

# THE DEVELOPMENT OF E-GOVERNANCE-BASED QUALITY IN THE UNIVERSITIES

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## ABSTRACT

Universities hold a strategic role in society as the teaching university, the research university, and the bastion of civilization. In this decade, the challenges of the universities become more complex where a paradigm shift in the universities occur such as: (1) the shifting of the role of the universities due to the influence of the globalization; (2) the scarcity of resources in response to changes with the proper way; (3) the development of the science and technology which accelerates rapidly; and (4) the development of the rapid entrepreneurial culture. Some important and fundamental issues facing the universities college in Indonesia today is that the existence of the universities college in Indonesia still faces a number of obstacles in the policy, the implementation, the monitoring, and the evaluation. Moreover, the issue of quality and the relevance of outputs of the universities have not contributed optimally in the world of industry and society. The universities have not optimally been able to become the important sector which can produce a significant number of entrepreneurs with the orientation of job creation and self-reliance. Based on the background of this grant research above, it can be concluded that the strategy of private universities towards the world class or high quality is studied. The method used was a qualitative research consisting of studying literature, conducting interviews, and distributing questionnaires to the informants in the universities in four provinces or cities in the area of The coordinator of The Private Universities

II of the southern sumatra and the analysis models. The following method used a quantitative method to measure the parameters of the performance of the universities and entrepreneurial growths of the universities. According to the results of the research in the first, second, and third year, a model to improve the e-governance-based quality to the universities through the research focus, the entrepreneurship, and the development of the resources was developed in the area of The coordinator of The Private Universities II of the southern sumatra. The final result of the improvement of e-governance-based quality in the universities in southern sumatra was the manifestation of the policy of the ministry of the higher education and research in implementing the management of the world-class universities, the scientific publications, and the reference textbooks.

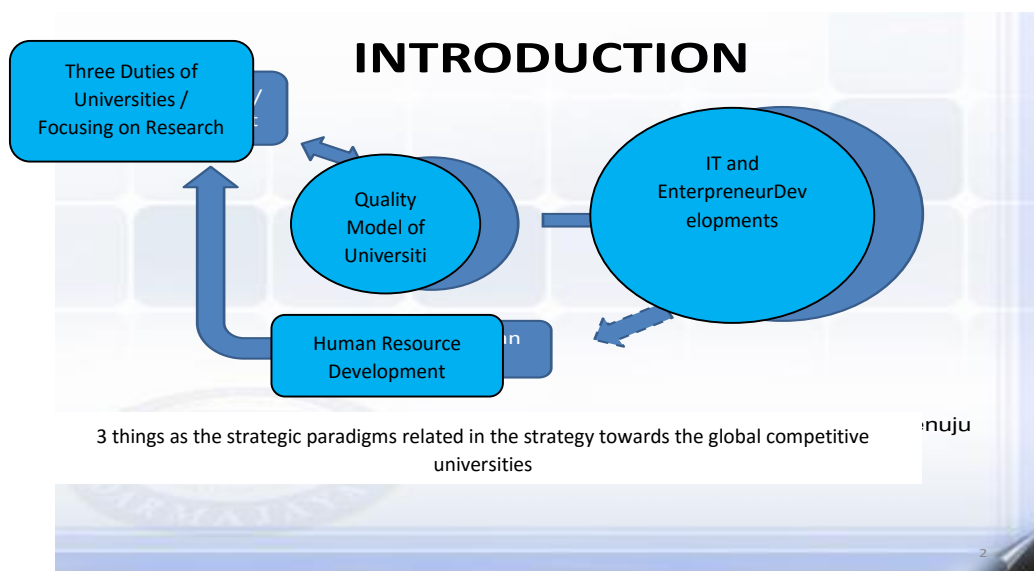
## KEY WORDS

Quality, E-Governance, Research, Enterprise and Development

## 1. Introduction

Universities has a very strategic role in society. The strategic role was often formulated into three paradigm. They are: the teaching university, the research university, and the bastion of civilization. The strategic concept on the quality of the education is ideally manifested if the spirit of three duties of the university is improved and and supported by the reliable IT systems,

entrepreneurships, and human resources (HR). The description of the good university college is shown below.



**Figure 1. Concepts of Strategies towards Universities**

After more than four decades, the industrial development in Indonesia is still classified as the country that imports the advanced technology through the mechanism of technical licensings, franchisings, joint ventures, foreign direct investments, capital goods imports, and international trade activities. There is no wonder if the study is carried out further based on the level of the technological development, the competitiveness level of Indonesia is far from the rank of 91 (Diharjo et al, 2013). Moreover, the industrial innovation development ecosystem conceptually also consists of various elements such as human resource suppliers, capital providers, knowledge and technology providers, and policy makers. The continuous interaction among the parties will produce the researchers.

In line with the condition above, the universities need to make changes in the directions and the goals of the universities related to aspects of the quantity and the

quality which will also be reflected from the alumni in conducting research and in creating dedication inside and/or outside the organization where they work. Furthermore, the change of the needs was also done on how the concept of managing the process of the organization of universities and the management of the universities either strategically or operationally in encountering the global challenges. Besides, it should also be noted that the perspective of the growth of the college is regarded as the corporation concept, how the concept of corporation applications are implemented, the availability of the information technology, the use of the information technology, and the strategic role for the communication among universities. In addition, it is also necessary to explain about the competitiveness of graduates who are able to study so long as they dedicate themselves independently in their work. Moreover, it is also important to improve the context of selection of

prospective students because the prospective students should meet three criteria such as the talent, the toleration, and the mastery of science and technology which are used in entering the arena of the information age and the creative economy.

The conditions above are in line with the study of Alttbabach and Knight (2010). These education experts stated that there are four factors that cause changes in the world of the universities in the 21st century. They are: (1) the shifting of the college role due to the influence of globalization; (2) the scarcity of resources in response to changes with the proper way; (3) the development of science and technology which accelerates rapidly; and (4) the development of an rapid entrepreneurial culture. Moreover, The Economist writes that universities have recently contributions to meet the demands of society, particularly in the improvement of human resources and development of the nation which culminate with the dissemination of the culture. From the role of the universities, it is indeed necessary to develop a model to improve the quality of the universities by which its development is outlined in a vision of the universities. Through this vision, the change management of the universities which answers the challenges of the future are in the realization of the management of the universities which is fundamentally based on three main aspects. They are the processes, the contents, and the resources that should be optimized independently by each university.

The issue is whether the universities in Indonesia have been prepared to deal with these changes or not. Some important and fundamental issues which are faced in the universities of Indonesia today are the universities in Indonesia still encounter a number of obstacles both in terms of the policy, the implementation, the monitoring, and the evaluation. The obstacles are related to issues of the access, the quality, the budget, the cost, the relevance of the higher education, and the other issues. Moreover, issues of the quality and the relevance of outputs of the universities also have not contributed optimally in the world of the industry and the society. The universities

have not optimally been able to become the important factor that can produce a significant number of entrepreneurs with the orientation of job creation and self-reliance. Furthermore, there is also a large number of educated unemployments. In addition, there is also a few of the result of the research and publications. Besides, the community service program is still considered quite responsive in contributing to the empowerment and community development. Therefore, those are the fundamental problems faced by the world of the universities in Indonesia today. According to the KEI (Knowledge Economy Index), the scientific publications of universities in Indonesia is still low; and, Indonesia is still in the rank of 103 but Singapore is in the rank of 19th, Malaysia is in the rank of 48, and Thailand is still in the rank of 63.

## **2. Reviews Of Related Theories**

### **2.1 Entrepreneurship**

Entrepreneurship, according Sunarya et al, (2010), is a discipline which studies about values, and capabilities of a person's behavior in the face of life's challenges to pursue opportunities with various risks which may be encountered. In the context of the business, according to Zimmerer (1996) in Sunarya et al, entrepreneurship is the result of disciplined and systematic implementation processes of the creativity and innovation in filling the needs and opportunities in the market.

Moreover, Jati et al, (2015) say that Entrepreneurship is the efforts to take advantage of opportunistic fashion to achieve a profit in the form of material (money or valuable stuffs) and of non material (praise and fame). The person who do the entrepreneurship is known as an entrepreneur and the verb of it is enterprise. Furthermore, he adds that the enterprise means standing under their own feet. The implementation of the entrepreneurships by Wiratno in the Ministry of Education (2010) comprises 2 things. They are: (1) the

entrepreneurship as a subject in the level of the medium education and as a subject in the level of the higher education; and, (2) the entrepreneurship as a skill that refers to the standard of competence.

The subject both at the level of the secondary education and the higher education is different one and another but essentially contains the same meaning because it is in the context of the vocational high school (SMK). Entrepreneurship is generally known as "units of production"; while, in university it is better known as business Incubator (Ibis) as the development of business Incubator that can be used as a model (the model Ibis University).

## 2.2 Management of Universities

Most universities are non-profit organizations or franchises. Moreover, a few of them was called a commercial enterprise which is similar to the other business enterprises. Therefore, the topic discussed here is the management of the universities is as one form of social activities or non-profit managements. If there are some dimensions of the meaning or the function which include the nature of the university, the meaning the corporation still has subdimensions of the defintions. The corporation of the universities can be viewed also as an institution, a company, or an agent or an intermediary. Regarding this matter, Balderstone (in Indrajit & DjokoPranoto, 2011) says:

*"Now the university has become a mixture of institution, enterprise, and agency. This is partly because it has assembled a large and confusing range of activities and operations, but partly also because the major parties at interest want to view it in different ways; the faculty and students as an institution; the trustee and some administrators, as an enterprise and the government sponsors as an agency. Conflict of purpose, law, motivation and style flow from these different views. But i believe*

*that important consequences flows from the voluntaristic and self-propelling character of the process of learning bt individuals and groups of scholars."*

The functional applications of the general management in the management of universities could be seen below:

### 1. Planning

The planning work program including the budget planning is not a new thing for universities, either five-year planning or annual planning. But a planning is also necessary for a strategic planning. Its planning is called a planning which determines life and death and the growing and the stagnate of an entity including universities

### 2. Organizing

The organising functions include the function of the fulfillment of staffs who are suitable with each task or position. There are several models of the growing organization of the universitiess either in Indonesia or outside Indonesia. Regarding the fulfillment of staffs or employees, some types of the employees who have distinctive tasks and have their its own characteristics in working in a university should be distinguished. There are four types of the employee which have a different task in the management of the universities. They are: (1) the academic employees (lecturers and scientific researchers), (2) the administration employees (finance division, registration division, personnel division, etc.), (3) the supporting academic employees (lab employees, garage employees, library employees, etc.), and the other supporting employees (drivers, gardeners, cleanser, etc.). The tasks of the organizers and the staffs are in the area of plannings, recruitments, selections, trainings, career developments, detailed task manifestations, and task needs, authorization establishments, and control determinations.

### 3. Implementation

This task is related to empower the human resource who works in the college so that each human resource works to the assigned tasks with the maximum passion and skills. This is a very big challenge for the management function because it involves human beings who have faith, hope, nature, behavior, emotion, satisfaction, development, intelligence, and interpersonal concerns.

#### 4. Supervising

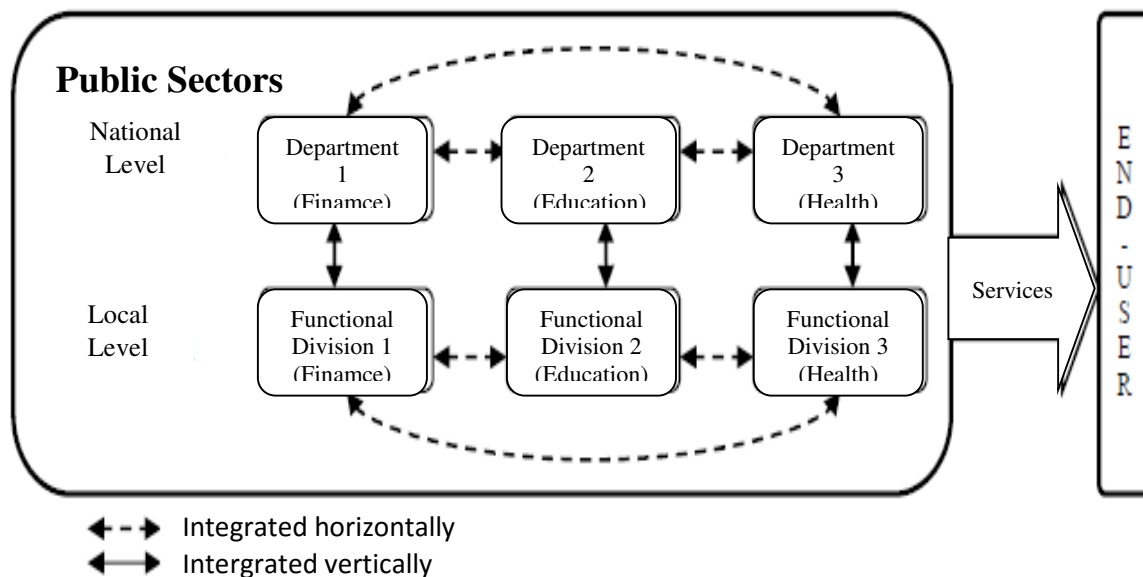
Supervision is the last function of the management but it does not mean that its function is not important. Supervision is the observation and measurement whether the implementation and the result of the work are in accordance with the plan or not. If the implementation and the result of the work have not suitable with the plan, the obstacles and the way to eliminate these obstacles must be found in order to be able to work as it is expected. The function of the supervision is not only done in the end of the year, but it should be done regularly in a shorter time (for example., the function of the supervision is done monthly) so that the betterment needs to be done and also not too late to implement.

### 2.3 Roles of E-Governance in Universities

According to Nurhadryani (2009), the actor in e-Governance can simply be divided into two types. The

first actor is the public sector as the government organizer (the executives of the department of finance, the department of education, and the department of health, etc.), the judiciary, and the legislature at the national, regional and local level. The second actor is called end-users. According to the concept of governance, the end-user consists of the non-governmental sectors and the private sectors which interact in a five-level governance. The utilization of the information systems through the virtual office services increases the quality of the better office services which are used to serve all the stakeholders which provide a sustainable competitive advantage, especially for the college. It is expected that through the virtual application program, it indirectly affect the colleges to steer students to study in the universities and all this matter indirectly increase the intake.

According to the two types, ICTs can be used for internal and external functions. The function of the internal functions was that ICTs are used for the administrative processes by integrating all sectors of the public horizontally (integrated among departments) and vertically (intergrated among levels). With the increasing of the internal integration either vertically and horizontally, it is expected that the government can improve its external function which organizes the better public services which to the end-user. The e-Governance has internal and external functions illustrated as in Figure 2



**Figure 2. E-Governance Framework: Functions of e-Governance Internally dan Externally**

#### 2.4 The Objectives And The Benefits

1. To implement the strategies to achieve or to win the top e-governance-based universities through the research activities, to create entrepreneurs and developments of resources or capacities.
2. To analyze the empirical phenomena about the model of the change management of the universities to answer the challenges of globalization through the main aspects (processes, contents, and resources).
3. To formulate the design of Products or Services of the universities (Curricular Services (CS), Research Services (RS), Dedication to Community Service (DCS), Administrative Services (AS), and Extracurricular Services (ES).

#### 4. Research Method

The method of this research was the qualitative method (studying literature, implementing observations, and conducting in-depth interviews with the related party of

World Class Universities. In this research, the observation was carried out. The observation was done at the private colleges throughout the areas of The coordinator of The Private Universities II of the southern sumatra (Palembang, Bandar Lampung, Bengkulu, and Bangka Belitung) whose target was the informant of the private universities and the students of the private universities. To complete the additional data, questionnaire was distributed. The observation was conducted to obtain data related the performance of the the college. The data collecting technique was (1) doing the library research (studying literatures, having documentations, and studying text books) which was relevant to this research; and, (2) conducting the research files to the related parties from which the analysis on the strategy was also done in order to reach the universities which had the high quality. The data collecting technique was guided by the particular instruments (observation, interview, and Focus Group Discussion (PGD). The obtained data were implemented directly to the respondents from the private universities in

the area of The coordinator of The Private Universities II of the southern sumatra

## **5. Result Of The Research And Discussion**

The development of this research was done by involving the internal management. Evaluations was done periodically and comprehensively by considering the aspects of the performance units, the contributions on the performances, the overall academic reputation, and the effectiveness of the unit. The overall evaluation was necessarily implemented to be optimized periodically. The quality assurance system which could be used as an appropriate development for each work unit. The development associated with the current needs of the university in this research was an interesting thing to be developed. Kinds of the development encompassed the development of the research capacity, the entrepreneurship education, and the human resources. Furthermore, the urgent connection related to another development was Internal Quality Audit (IQA). IQA was the evaluation tool which had been implemented under the coordination of the Quality Assurance Bureau (QAB), and the cooperation at the national and international level.

### **5.1 Internal Quality Audit (AMI) is an evaluation tool that had been implemented under the coordination of the Quality Assurance Bureau (QAB).**

The general or basic performance indicators which were evaluated and applicable to all units were: (1) the achievement of the target quality unit; (2) the achievement of work plan/program and the development unit program; (3) the availability of the working procedure and its implementation; (4) the understanding, the realization, and the evaluation on the lists of the customers' complaints, (5) the evaluation of the discipline on the work, and (6) the control and the evaluation of the customers' complaint. The academic performance

indicators which were evaluated consisted of 9. They were: (1) the preparation processes; (2) the implementation processes; (3) the reviewers/tests processes; (4) the academic achievement; (5) the dedication work practice processes (DWPP)/Field Work/Clinical Secretariat; (6) Scientific Work Processes; (7) The research result examination; (8) Lecturers' Condition; and (9) Graduate Results. The indicators of the performance were in the form of the activities which were more detail and operational. The result of Internal Quality Audit (AMI), Performance Unit, and Internal Academic Quality Audit (AMI) per Semester Academic generally were expected to increase the significant performance index compared with the period of the previous Internal Quality Audit (AMI). Unit Performance Index increased annually on all units with the average upsurge.

The result of the achievement of Internal Quality Audit (AMI) and the Performance Unit on the Academic Performance Index is expected to increase the faculty and the department. Internal Quality Audit included the unit quality target, the strategic plan, and the work program, work processes, a list of quality records, disciplines, and customers' complaints. The basic principle of the implementation of Internal Quality Audit (AMI) recently was to look for opportunities for the improvement towards the external audit so that Internal Quality Audit (AMI) also analysed the Higher Education's new accreditation instruments and the items of ISO. The capacity of the research of the private university was also supported by a network of the cooperation. Furthermore, the private universities also continued their efforts to build the cooperation network with various institutions either with universities, government, or industry at the national level. Efforts to develop this cooperation was manifested through the intensification and extension. Intensification was done by empowering the cooperation; while, the extensification was done through the development of new cooperation.

### **5.2 Cooperation in National Level**

The cooperation at the national level which had previously been done was improved in order to bring the alumni with the world of work and to improve the connection between the education and the demands of the real world. Moreover, the cooperation with industry was also woven in various forms such as in campus recruitments, workshops, career meetings, public lectures, student internships, and entrepreneurship workshops with national and multinational companies. With the cooperation, furthermore, the private universities had also a chance of obtaining facilities in the form of the technology in teaching and learning which was equal to the leading universities in the world. With this cooperation, in addition, the doers of the private universities could also use the special prices of products and educational programs of the company through the signing of the MoU. The signing of the MoU was also the form of the early commitment for master plan of researches. Recognising, learning, understanding, and applying the latest technologies especially in imaging and printing were regarded as a means of the early utilization of the latest technology and as the awareness in the field of education. In an effort to strengthen the cooperation network with the industry, in 2016, the Alliance Office of Universities and Industry needed to be founded as the unit of the resource management on the science and technology which was used to manage the power of the science and technology of the private universities to the public and the industries. Besides, the following development was also expected to cooperate with the collaborators with various institutions in the future nationally and internationally with the reference to the MoU which was signed with the agreement to establish the cooperation in the field of education, teaching, and research. As the recognized university in terms of quality assurance on the institutions, private universities were also expected to collaborate with the university in the regions of Bengkulu, Bangka Belitung, South Sumatra, and Lampung.

The model of the development of the quality of the universities could be realized with the guidance on how the strategic program packages were going to be implemented by deriving the visions and the missions set out in the strategic plan of a university and a master plan of researches (RIP). The orientation of all researches was conducted in accordance with the master plan of researches of private universities in the area of The coordinator of The Private Universities II of the southern sumatra which currently had orientations on the development of research in the framework of the improvement of the life of the civil and eternal society to manifest the good, righteous, and prosperous nation which was blessed by Allah SWT (the opening of the 1945 constitution on the 4th alenia). The focus of this research was “The Development of the Research for Problem Solving” which was contained in 4 Roadmaps of the the Leading Research of the Universities. The 4 roadmaps could be seen below.

- 1) The development of the e-Governance-based quality in the universities through Research;
- 2) The development of the e-Governance-based quality in the universities Through Entrepreneurships;
- 3) The development of the e-Governance-based quality in the universities through human resource capacities
- 4) The change management of the universities through the processes, contents, and resources as the main aspect;
- 5) The implementation of the development model to manifest services (product) of universities.

The leading research of the universities in 2016 with the title of “The E-Governance-Based Development Model on The Quality of The Universities through The Research, The Enterprise, and The Human Resources Capacity (A Case Study on Private Universities in the area of The coordinator of The Private Universities II of the southern sumatra) was described as follows.

## 6. Conclusions



1. The e-governance strategic model was established to win the leading and the competitive universities through the researches, to create the enterprise, and to develop the resources or capacities.
2. There was an approach model of the change management within the universities to answer challenges of globalization era which focused on the processes, the contents, and the resources as the main management aspect.
3. Designing and manifesting the higher education service, the research services, the dedication to community service, the administrative services, and the extracurricular services.
4. The leading e-governance approach model was an effective model to determine the right strategy which was used for the universities to win the competition among the world class universities.

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