Study of Higher School Management for International Level Acceleration in Muhammadiyah University of Malang

Abstract—In order technology adoption to achieve high quality of education, it must be set the good management first so the activity will be effective. The research is described how Muhammadiyah University of Malang do related to their management, operational strategy, problem solving, and good management development. The result would be implemented in many other higher schools of Muhammadiyah all over Indonesia. A field observation and certain interview with managerial were very helpful in the research. While the result is about key point of international level acceleration are communication skill, student interchange, and information technology adoption.

Keywords: technology adoption, Muhammadiyah higher school, good management

I. INTRODUCTION

In the technology rapidness, people driven to be more attractive related to the new development, not just how to get but also how fast can be acquired as well. What Muhammadiyah need is to accelerates more technology acquisition in many colleges all over Indonesia since Muhammadiyah is an important player in the national education development. It is now about how to manage the strategy in management planning align with the technology evolution. This study observed how Muhammadiyah University of Malang accelerates internationalization and also evaluates the achievements.

A certain research has reported that innovation is happening all over the world in many different contexts and by a diversity of actors. While there are four broad to accelerate quality progression of student: 1) Hands-on, Minds-on Learning: It drives a transformation in study by doing more learning than classroom teaching, 2) Elevating the Education Workforce: Involving high technology in the educational activity, 3) Streamlining Schools: In higher education, it is about what are industrial needs and what the student expected, 4) Activating Communities for Accountability and Delivery: It is about how to build communication by involving such community [1].

At the beginning of internationalization, it must be understood what the dimensions are, then partially goals can be determined. Clearly, the international dimension of higher education has been steadily increasing in importance, scope, and complexity [2][3][4]. Many targets make a certain complexity that align together with state of the art in the organization. Internationalization related to globalization, where everyone in the institution and all stakeholders take a part as agent of change. It is impossible to do big project by little amount of contributions.

II. LITERATURE

As UMM big project, to be the international player in higher education, there are eight areas challenges to be concerned: globalization, regionalization, information and communication technologies, new providers, alternate funding sources, borderless issues, lifelong learning, and the growth in the numbers and diversity of actors [2][5][6][7]. Many things have to prepared by small part and or scope first by a numerous diversity, could be the new issue in every field. In campus scope, it can be involved by lecturer, experts, even students with good continues learning concepts. This strategy drive the campus to look for innovative content and increase a variety of technology-based options [8][9][10], therefore it must implement the information and communication technology. Information technology plays most in order accelerate the regionalization, and globalization or internationalization.

Related to the innovative content that align with current technology development, it is good idea to consider the borderless issue means thinking out of the box, getting new provider and also thinking about alternate funding sources. Many researches stop the project just because about the money, then the institution have to do some helps them out and cross the line. In this case, all they need is collaboration with other institution who will share the experiences, accommodations, fund, or human resources.

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As shown in Chart 1 that in 2019 there are six key trends of higher education in the world. Innovative approaches to new degree programs show that institutions are seeking to connect diverse disciplines while maximizing existing programs, as evidenced by the rise in interdisciplinary programs [11]. One trend comes out as new innovative thinking, that is modularized and disaggregated degree. It gives possibility and opportunity of formal education and coursework blending. Together with rethinking how institutions work, the new trend replaces new forms of interdisciplinary studies that formerly trending in 2018. It clearly that internationalization need to follow trends: growing focus on measuring learning, advancing cultures of innovation, redesigning learning spaces, rethinking how institutions work, and modularized and disaggregated degrees.

III. DISCUSSION AND RESULT

Formerly Muhammadiyah University of Malang is Muhammadiyah University of Jakarta’s branch was established in 1964. Four years later officially operated by Yayasan Perguruan Tinggi Muhammadiyah Malang as independent University. It now has 10 faculties of Bachelor Degree, 8 Majors Master Degree, and 1 Major Doctoral. To become leader University regarding science and technology development based on Islamic values is the vision, while the missions are: carry out the qualified education, doing research for a better life, implementing a good university, assist civitas to be more Islamic being, construct mutual relationships. The study then continued by observing many aspects as list:

A. Management

1) Strategy Planning and Human Resources Program

Human resources take an important part of organization success, so it must be planned systematically and aligned with interest and potensial skill of lecturer and staff [12][13]. This strategy is started by human resources recruitment/ selection, competencies improvement, performances evaluation either academical or non academical field, and formulate a rewarding recommendation for any kind of important achievements.

Further in Muhammadiyah University of Malang, particularly have implementing international master and doctoral programme for lecturers, good lecturer and stuff competition, training engagement, international lecturer exchanges, and collaboration research. All of programme have to be carried out by involving physically, emotion touch, and intellectual to achieved the goals.

2) Strategy Planning and Graduates Quality Program

Related to graduates quality planning UMM supports to enrich them both of English and Information Technology in order value adding positively in the industry and global competition. Besides, UMM build a good relationship with many institutions to carry out some scholarship programs through a competitive selection of candidates. Collaboration with other abroad university creates new system in the academical services by certain software application. By the system, UMM guarantees one day academical service that integrated in Academic Administration Management. In the earlier season, students have to live in board in order Character and Leadership Building Program, under the special supervised method to improve their soft skill. They are also leaded to be Good Muslim who skilled in problem solving and social awareness.

3) Facility and Infrastructure

Automatic services is the first priority in order improving facility and infrastructure of UMM. To do this, web based system must be already setted and implemented as mandatory in system information development which including administratives, academic, and also operational or transactional services as well. The web based system in which become such a information portal, use three different language preferences, Arabic, English and Indonesian. This
strategy align with the vision and mission of UMM, especially related to graduates quality planning. The system supports an effective academic controlling, high accuracy and speed of students services.

Regarding the knowledge references, it implements an automatic application system called Library Automatic Services, where students allowed to surf any kind of their references through Online Public Access Catalogue. Because of the system developed in web based, they can access by smartphone anywhere, anytime they need. It is very useful to get any references to do some research as much as they can so the output will be more valuable.

B. Problems

The problems of UMM can be reported about Information Technology Data Centre utilization that still low for lecturer and staff, and limited amount of international handbook as the main study references. They have to be managed seriously to do acceleration as fast as they can do, so the campus rating will increase more higher later. As we know it is not only physical proven observed to look after the institution quality, but also what they can show to viewer over the world, so the use of latest information technology must be concerned.

Other problems are about foreign language implementation, either Arabic and English in campus scope. Then another is an ambiguity among reward and punishment related to the achievement of lecturer and staff.

C. Challenges

This study focused on internally Muhammadiyah Higher School challenges which found: 1) The quality and quantity of human resources are limited, 2) Internal conflict potential among managerial and operator still high, 3) There are some major does not align with the campus vision, 4) Many policies do not well distributed and understood by all Muhammadiyah Higher School Management, 5) Still has low quality of administrative staffs, and 6) Facilities and Infrastructures issue.

D. Preventive

According to the challenges found, UMM has actions: 1) Lecturer and staff education development, 2) Concern in their welfare, 3) Muhammadiyah involving optimizing, 4) Management efficiencies improving. Those, management theory concepts that focused on human resources quality including leadership have to build wisely to accelerate the internationalization. Because of UMM is a part of Muhammadiyah society, it is important to align all policies with Muhammadiyah vision generally.

E. Strength

Study about what UMM has as their strengths in order reach international class in education reported as follows:

- Having a good cooperation with Australian Consortium for In-Country Indonesian Studies (AICIS) since 1993, which contributed by 15 Australian Universities who has Indonesian studies.
- It has an English Class Program.
- It has passed the international recognition, so that connected with 13 universities in Europe, 9 universities in Asia by Erasmus for Cooperation Window.
- The campus known as a beautiful tourism campus, that is comfort to do any education activities like outdoor discussion, field research, and many more. It supports academical productivity, especially in community service research related.
- Fastabiqul khoirat spirit, that is positive competition constructed by Islamic values.
- It has many productive business units to support internal financial, as field laboratory and creates entrepreneurship at once.
- Plurality, that drive to nation character building.
- Fresh air and many supporting environments surrounding UMM.
- It is located in the most kind and friendly city, enjoyable, modern, and respect to each other.

F. Strategy

Here UMM implements what was called strategic systemic interventions. Strategic planning refers to the combined processes of design, development and ongoing maintenance set of actions [14]. The intervention including monitoring all of activities, that links the institution’s aims and competences with demands and opportunities. UMM tried to set a good governance of Muhammadiyah Higher School to be the international player by improves quality and quantity of lecturer and experts. It has more than 94,5% of 798 lecturers are come from abroad university. Exchange program through Erasmus Mundus External Cooperation Window is one of its commitment in improvement strategy.

Another strategy related to human resources and graduates quality improvement is by establish cooperation either Government to Government (G2G), Government to University (G2U), or University to University (U2U) such: Rabithah ‘Alam Al-Islam (with many da’wah institutions, Arabic), Al-Azhar University and Mina University (Egypt), American Corner, RELO for lecturer support, Indiana University for professor exchange, AMINEF for American scholarship, Summer Job in Canada and USA, Australian Consortium for In Country Indonesian Studies for student exchange, Murdoch University for human rights study centre, University of Wollongong for library information technology.

G. Implementation

The planned strategies must be implemented to realize the aims, as follows:

- Let the lecturer to take advance study in abroad as much as they can send to get higher standard of quality in many universities.
- Do web based academical services.
- Teaching exchange among international collaboration universities.
- Do collaboration researches.
- Continues improvement to be good university government.
H. Achievement

The implementation of planned strategies let UMM got some achievements:

- One of 20 Promising University (General Directorate of Higher Education, 2008).
- ASEAN Energy Award (Electricity Generator by Micro Hidro, 2008).
- Anugerah Kampus Unggulan (Prime Campus Award, 2008-2010).
- Two stars of International Accreditation Council (QS Star, London-British, 2010).
- ISO 9001 : 2008 holder for Finance, Administration, and Students Bureau.
- 14th National Private University

Regarding the international collaboration, UMM build many relationships with other university from Europe, US, and Australia also.

1) Europe: by scope on Library Management, Teaching Learning, Strategy, Curriculum Development, Exchange Program, and Islamic Seminar with Islamic University of Rotterdam (Netherlands), Utecht University (Netherlands), and Tillburg University (Netherlands). While Link Program has also created in research and lecturer exchange with University of Trento (Italy), University of Innsbruck (Austria), Dresden University of Technology (Germany), Murcia University (Spain), University of Kuopio (Finland), Minho University (Portugal), Atılım University (Turkish), Global Education for European Engineers And Entrepreneurs (Franc), University of Cagliari (Italy), University of Murcia (Spain), University of Oviedo (Spain), University of Rovira I Virgili (Spain), Halmstad University (Sweden)

2) US: by scope Summer Job Program, public speaking and English training, International Networking, students and lecturer exchange, and Study Abroad program which is UMM take a part as host. The collaboration created with The University of Wisconsin (Madison), Shimamura LLC (San Diego), and Apex USA Oklahoma.

3) Australia: collaboration with Australian National University, Asia New Zealand Foundation, Charles Darwin University, SOAS (Uni of London), University of Sydney, University of Technology Sydney, University of Western Australia, University of Western Sydney.

4) Asia: many collaborations has created with Universitas Malaya, Chonnam National University (Korea), National University of Mongolia, Hanoi University of Technology (Vietnam), The National University of Laos (Laos), Universiti Sains Malaysia (Malaysia), Asian Institute Technology (Thailand), Burapha University (Thailand), Hunan Normal University (China), Jilin University (China), Beijing Foreign Studies University (China), Lanzhou University (China), Kunming Institute of Botany (China), Royal University of Phnom Penh (Cambodia), University of the Philippines Diliman (The Philippines), Amity University Uttar Pradesh (India), Yenepoya University (India), National University of Laos (Laos), Hanoi National University of Education (Vietnam).

5) Collaboration with international non-academic institutions related to either on job training programs or researches such as: Othman Hashim & Co (Malaysia), Hawha Corporation (Korea), US Embassy, Iran Embassy, and Netherlands Higher Education Partnership.

6) Collaboration with Curtin University, University of Western Australia, and Australian Volunteers International for English Lesson Programme.

7) Other collaboration with France in culture research, Japan by JICA, and Korea.

IV. CONCLUSION

There are three main issues related to the international level acceleration in Muhammadiyah University of Malang:

- Setting a special program which is English used as common communication language, modern infrastructures and facilities, boarding system, student and lecturer exchange as well.
- In order improve human resources qualities, some courses have been held, seminar both national and international.
- Launch a scholarship programme.

Follows the six key trends of higher education especially advancing cultures and learning also build and maintain international collaboration to look for innovative content by researches.

REFERENCES

[1] R. Winthrop, E. McGivney, T. P. Williams, and P. Shankar, “Background Paper The Learning Generation Innovation and Technology to Accelerate Progress in Education,” 2016.

[2] J. Knight, Higher Education in Turmoil: The Hanging World of Internationalization, 13th ed. Ontario: Sense Publisher, 2008.

[3] V. A. Proletarskaya, E. Yu, J. Wang, and J. Song, “University Accreditation using Data Warehouse University Accreditation using Data Warehouse,” Int. Confr. Comput. Appl. Inform., pp. 1–7, 2017.

[4] S. Gupta and K. Saroha, “Fundamental Research of Distributed Database,” UCSMIS Int. J. Comput. Sci. Manag. Stud., vol. 11, no. 02, pp. 138–146, 2011.

[5] P. T. Makele and S. Doss, “A Survey on Data Warehouse Approaches for Higher Education,” Int. J. Innov. Res. Appl. Sci. Eng., vol. 1, no. 11, pp. 223–227, 2018.

[6] S. M. Nejres, “Analysis of Data Warehousing and Data Mining in Education Domain,” Int. J. Adv. Comput. Sci. Technol., vol. 4, no. 4, pp. 35–38, 2015.

[7] C. Suba, “Data Warehousing Methods and its Applications 1 1,” Int. J. Eng. Sci. Invent., pp. 12–19, 2018.

[8] R. S. Natow, E. Barnett, A. Boatman, M. Cormier, A. Mayer, and S. Smith, “How and Why Higher Education Institutions Use Technology in Developmental Education Programming,” Cent. Anal. Postsecondary. READINESS, no. September, 2017.

[9] A. Sebba, F. Chih, A. Nouicer, and A. Tari, “Research in Big Data Warehousing using Hadoop,” J. Inf. Syst. Eng. Manag., vol. 2, no. 2, pp. 1–5, 2017.
[10] R. Hahn and M. Kuhnén, “Determinants of sustainability reporting: A review of results, trends, and opportunities in an expanding field of research,” J. Clean. Prod., no. October, 2017.

[11] B. Alexander et al.; EDUCAUSE Horizon Report | 2019 Higher Education Edition, 2019.

[12] S. H. Chalid, “Managerial Staff Developing Management Regarding to Organizational Culture in Muhammadiyah University of Malang,” 1994.

[13] S. Q. Badu and N. Djafr, Kepemimpinan & Perilaku Organisasi. Gorontalo: Ideas Publishing, 2017.

[14] Maria Jose Latorre-Medina and F. J. Blanco-encomienda, “Strategic Management as Key to Improve the Quality of Education,” Procedia Soc. Behav. Sci., vol. 81, pp. 270–274, 2013.