A Development of a Benchmarking Prototype of the Online International Master Program in Business Administration for Open University

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Abstract—Currently, internet technology is adopted worldwide in every industry including distance education. Online education becomes acceptable in every country as open learning opportunity for working people regardless remote location and limited time. Therefore, there is rising demand of master level of business education for working people to attend online program and complete without classroom requirement. Sukhothai Thammathirat Open University is the only distance University in Thailand that provides business degree in undergraduate and graduate levels. The new product development for international MBA to serve ASEAN border integration and online education is required currently. The research was conducted with prototype observation to learn from best practices and to prepare for program development. The findings are implied to fortify integrative team for online MBA to gain better insight, more communication and well-rounded execution for product launch.

Index Terms—Online education, online MBA, distance education, new product development, open university, product prototype, benchmarking study.

I. INTRODUCTION

Since 1990s, the highly growing of online education calls for research of online effectiveness preparation [1], [2]. The MBA programs are also a new product for online education development as their fast growing demand [3], [4]. Online MBA programs are expected to attract unconventional students who are employed with organization [4]. The independability with classroom attention also enhances online MBA feasibility to become international product for foreigners in neighboring countries.

However the challenges of program development are existed regarding virtual interaction and infrastructure development which are critical to program effectiveness [5]. The readiness of program involves with faculty members and team staffs [6]. The preparation of team engagement toward online education is emphasized to enhance the program successful outcome.

Developing country like Thailand is facing the obstacle of communication infrastructure. The 4G internet technology is not fully launched, yet several neighboring nations provide higher speed internet. Online education is still being infancy of learning especially in master degree level, although there is interest from both students and educational institutes according to its ease and flexibility of use [7].

Sukhothai Thammathirat Open University (STOU) is the only established open institute of providing degree education in Thailand. The policy to employ internet technology has been set up since 2010. However, only marginal portions of courses were delivered online with Moodle courseware. The online program provides the education option in cost-effective and time flexible approach [8]. The offering of online MBA is primacy but needs to plan and prepare the effective implementation without rush launch [5]. The Empirical evidence to suggest the program development in developing countries is scarce to shed the light on this area.

This study aims to learn the key success factors of this online platform of master education based on the cases of similar programs in selected countries including inside STOU, which has been offered online for the past few years. Comparative benchmarking techniques were utilized to generate the best practices from three cases of program offerings. Finally, the recommendation for international MBA was provided to improve the program planning and execution in the near future.

II. LITERATURE REVIEW

The related literatures in online education development consists of online education, online education development process, effectiveness of online education development and selected prototypes.

A. Online Education

Online Education is the education via computer and internet technology for more than 80% [9].

Paulsen [10] asserted the key characteristics of online education consists of the following items:
1) Non face-to-face interaction;
2) The course that delivers the teaching content through computer network and internet;
3) Two way communication with computer network and internet.

Online education offers a way to provide students with high flexibility of time and place throughout internet platform of learning [11]. The level of online education is categorized from the definition suggested by Allen and Seaman [9] (see Table I).

Currently open universities favor on blended/hybrid learning and full online learning. STOU provides mostly blended/hybrid programs for bachelor and master degree levels. The leverage of online learning program needs to conduct with the course preparation and prototype

development from pioneer program inside institute and other well established programs in other institutes.

TABLE I: EDUCATION CATEGORIZATION

Proportion of Content Delivered Online	Type of Course	Typical Description
0%	Traditional	Course where no online technology used — content is delivered in writing or orally
1 to 29%	Web facilitated	Course that uses web-based technology to facilitate what is essentially a face-to-face course. May use a course management system (CMS) or web pages to post the syllabus and assignments.
30-79%	Blend/Hybrid	Course that blends online and face-to-face delivery. Substantial proportion of the content is delivered online, typically uses online discussions, and typically has a reduced number of face-to-face meetings.
80-100%	Online	A course where most or all of the content is delivered online. Typically have no face-to-face meetings

Source: Allen and Seaman [9] p.7

B. Online Education Development Process

Anderson and Elloumi [12] proposed development process for online education with four parts as follows.

Part 1: Role and Function of Theory in Online Education Development and Delivery, provides the foundation of education theory for online learning. The concept of online education is to provide the student flexibility with the proper content to response for student variety through online course.

Part 2: Infrastructure and Support for Content Development, covers the necessary infrastructure for online learning. The institute needs to prepare appropriate resources both human and non-human resources to serve for course development.

Part 3: Design and Development of Online Courses, covers with operations, design, and production of online course. The media which will be used needs to be designed and developed with the team of multimedia instructional design editor (MIDE), course director, faculty members and support staffs.

Part 4: Delivery, Quality Control, and Student Support of Online Courses, is concerned about delivery and service. The related services after design phase enhance smooth participation among students, teachers and institutes.

C. Effectiveness of Online Education Development

The cost effectiveness and student flexibility are major advantage of online education [5], [11]. However, the quality of online teaching still be paradox. The perceived outcome and student satisfaction depend upon the facilitator interaction and feedback [13]-[15]. The facilitator experience toward online education effects directly on the quality of interaction between facilitators and students [16]. Besides, the effectiveness of online programs enhances from continuous development with other program benchmarking. The best practices of online program should be leveraged as product prototype [17].

D. Program Protype

The prototype model is commonly used to define the basic process of new product and its initial setting [18]. The online education program for master degree which was initial developed at STOU is defined as prototype model to shape the coming online program for MBA.

Benchmarking is a test of model function achieved through comparison of model results with best observational practices [19]. The selected best practices are based on the similar environment of ASEAN culture and program execution as online basis. The two programs of two countries, including Japan and Korea, were selected. These program details are listed below:
1) Online MBA in Business Breakthrough University (BBT) in Tokyo, Japan; and
2) Online MBA in Korea National Open University (KNOU) in Seoul, South Korea.

In addition, the characteristics of two programs are illustrated in the Table II.

TABLE II: PROGRAM CHARACTERISTICS

Institution	Country	Organization type	Number of students	Language	Type of distance education
BBT	Japan	Private, public company	400	English/ Japanese	Online
KNOU	Korea	Government	120	Korean	Online

III. METHODOLOGY

STOU has offered the online program for International Master's degree in Communication Art since 2014. The researchers developed semi-structured questionnaires and sent for external expert review of construct validity. Next the research team conducted the focus group with course executives and faculty members of the program to understand the product development process. Following with several in-depth-interviews with supportive heads and staffs from multiple stakeholders including international affair, computer, information technology, financial and registration offices.

All conversation was audio-recorded and transcribed into text. The prototype generation was developed from content analysis. The course prototype for international MBA of STOU was drafted and submitted to be reviewed by internal and external experts for validity.

The benchmarking programs were selected with Yin's concept of case study research [20] from the shortlisted programs aligned with developed program prototype; similar MBA with distance education and full online and ASEAN culture. The researcher team was appointed to conduct focus groups at their institutional sites with 1-2 days

using semi-structured questionnaires.

The data meanings were generated from audio-transcription. The comparison of observational programs and prototype was conducted and the recommendation for adjusted program prototype was yielded from holistic analysis.

IV. RESULTS

The prototype of the program was utilized to compare with benchmark data from Japan and Korea with the analysis method of cross case comparison. The findings were presented in Table III.

TABLE III: PROGRAM COMPARISONS

Topics	Prototype	MBA of BBT	MBA of KNOU
Program general description	International MBA (English program)	Japanese and English MBA (some English courses)	Korean MBA
Instructors	Thai and Foreign faculty from inside and outside university	Executive teachers from various universities and companies	Internal faculty members
Student Characteristics	Thai and neighboring working people	Japanese executives working all over the world	Korea working people
Part 1: Role and Function of Theory in Online Education Development and Delivery	Online courses provide students with high flexibility. Examination is still being used of face-to-face.	Online courses provide students with high flexibility including online examination.	Online courses provide students with high flexibility. Examination is still being used of face-to-face.
Part 2: Infrastructure and Support for Content Development	Independent content development is provided by lecturers. Late involvement of supportive functions will be set up.	Independent content development is provided by lecturers. Late involvement of supportive functions will be set up.	Integrative content development is provided among teacher, IT and media designer
Part 3: Design and Development of Online Courses	The final step of content production which conducted as a content team.	The final step of content production which conducted as a content team.	The involving process of design simultaneously with content development. After finalization, The development of teaching content will be done.
Part 4: Delivery, Quality Control, and Student Support of Online Courses.	Independent teacher support in course delivery which is separated with IT support on technology.	There are separated units for delivery, quality control and student support which are intensively provided 24 hrs.	There are separated units for delivery, quality control and student support.

V. CONCLUSION

The findings provided by a benchmarking study suggests of STOU, school of management science who owned the program, or individual faculty to prepare the development process. The benchmarking results shape prototype for institutions from learning the best practices to strengthen their online development processes to achieve a quality educational program as following topics.

A. Institution Practices

The infrastructure of institution needs to operate with flexibility and coordination. To launch the new product to the marketing, the online education program is demanding on faculty, regulation and technology support. The interaction with new media requires both teachers and students to learn from their online experience. Online students still long for their communication and school connection. The institution social support is considered to provide success factor for online program education. KNOU regularly arranged monthly seminar for students to meet each other and their teachers. KNOU students usually discuss with their classmates via social media that contain the way to socialize and satisfy with learning experience.

B. Faculty Practices

Faculty members or teachers need to be prepared for new type of teaching. They are prompted to understand various media types of online teaching such as VDO, case study, task assignment and tuition session. Besides, the interaction with students and constructive feedbacks during learning are primacy to student satisfaction with the program. The training for faculty members and facilitators should be prioritized to set up before the course provision. In the condensed class with more than 30 students, hiring facilitators is beneficial for teaching quality.

C. Instructional Design

The successful programs involve the holistic team management for instructional courses. Simultaneously the course is developed as one new product management team instead of sequentially meeting. More engagement with instructor, course director, designer and technology support team provide the opportunity to use appropriate Web-based technology with the content.

Fundamentally, every stakeholder in program management team understands the concept of online education in order to trigger the best approach for learning experience and outcome. The team must embrace the students to learn actively with the online program without any motivation distraction.

VI. DISCUSSION

This benchmarking study provides the levering opportunity to shape the institutional prototype for international MBA as STOU new product. This program endorses the education as empowering human capability without geographical or time spatial barriers. The extent that was learned from observational study will certainly improve pedagogical approaches and possibly prevent other important problems especially quality issues.

Learning cooperated modern technology, the successful cases of Khan academy and Standford online education demonstrate how the global market opens for online tailor-made education [21]. The primacy of online program development is rising and mandatory for public university where still follow the steps of other private institutes. The public requirement for lower cost of education that commands the high quality of education [22] remains the paradox for our product development for education.

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