# Thai MOOC Sustainability: Alternative Credentials for Digital Age Learners

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**Abstract** This paper investigates the in progress work involving Thai MOOC as relates to an institutional plan that oversees the management of the organization. Thai MOOC is the national MOOC provider in Thailand established in 2017. At present, there are more than 94,000 members with 153,981 registrations and 300 courses (mooc.thaicyberu.go.th). The policy of Thai MOOC is to focus on creating sustainable lifelong learning. In order to make Thai MOOC sustainable, the project involves working with network partners, including government organizations and universities to respond to and accommodate the needs of Thai people with different self-development goals. Since the platform has become fully functional, Thai MOOC has four progressive strategies to manage and expand the user base: (1) expanding through 9 regional university networks (courses are created by universities across the country, focusing on subjects that reflect the uniqueness of the region), (2) receiving funding from the TCU Target Program, focusing on courses in accordance with the needs from universities and government organizations, (3) creating cooperation with educational institutions and related agencies both domestically and internationally by signing an MOU to jointly develop courses from government organizations to promote lifelong learning, and (4) giving the opportunity for other organizations to request use of the Thai MOOC platform to publish courses already produced, focusing on organizations that use Thai MOOC without profit. Thai MOOC expects that the practice will help to add alternative credentials and increase certificate value sustainably. Meanwhile, credit bank and credit transfer are currently being planned with the Thailand digital economy policy as relates to the educational sustainability.

**Keywords:** Thai MOOC, Sustainability, Alternative Credentials, Digital Age Learners

# 1 Thai MOOC: Background

The Thailand Cyber University Project (TCU), Office of the Higher Education Commission, Ministry of Education recognizes the importance of academic cooperation for Massive Open Online Courses (MOOCs). Higher education in Thailand faces many challenges, such as the decrease in the number of learners, increases in the cost of education, the lack of higher education opportunities among low economic status, and fewer faculties in specialized areas. Cooperation among higher education

institutes (HEIs) is one strategy that addresses these challenges. MOOCs open educational opportunity for all as well as allow for the sharing of learning resources among higher education institutions that have a wide range of specializations. Educational institutions cooperate to develop and manage MOOCs as a central system for teaching and learning management, measurement and evaluation. Accordingly, they build up databases of learner information, learning records, learning results, learning credits, and other related information. In response to Thailand's digital economy policy as relates to education sustainability, Thai MOOC (http://mooc.thaicyberu.go.th) was established under the partnership of three ministries, namely, the Ministry of Digital Economy and Society, Ministry of Science and Technology, and Ministry of Education to develop it as the national provider for open online education. It is a central platform supporting a lifelong learning space. Its main target groups are employees, entrepreneurs, students, teachers with its secondary target group comprising the general public as a whole. By taking the role of a central platform for instruction, measurement, and evaluation among the general public, the institutions work together to develop the shared learning resources between institutions that specialize in different fields to collaborate in the development and management of Thai MOOC. The student database, learning records, course credits, and other related information are stored. To enable higher education opportunities as well as share specialized expertise, Thai MOOC provides a credit bank system for learning credit transfer both within the same HEIs and also between HEIs. Cooperation between HEIs is developed to enable students to register for courses and transfer course credits across universities in the future. Currently, nine university network hubs have cooperated, resulting in a total of 300 courses, 2,470 learning hours, and more than 94,000 members.

### 2 Thai MOOC: Objectives, Management, and Operation

The Thai MOOC project has set out five main objectives: (1) to develop a digital learning platform that can accommodate the unlimited participation of students with a learner database, learning records, credit bank, and credit transfer system, (2) to develop the digital learning standards and guidelines and educational quality assurance of Thai MOOC, (3) to create cooperation with universities to develop and/or improve course materials for Thai MOOC and create cooperation in credit transfer, (4) to develop courses, including learning materials and learning activities in accordance with the quality standards and digital learning process of Thai MOOC, and (5) to develop the test database for the measurement and evaluation of learning in Thai MOOC and to collect data for research and developing the process and quality of a digital learning platform. Hence, there are four operational plans aligned with the objectives as presented below.

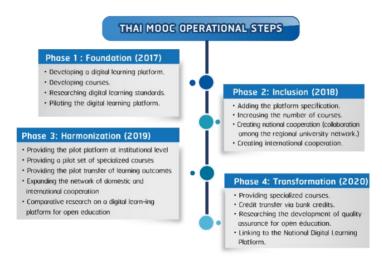


Figure 1 The four phases of the operational plan

### 3 Thai MOOC: Flagship activities

The activities of Thai MOOC include developing a central platform for MOOCs, publicizing the Thai MOOC project, developing and modifying, improving existing learning content to be compatible with the platform, organizing conferences to develop internationally recognized MOOC standards and guidelines, organizing training to prepare instructors and those involved in the process, providing teaching and learning services, and conducting a follow-up of Thai MOOC operations. Another notable activity is the cooperation agreement with domestic and overseas organizations. Currently, Thai MOOC is cooperating at an international level, with an MOU signed between Thai MOOC, K MOOC, and J MOOC at the 1st Asia-Pacific MOOCs Stakeholders Summit in Thailand. Other collaborations involve several regional network organizations such as the Association of ASEAN Open Universities, SEAMEO, and UNESCO, among others. Cooperation has also been on a domestic level with, for example, the Office of the Civil Service Commission (OSCS) (government official development courses), Ministry of Information and Communication Technology (digital literacy courses), Digital Economy Promotion Agency (DEPA) (digital economic and society promotion courses), Distance Education Institute, Office of the Non-Formal and Informal Education, Thailand Professional Qualification Institute (public organization), and Office of the National Digital Economy and Society Commission (courses from the Digital Community Center).





**Figure 2** The 1<sup>st</sup> Asia-Pacific MOOCs Stakeholders Summit (Thailand)

**Figure 3** Activity to publicize Thai MOOC

# 4 Thai MOOC: Four progressive strategies to manage and expand the user base

The production of Thai MOOC content takes the form of the following four models.

Model 1: Providing funds for nine higher education regional network hubs – courses from universities across the country produced by the regional network hubs. Thai MOOC informs the scope and framework of the required courses through the higher education regional network host. Then the host examines the readiness and informs universities in the network. Universities across the country propose courses via nine regional network hosts. After that, the host and Thai MOOC jointly review the appropriate courses and readiness. Finally, the network host will manage the course development project, and oversee the course production and teaching and learning management of the universities in the network (Figure 4).

Model 2: Providing funding from the TCU Target Program – courses from universities and government organizations focusing on needs. Examples of projects include the course development project for government officials, jointly developed by the Office of the Civil Service Commission and the international course development project (2 language lectures), jointly developed by Thai MOOC, K MOOC and J MOOC. At present, there are two courses in the development process – the Special Interest Tourism course by Mae Fah Luang University and Dusit Thani College and the Data Science Essential and Applications course by Chulalongkorn University. Both courses have two language text scripts and the possibility of further extension as a course series (Figure 5).



Figure 4 The nine higher education regional network hubs nationwide



**Figure 5** Special Interest Tourism course – cooperation between three partners: Thai MOOC, K MOOC and J MOOC

Model 3: Cooperating with government organizations – courses produced by government organizations to support online learning and promote lifelong learning. Examples include cooperation with the Digital Economy Promotion Agency to organize five courses aimed at developing SME entrepreneurs and farmers, cooperation with the Office of the National Digital Economy and Society Commission to conduct a project in digital community development and upgrading the ICT community learning center to act as the digital community center. At present, 200 sets of Thai MOOC learning materials have been developed. The contents can be categorized into 5 subjects: (1) Agriculture, (2) Public health, (3) Career promotion, (4) Technology, and (5) Other subjects such as tradition, culture, art, and painting.

In addition, there is cooperation with the Office of the Civil Service Commission to develop courses for government officials such as the 20-year National Strategy with the development of the Thai government system. TCU cooperates with the Distance Education Institute (DEI) to develop courses on the quality of life. TCU and Thailand Professional Qualification Institute (Public Organization) create courses related to digital competencies. As such, TCU works with the Institute of Community Colleges

to modify existing courses and publish them, making them available for the large target group through Thai MOOC.

Model 4: Requesting use of the space to publish courses already produced through a formal letter from an organization to open a course in the system. Examples include the nctu001 Course: Creative Essentials of Economics from National Chiao Tung University, the nou001 Course: Creative Marketing and the nou002 course: Open Mind! Cross-Boundary New Media and Creative Public Relations from the National Open University of Taiwan.

Both domestic and international organizations can request a space on Thai MOOC to develop courses for the public without profit or commercial purposes. In addition, teachers in educational institutions and universities can write a letter to request the publication of existing courses according to the conditions of the OHEC. Students can request use of the space to develop media for research or theses in accordance with the conditions of the OHEC. Also, a microsite has been developed for educational institutions interested in using Thai MOOC in their organization to expand usage and achieve maximum benefit (Figure 6).



**Figure 6** Thai MOOC microsite offering courses from organizations to be used for professional development. For example, thaimooc.org/site/DEPA-MOOC has developed five courses aimed at developing SME entrepreneurs and farmers. At present, it is in the testing process.

# 5. Impact of Thai MOOC on National Policy

The previous operations of Thai MOOC have impacted education in Thailand by responding to national policy and open education to promote lifelong learning. This is in line with the Long Term Higher Education Framework (2008-2022), Vol. 2, Strategy 1: Integration between basic education, vocational education, and higher education, which emphasizes the creation of opportunities for vocational graduates who are working to engage in flexible education. Higher education institutions can adjust the curriculum to support an admission at any time and it involves a credit accumulation system (Credit Bank).

This is consistent with the 5-year Digital Plan for the Economic and Social Development (2017-2021), Strategy 3: Building a quality society with digital technology. This states that people of all ages across the country (or at least students, seniors, the disabled, farmers, and small business owners) can access digital education from MOOCs as needed, with the aim of achieving a target of at least 2 million people of all ages across the country accessing MOOCs by 2021.

This is in accordance with the 20-year National Strategic Plan (2018-2037), Area 3: Development and promoting reading habits and lifelong self-development among the human resources to be innovators, thinkers, and entrepreneurs, focusing on the transformation of learning. The MOOC system, experience transfer system, and credit bank system have been mentioned as important mechanisms in this drive. Finally, in accordance with the Digital Plan for Education (2018-2021), Strategy 2: Creating opportunity and equality of education through a digital society, MOOCs will be developed and promoted to cover all types of courses at all levels, be open to people of all ages and professions, and which can be used as part of the certification of education.

### 6 Conclusion

MOOCs play an important role in education throughout the world. For example, edX (https://www.edx.org) has 10,000,000 students. Other MOOCs such as Coursera, Udacity, Udemy, P2Pu and Khan Academy have also gained popularity. Thai MOOC has been developed as the national MOOC platform in Thailand since 2017. Starting from an open source platform (Open edX), Thai MOOC has developed add-on modules to address the project objectives, local context, and modern online distance learning pedagogy. Thai MOOC has features that support a digital learning platform with a student database, learning history, and accumulated credits. There is also a credit transfer system and test bank system. In terms of standards and practice, research has been conducted on the conditions for effective and high quality practices related to Thai MOOC design and learning. The development of the Thai MOOC project, including learning media, learning activities, and evaluation, is in line with quality standards and learning processes. Currently, there are more than 94,000 members with 153,981 registrations and 300 courses. Ultimately, Thai MOOC focuses on sustainable lifelong learning that can respond to and support the national policy to expand the digital society and access within Thailand.

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