing e-learning learning modules, implementing e-learning learning. Societal challenges 5.

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