

# Developing Strategic Plan for Supporting Internationalization of Technical and Vocational Education and Training

Ismi Dwi Astuti Nurhaeni, Rino Ardhian Nugroho, Noni Srijati Kusumawati  
 Magister Public Administration Department, Faculty of Social and Political Sciences  
 Universitas Sebelas Maret  
 Surakarta, Indonesia  
 ismidwiastuti@staff.uns.ac.id

**Abstract**—In global competition era, universities are demanded to improve their quality and reputation through internationally-standardized improvement of education and research called internationalization. The attempts to actualize university internationalization has not been widely responded by vocational education in Indonesia, such as by Solo Textile Academy, whereas its graduates should compete with overseas graduates from China, India, and South Korea, etc. This article discusses the development of strategic plan for supporting the internationalization of technical and vocational education and training. The research was conducted in Solo Textile Academy. The data were collected through documentation, focus group discussion and in-depth interview. The analysis technique employed is Miles and Huberman's qualitative analysis. The result reveals that Solo Textile Academy was still not prepared for developing internationalization. The main problem is the limited number of lecturers with doctoral degree, poor English proficiency and insufficient fund. Moreover, its business-plan documents have not explicitly stated about internationalization. Accordingly, strategic plan for supporting the internationalization of technical and vocational education and training is required. The first step taken is the making of planning and developing team for the making of self-evaluation and SWOT analysis as the foundation to determine prominent and priority programs for supporting the internationalization.

**Keywords**—*internationalization; strategic plan; technical and vocational education and training*

## I. INTRODUCTION

In the era of global competition, universities are demanded to enhance their quality and reputation through standardized improvement of education and research by referring to the international standard. In universities, such acknowledgement process is called internationalization.

Internationalization of higher education is a systemic and sustainable effort in responding to global challenges through the integration of international and intercultural dimensions into services in the fields of Education and Teaching, Research, and Community Service [1-3]. Internationalization of higher

education can decrease the differences of the quality of education services between developed and developing countries [4]. Universities/colleges become more competitive at the global level and receive recognition at the international level. This is known as World-Class University [1,4,5].

Indonesian government issued Law Number 12 Year 2012 concerning Higher Education [6]. One of the Articles (Article 50) discusses international cooperation.

Internationalization policy on higher education has been differently responded. Some universities responded the internationalization policy by participating intensively in international university ranking such as: QS Star, UI Green Metric, 4ICU, Webometric, AUR, etc. However, there were also universities giving no responses.

Based on the data of Global Competitiveness Index 2018, among the eight ASEAN Countries, Indonesia is ranked on the fifth level. It is left behind the four countries (i.e. Singapore, Malaysia, the Philippines, and Thailand). Moreover, among the 119 countries, Indonesia is on the 77th rank [7].

The attempts to actualize universities/college internationalization was not intensively responded by vocational education institutions in Indonesia, such as Solo Textile Academy, whereas the academy graduates will compete with other graduates from other countries, such as China, India and South Korea.

Strategic plan is a comprehensive long term plan that is useful for guiding day-to-day organization's decisions moving towards an organization's goals having been set. Strategic plan is also useful for evaluating organization's progress and changing approaches while moving forward [8-10].

Strategic plan is very important for the fundamental framework of all other plans that must be taken. Moreover, it enables the formulation of targets and plans to be achieved more easily. In addition, it will also become the guidance to all organization members to work towards similar direction and aid the manager in making decisions [8,11-13].

This article discusses the development of strategic plan for supporting internationalization of technical and vocational education and training, i.e. (1) the views of Textile Community Academy’s managers on the concepts and focus of internationalization; (2) internationalization policy contents of the strategic plan in Textile Community Academy; and (3) the constraints of the implementation of the internationalization in Textile Community Academy.

**II. METHOD**

The research was conducted at Technical and Vocational Education and Training in Solo, Indonesia, namely Textile Community Academy, considering that the academy is the mere vocational school established on the joint-cooperation among the Ministry of Industry, the local government, and industries. The data collecting technique was in-depth interview with the college community comprising of director, lecturers, students, and administration employees. The data analyzing technique was qualitative analysis based on Miles and Huberman’s model. The aspects analyzed are: (1) the views of the manager on the concepts and focus of internationalization; (2) the internationalization policy contents of the strategic plan; and (3) the constraints of the implementation of internationalization.

**III. RESULTS**

*A. History of Textile Community Academy*

Textile Community Academy was established in response to the need of middle employees not operators but also not managers based on the cooperation among the Ministry of Industry, the local government and industries.

Textile Community Academy was built on the land belonging to Surakarta City Government and it was built by the Ministry of Industry. Seen from its concept, the vision of Textile Community Academy is more likely directed to the fulfillment of industries’ human resources (Source: Interview with the teaching staff, September 8, 2018).

Textile Community Academy has employees with various ranks of employees groups, namely 5 people of grade IV and 24 people of grade III. In addition, seen from their educational background they can be classified into master degree (12 people), undergraduate degree (17 people), undergraduate vocational degree (D-4) (12 people), diploma degree (D-3) (1 person) and senior high school (8 people).

*B. Views of Textile Community Academy’s Managers on the Concepts and Focus of Internationalization*

Strategic plan on internationalization is necessarily commenced with the presence of understanding of the universities/colleges about internationalization. This will be able to drive the institution to designing and then implementing the strategic plan.

Based on the organization structure, the director is responsible for chairing the implementation of education, research, and public service, building and developing the

teaching staffs, students, and administration employees of Solo Textile Community Academy.

TABLE I. VIEWS OF TEXTILE COMMUNITY ACADEMY’S MANAGERS ON THE CONCEPTS AND FOCUS OF INTERNATIONALIZATION

Description	Director	Lecturers
Concept of internationalization	Internationalization means: Globalization Alumni have insight both locally and internationally Students have the ability on international languages in line with the development of science and technology The academy can apply industry 4.0 in the future	Internationalization means: International recognition by international institution International accreditation
Focus	The learning process must advance to the level of current technology Machines are more sophisticated than industry. Combining between conventional and modern technology Developing the technology of yarn manufacturing techniques, fabric manufacturing techniques and garment manufacturing techniques. But in the future, there are plans to make design techniques to keep abreast of foreign market demand for apparel.	Opening international class Quality assurance Opening and accepting everyone Facilitating the instructor for going to the international conference
When to start	Already starting internationalization Preparing to send three lecturers to China related to weaving technology in accordance with developments abroad.	Needing to improve the internal system The practice of dual systems (campus and industry) is troublesome Having two references, i.e. Ministry of Industry and Ministry of Higher Education There is no rule of thumb for recruiting foreign lecturers International Certification Publication in international conference

<sup>a</sup>. Source: In-depth interview with the director and lecturers on September 6, 2018.

According to the director, internationalization of higher education takes place globally. Textile Community Academy adopted German educational system by implementing dual system, namely 50% theories and 50% practices in industries. The academic institution has cooperated with industries in

China for producing weaving machines for over one year (Result of interview, September 6, 2018). Furthermore, he stated that the academy focuses on textile. It is still in the process of learning but it should be one level higher than that of in the present industries. Thus it may not be like vocational school, of which its machine is left behind the industries and obsolete. In short, the graduates will not be useless.

The statement is reinforced by one of the teaching staffs that the approach can be done by opening international class with local or overseas participants and teaching staff. University/college internationalization must cohere international quality assurance. Furthermore, it must be supported with fund for conducting international seminars.

Furthermore, another teaching staff said that to support internationalization it is necessary to develop internal system. The academy was established not long ago, having just one class of alumni, possessing merely two-year experience by assigning dual-system educational and block systems.

#### *C. Internationalization Policy Contents of Strategic Plan in Textile Community Academy*

The vision of Textile Community Academy is becoming higher vocational educational college having global competitiveness.

According to the director, global competitiveness means that: (1) the knowledge gained by the students is able to compete both in domestic and overseas levels; (2) the graduates are not inferior in global competitiveness; (3) the college has “a creative, innovative, competent, ready-to-work” slogans. Ready to work means the graduates can operate sophisticated machines and (4) Textile Community Academy should be able to build international cooperation as it has been mentioned in the Regulation of the Minister of Industry Number 74/M-IND/PER/9/2015 concerning the Organization and Work Procedures of the Academy of Industrial Communities, Surakarta [14] (In-depth interview with the director on September 6, 2018).

The director’s statement was not approved by one of the teaching staffs who asserted that the vision and mission of Textile Community Academy is too high. Although the vision has global competitiveness, the goal tends to be directed to fulfilling the local industries (although it was expected to fulfill international industries). Innovation is not easy for diploma level due to the demand in the Indonesian National Curriculum Framework (KKNI).

Based on the focus group discussion it was known that the development of Textile Community Academy is directed to the technological development of yarn, fabric, and garment making. It is expected to the future that Textile Community Academy can develop technique of design-making based on the demand of foreign apparel markets.

The internationalization development plan is in line with the legal law of internationalization of Textile Community Academy, namely the Regulation of the Minister of Industry Number 74/M-IND/PER/9/2015 about organization and working procedure of Surakarta Community Academy of Industry, Textile and Textile Products. It is explicitly stated in

the regulation about cooperation both domestic and overseas. However, there is just legal cooperation with China, whereas that of with other countries such as Germany, Canada and Holland is still being explored.

#### *D. Wish of the Internationalization of Textile Community Academy*

Based on the interview with the director, it was known that Textile Community Academy wanted to have internationalization. He said that Textile Community Academy was heading to internationalization. The academy constitutes the Role Model of industrial vocational education from the Ministry of Industry. Many universities visited Textile Community Academy for having comparative studies since its all graduates (100%) are employed in industries.

This is because the education applied at Textile Community Academy is suited to the demand of industries. According to the director all of the academy’s graduates have been distributed to industries. There is no jobless graduate since it produces graduates based upon the demand. Opening or closing a study program is possible at Textile Community Academy, due to the changing need and demand from the industries.

The success of all graduates to be accepted at the industries is because the number of the students accepted at Textile Community Academy is similar to that of demanded by the market need. According to the regulation the academy is not allowed to produce jobless alumni. Therefore, the basis of the students’ recruitment refers to the industries that have already had MoU. Every industry requiring the graduates of Textile Community Academy must have MoU first with the institution.

In relation to the possibility if the alumni are not absorbed, according to the director it will not happen. All have been considered since the beginning of the new students’ recruitment in accordance with the market demand. Every semester the students have working practice in accordance with the industries’ needs. The industries refer to German model. Thus, the students will have known how to adapt to the new environment, how the industrial culture is, being familiar with industrial machineries, and how the depiction of their will-be workplace is.

The attempts of Textile Community Academy to prevent their graduates from being jobless is in line with the statement of the Director General of Science & Technology of the Ministry of Research and Technology of Higher Education stating that the target of the government by the end of 2019, graduates of polytechnic may not be jobless.

Seen from the level of their work, the graduates of Textile Community Academy is equal to supervisor. Nevertheless, they must also become operators, so that when they hold position as the heads of companies they know how to operate the machines. The industrial practices done by the students have been weekly well-scheduled and after they finish having practices they must write reports and competence examination. Fifty percent of the teaching staffs are from industries. They are provided with office, teaching credits, and they provide assistance to the students at the industries until the students are

capable of doing their jobs well. All were paid up to hundreds of million rupiahs.

Although the director has objective to have internationalization, there are a number of teaching staffs who don't want to have it. They claimed that they just wanted to become an ordinary lecturer. To support internationalization, the system is still not ready. Therefore, internationalization requires several criteria, such as adequate education, quality assurance through certification and participation in international conferences. The limited number of reputable international journals for applied sciences is considered a challenge in having internationalization.

#### *E. Obstacles of Internationalization*

Textile Community Academy was encountered to an obstacle for having internationalization. D-2 program is hindered by the access towards the equal level of overseas studies, whereas D-3 and D-4 graduates can still continue their study abroad. Until today none of the graduates has been able to study overseas; they just had internship abroad.

Based as the focus group discussion, the constraints of the implementation of internationalization in Textile Community Academy are:

- Inadequate knowledge of the manager and lecturers about internationalization.
- Limited number of lecturers having doctoral degree.
- Poor English proficiency.
- Insufficient fund for having international activities.

Obscure strategic business-plan document, which does not explicitly state internationalization plan.

#### IV. DISCUSSION

Universities internationalization constitutes the mandate of the Act Number 12 Year 2012 about Higher Education in which one of the Articles (Article 50) discusses about international cooperation. In Article 50 paragraph (1) it is mentioned that international cooperation in Higher Education is an interaction process in the integration of the international dimension into academic activities, without losing Indonesian values. Paragraph (2) states International cooperation must be based on the principle of equality, and mutual respect by promoting science, technology and the principles of humanity that benefit human life. Paragraph (3) asserts that international cooperation covers the fields of education, research and community development. Furthermore, it is stated that international cooperation in the development of higher education can be done through: (1) the relationship between higher education institutions in Indonesia and other state educational institutions in quality education activities (2) development of an Indonesian study center and local culture at higher education domestically and abroad and (3) the establishment of an independent scientific community.

By referring to the regulation, every university/college (including Textile Community Academy) should prepare itself for internationalization. University organization needs to apply

good university governance through the application of the basic principles of the concept of "good governance" in the system and the process of governance at higher education [15]. Strategic planning is a process in which organizational leaders determine their vision for the future as well as identify their goals and objectives for the organization. The process also includes establishing the sequence in which those goals should fall, so that the organization is enabled to reach its vision.

The importance of stating the vision and mission of organization is explicitly stated by Taiwo et al. [16]. According to them vision and mission is considered critical elements of an organization used as a guidance in determining the goal of an organization. In the internationalization context of universities/colleges, universities are responsible for formulating and discussing the goal of organization, curriculum, and determining the role of the students, administration employees, teaching staffs and the executives of universities/colleges in the internationalization [17]. There are two ways for an organization to achieve its strategic goal, namely doing projects right and doing the right projects [18].

Since not all academicians own overseas experiences, the organization should endorse them to have cross-cultural understanding and respect the cultural diversities as an integrated dimension in developing the curriculum, teaching and learning and all social activities and other organizations from educational programs [3]. Moreover, the organization is required to improve the teaching staff performance, develop organization culture, and increase the commitment indicator and policy-target clarity indicator in the management of universities/colleges [19]. In performing the activities, the concept of discussion (deliberation) becomes the foundation of the internal relation of universities [20]

Besides the improvement of the internal organization, internationalization requires the establishment of networks and consortiums to allow partners to work together closely and expanding intercultural understanding at the same time. Networking, which has emerged as a major means of action, should be based on sharing, solidarity and equality among partners. Priority should be given to training programs in the developing countries, in centers of excellence forming regional and international networks, with short periods of specialized and intensive study abroad [4].

Internationalization has impacted higher education primarily in two ways namely the higher education sector, and secondly, it has driven institutions to devise policy prescriptions at the organizational level [1].

In sum, universities/colleges must put internationalization programs in their strategic plan as the foundation of each member of college community in conducting academic activities, so that the collective goal of the organization can be achieved. Accordingly, the chairmen of universities/colleges must understand the internationalization concept and obtain supports from all the academicians. Moreover, the capacity of human resources must be increased, at least to doctoral degree, their English proficiency must also be improved and universities/colleges must provide sufficient fund to have international activities.

## V. CONCLUSION AND RECOMMENDATION

### A. Conclusion

Although Textile Community Academy is the Role Model of "Industrial Vocational Education" from the Ministry of Industry, it has not been well-prepared for developing internationalization. It only focused on how its graduate are absorbed in the labour market as required by the Ministry of Industry.

Although the vision of Textile Community Academy is becoming higher education vocational college which has global competitiveness, it has not been well implemented.

Textile Community Academy faced many constraints in implementing internationalization.

### B. Recommendation

- Strategic plan for supporting internationalization of technical and vocational education and training is required.
- The most important step to be taken is forming the team of planning and developing for the making of self-evaluation and SWOT analysis as the basis to determine prominent and priority programs in supporting the internationalization.
- It is supposed to be followed with driving all of the academic communities to be more concerned with internationalization.

## REFERENCES

- [1] Yeravdekar V.R. and Tiwari G, "Internationalization of Higher Education and Its Impact on Enhancing Corporate Competitiveness and Comparative," *Social and Behavioral Sciences*, vol.157, no.1, pp.203-209, 2014.
- [2] Zulfa U, "Transformasi Internasionalisasi Perguruan Tinggi Menuju World Class University," *Jurnal Ilmu Pendidikan*, vol.3, no.1, pp.111-124, 2012.
- [3] Robson S. "Internationalization: A Transformative Agenda for Higher Education?" *Journal of Social Sciences & Humanities*, vol.17, no.1, pp.619-630, 2011.
- [4] Morosini M.C., Corte M.G.D., and Guliherna A, "Internationalization of Higher Education: A Perspective From The Great South" *Journal of Social Sciences & Humanities*, vol.8, no.1, pp.95-113, 2017.
- [5] Suyanti E, "Strategi Internasionalisasi dalam Bidang Penelitian pada Universitas Indonesia dan Institut Pertanian Bogor" *Jurnal Manajemen Pendidikan*, vol.7, no.2, pp.220-230, 2013.
- [6] Indonesian government Issued Law Number 12 Year 2012 concerning Higher Education, 2012.
- [7] Lanvin B and Evans P, *The Global Talent Competitiveness Index 2018*, France: INSEAD, 2018.
- [8] Hindun, "Perencanaan Strategis dan Perilaku Manajerial Lembaga-Lembaga Pendidikan" *Jurnal Kependidikan Islam*, vol.6, no.1, pp.112-129, 2015.
- [9] Oncol J, "Strategic Planning: Why It Makes a Difference and How to Do It" *American Society of Clinical Oncology*, vol.5, no.2, pp.139-143, 2015.
- [10] Gartenstein D, *Why Strategic Planning Important to an Organization?*. Yourbusiness Azcentral, [online], Retrieved from <https://yourbusiness.azcentral.com/strategic-planning-important-organization-4103.html>, accessed on 30 August 2018.
- [11] Rusniati H.A, "Perencanaan Strategis dalam Perspektif Organisasi" *Jurnal Intekna*, vol.16, no.2, pp.102-209, 2014.
- [12] Haythem A, "The Role of Strategic Planning in Performance Management" *International Journal of Multi Disciplinary Research*, vol. 2, no.3, pp.2348-2052, 2015.
- [13] Torzhevskaja D and Minna P, *She Doesn't Matter: The Importance of Strategic Management & Planning in SMEs*, LAMK pub [online], Retrieved from <http://www.lamkpub.fi/2017/10/25/size-doesnt-matter-the-importance-of-strategic-management-planning-in-smes/>, accessed on 30 August 2018.
- [14] Regulation of the Minister of Industry Number 74/M-IND/PER/9/2015 about organization and working procedure of Surakarta Community Academy of Industry, Textile and Textile Products, 2015.
- [15] Muktiyanto A, Rossieta H, and Hermawan A, *The Effect of Good University Governance and Strategy Toward The Performance of Higher Education Institution*, 2nd International Conference on Economic Business Innovation-ICBE, October 22-23, 2014, Entrepreneurship and Creative Economics in Global Competitiveness, Padang: Andalas University, 2014.
- [16] Taiwo A.A, Lawal F.A and Agwu M.E, "Vision and Mission in Organization: Myth or Heuristic Device?" *The International Journal of Bussiness and Management*, vol.4, no.3, pp.127-134, 2016.
- [17] Ganga F, Quiroz J, and Fossatti P, "A Synchronic Analysis of University Governance: A Theoretical View of The Sixties and Seventies" *Educ Sao Paulo*, vol.43, no.2, pp.553-558, 2017.
- [18] Mohan K, and Ahlemann F, "Managing the Achievement of Strategic Organizational Goals Through Project: Understanding the Role of Management Practice" *The Hawaii International Conference on System Sciences*, vol.14, no.1, pp.484-493, 2014.
- [19] Hamzah G, Haryono S, and Mustafa Z, "The Effects of Good University Governance and Organizational Culture Toward Lecturer Performance and Its Influence on Private Universities Performance in the City of Lampung" *European Journal of Business and Management*, vol.10, no.2, pp.85-94, 2018.
- [20] Henard F and Mitterle A, *Governance and Quality Guidelines in Higher Education*, UK: Leipzig University, 2010.