



MOOCS BUSINESS MODEL INNOVATION IN INDONESIAN PERSPECTIVE: COMPARISON OF INDONESIA X AND HARUKAEDU

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Abstract

Massive Open Online Courses (MOOCs) are a disruptive technology that can displace traditional learning platforms by offering an online learning platform with access to high-quality courses at affordable fees. They contain similar teaching materials to traditional courses, such as reading material, problem sets, and videos. MOOCs also provide an interactive forum for building a community of students, professors, and teaching assistants. The lecture materials in MOOCs are diverse. This paper examines the business model innovation of MOOCs in Indonesia, specifically comparing the Business Model Canvas (BMC) cases of IndonesiaX and HarukaEdu, two online learning platforms. The paper aims to understand and compare the implementation of business model innovation in education and the impact for both companies. The ultimate goal of the paper is to determine how MOOCs in Indonesian perspective can design and develop a sustainable business model innovation, create value, capture it, and have a positive impact and provide management implications for other emerging countries.

Key Words: MOOCs, Business Model Innovation, Indonesian Perspective, Case Study

Introduction

Disruptive technology manifests in different aspects of life as it progresses and develops. In the education sector, innovations have emerged that alter the means of acquiring education and offer novel educational services. Rather than physically attending classes, students can now access quality educational services from a range of prestigious institutions with just an internet connection. This innovation is called Massive Open Online Courses (MOOCs), which is essentially a service provided by universities, learning institutions, or companies to anyone seeking free and open lectures through online services. The impact of technological progress and development, as well as disruptive technology is also felt by Indonesia, as an emerging country. Therefore, MOOCs are a significant trend in higher education, with an increasing number of open and online courses and related changes during the era of globalization (Oey et al., 2017).

The Open Learning Initiative at the University of Pennsylvania offered 32 learning sessions across 24 subjects on Coursera in July of 2013, which was the second-highest number of offerings after Stanford, which had 27 subjects. The University of Pennsylvania conducted a survey of 34,779 respondents who took their courses to understand who was taking their courses and why. Indonesia was also impacted by the rise of MOOCs in various developing countries. Universitas Terbuka, a public university that specializes in distance learning systems and is open to the public, started offering a free "Open Online Lecture" service for Indonesians. The initial courses offered

were English for children, various food processing, distance education, marketing management, and public speaking.

MOOCs are the form that can improve the quality of education. This gives a guarantee of equality of knowledge that may be obtained by the public openly and for free. Likewise, in Indonesia, MOOCs are the best alternative and innovation in increasing the equity and the quality of education for the Indonesian people. With good support from various parties, MOOCs will become an effective education system for the Indonesian education world. Today, many universities, schools or other educational institutions and companies as well, trying to enter the online learning platforms to provide the affordable fees and education for all. Indonesia MOOCs rise up in this 3 years later. Of course rapidly in this pandemic Covid -19 era. This trend has continued in the latest new normal era or post Covid -19 era. During this period, Indonesia has obtained a great deal, but I imagine, it still has a long way to go before its business model will be perfect. From this further analysis, I expect this research would be helpful to the rest of the Indonesian educational institution who intend to pursue careers in the educational industry. Previous researchers have look at the MOOC business model innovation in the area of opportunity and challenging, regulation acquirements and government supporting, none of researches looked into the comparison of the MOOCs business model innovation. This paper is interested in conducting further research with the study of MOOCs business model and innovation in Indonesia from comparison IndonesiaX and HarukaEdu.

The aim of this paper is to explore and analyze various aspects of business model innovation in MOOCs in the context of Indonesia's education sector, as well as to evaluate the advantages of MOOCs as a learning platform. The results of this study could be beneficial for individuals conducting research, businesses, and academic researchers. Additionally, this study's findings could be advantageous for companies, business practitioners, and educational institution managers as knowledge and information to design innovative business models in the education and training industry, with a focus on MOOCs business model canvas innovation. Furthermore, this paper may contribute to the emerging countries advancement of the education sector's business administration and innovation, specifically in the field of educational learning platforms.

Literature Review

MOOCs Innovation and Education

Massive Open Online Courses (MOOCs) have emerged as a notable phenomenon in the higher education sector, evident from the increasing availability of open and online-based courses and related transformations in the era of globalization (Oey et al., 2017). The primary objective of MOOC-based learning is to facilitate unrestricted access for individuals, anytime and anywhere, to educational services delivered through the internet. In addition to providing access to course materials, MOOCs offer interactive forums that foster community-building among participants. This innovative approach to

education has gained significant popularity and shows great promise in addressing the limitations of traditional education systems, which are often characterized by complex bureaucratic structures, evolving curricula, rigid regulations, and limited availability of skilled resources. In higher education, MOOCs have the potential to significantly and swiftly disrupt the traditional education system. Therefore, MOOCs are one of the disruptive innovation phenomena capable of destroying conventional education methods (Fadli et al. 2020). Presently, job markets are increasingly valuing practical skills and competencies over mere university degrees. As global networks and private job markets embrace the MOOCs system, prioritizing students' skills over their formal degrees, MOOCs could be perceived as a threat to conventional universities or even lead to the possibility of universities being replaced by this emerging form of education (Oey et al., 2017).

MOOCs offer equal learning opportunities for the broader community, particularly those seeking higher education. They represent a departure from the exclusive nature of traditional education, where admission is limited to a specific number of students. In MOOCs, course information and materials are accessible online, eliminating the need for physical classrooms. Class sizes are virtually unlimited, and there are typically no restrictions on the number of students who can enroll. Learners have the flexibility to engage with course content at their own pace and convenience, anytime and anywhere. The scalability of MOOCs is virtually limitless, allowing thousands of participants to join each

class, unencumbered by traditional constraints. This model holds the potential to address the challenges posed by population and educational distribution across Indonesia. Recently, numerous platforms have established partnerships with both public and private universities to offer online courses that mirror traditional in-person classes. One of them, HarukaEdu stands out as one such platform, allowing participants to pursue bachelor's degrees aligned with their chosen majors through university collaborations (Fadli et al. 2020).

Business Model Innovation

Osterwalder et al. (2005) initially proposed the nine "building blocks" of the business model design template that came to be called the Business Model Canvas, as follows: (1) customer segments; (2) value propositions; (3) channels; (4) customer relationships; (5) revenue streams; (6) key resources; (7) key activities; (8) key partnerships; (9) cost structure. By considering and analyzing each of these nine building blocks, the Business Model Canvas provides a comprehensive framework for understanding and designing a business model. It helps entrepreneurs and managers assess the key elements of their business and identify opportunities for innovation and improvement.

Business model innovation refers to the process of transforming how an organization or company conducts its business operations to achieve financial prosperity by developing and expanding new sources of revenue. The concept of business model innovation can be intimidating as it necessitates the leaders

of a business to reevaluate and restructure its foundational elements into something novel and unfamiliar. Businesses pursue business model innovation to remain competitive in an ever-evolving marketplace that offers diverse opportunities. In recent decades, the field of business models and business model innovation has garnered substantial interest and significance in both academic research (Gassmann, 2016; Massa et al., 2017) and management practice (Lindgardt et al., 2009; Robins, 2013). The volume of articles exploring business models published in scholarly and non-academic management journals has notably increased since 1995 (Zott et al., 2011) and this trend has persisted beyond 2015 (Massa et al., 2017).

One area of focus in the literature is the role of MOOCs in enhancing the quality and accessibility of education. MOOCs are seen as a disruptive technology that can transform the traditional learning platform by offering online access to high-quality courses at affordable fees (Daniel, 2012). They provide an interactive forum for users to engage with course materials and build a community of learners, instructors, and teaching assistants (LiyanaGunawardena et al., 2013). Researchers have also examined the business models adopted by MOOCs platforms and their implications for sustainable growth and impact. The Business Model Canvas (Osterwalder and Pigneur, 2010) is often used as a framework to analyze and compare the business models of different MOOCs providers (Dhawale and Gupta, 2017). These studies highlight the importance of revenue streams, value propositions,

customer segments, and key partnerships in the success of MOOCs initiatives.

In addition, Andersson and Marrsson (2015) highlight that the business model of MOOCs determines how value is offered to learners and other stakeholders in the educational network. They emphasize the significance of the logic of the firm and the architecture of the partner network in enabling effective business model innovation. Furthermore, the establishment of partnerships between educational institutions and MOOCs providers can facilitate the integration of online learning into traditional educational settings (Reich, 2014).

In summary, Business model innovation in MOOCs provides valuable insights into the strategies and approaches employed by educational institutions and organizations to adapt and thrive in the digital learning landscape. MOOCs also reveals the transformative potential of these online learning platforms. It highlights the importance of designing sustainable business models, fostering collaborations, and addressing regulatory challenges to harness the benefits of MOOCs in enhancing education.

Data and Method

Since 2007 until now, there are at least 16 MOOCs sites made in Indonesia that are still active. Most are managed by private institutions with a freemium business model; only some content is free and the rest is paid. Only six online lecture sites (MOOCs) of Indonesia actually present content for free, namely:

CodeSaya, FOCUS Fisipol UGM, IndonesiaX, Open University MOOCs, Sibejoo and UCEO Ciputra University.

One of the qualities of a quality MOOC site is free. But free is not enough. To measure the quality of the MOOC site objectively, qualitative and quantitative assessment parameters are needed, such as (1) how to present content; (2) amount of material; (3) supporting institutions; (4) total site visits; (5) popularity on social media. Therefore, the Best MOOC site in Indonesia. To get objective results, the research is carried out with parameters such as: the amount of content, supporting institutions, estimated visits, to its popularity on social media, shown in Table 1. The comparison Table 1 highlights an intriguing observation regarding the popularity of IndonesiaX in comparison to other MOOCs sites, particularly on social media platforms. IndonesiaX stands out as the only MOOCs website in Indonesia that enjoys support from numerous institutions and universities. Further analysis suggests two possible reasons for this distinction. Firstly, the content provided by IndonesiaX is highly valuable and meets the needs of learners, resulting in a large number of website visits and a significant following on social media. Secondly, IndonesiaX demonstrates a strong commitment to the implementation of MOOCs by establishing partnerships with various educational and private institutions. Additionally, numerous platforms have established partnerships with both public and private universities to offer online courses that mirror traditional in-person classes recently. HarukaEdu stands out as one such platform, allowing participants to pursue

Table 1. The Parameter of MOOCs

MOOC web-site	Presentation of content	Amount of material	Supporting Institutions	Estimated visit *	Popularity (fans) in Social Media				
					Facebook	Twitter	Instagram	Youtube	Total
CodeSaya	Teks & Interaktif	4	Digital Ocean	67,300	1,620	1,279	0	0	2,899
FOCUS Fisi-pol UGM	Teks & Video	12	BCA	836	0	0	0	0	0
IndonesiaX	Teks & Video	15	edX, HarvardX, IDX, ITB, ITS, NET, Rumah Perubahan, UI, UNAIR, UNPAD, UT	141,200	197,580	47,261	1,975	560	247,376
MOOCs Univ. Terbuka	Teks & Video	7	-	45,200	0	0	0	0	0
Sibejo	Video	82	-	17,100	3,017	1,106	692	13,463	18,278
UCEO Univ. Ciputra	Video	11	-	44,300	6,974	3,952	10,400	0	21,326
* Estimates for April – June 2016 are based on similarweb.com									

Resource: <https://kampusunj.com/situs-kuliah-online>

bachelor's degrees aligned with their chosen majors through university collaborations (Fadli et al. 2020).

This paper was qualitative research and employed an in-depth approach to collect data from literature reviews and two MOOCs platforms. The analysis and review were conducted using the business model canvas framework, with the data collection material adapted from the building blocks of the business model canvas. The objective of this paper was to structure a qualitative case study and compare the business model innovation of the chosen research objects using the business model canvas. Specifically, the paper focused on examining the business model canvas of IndonesiaX (indonesiavax.co.id) and HarukaEdu (harukaedu.com) to assess their respective business model innovations. This selection was made in consideration of the prevailing trend of massive open online courses (MOOC) platforms in Indonesia.

Case Study Analysis

Profiles of IndonesiaX and HarukaEdu

IndonesiaX offers high-quality MOOCs taught by esteemed instructors across the country, accessible to all individuals in Indonesia through their online platform free of charge. It serves as an online educational platform that provides MOOCs from universities, institutions, and practitioners in various fields to educate the nation. IndonesiaX is dedicated to advancing online education and training of exceptional quality in Indonesia. Its objective is to expand public access to top-notch education and essen-

tial life skills by utilizing a MOOC platform supported by a cutting-edge learning management system (LMS). The LMS of IndonesiaX is specifically tailored for the Indonesian population and is presented in the Indonesian language. This endeavor aligns with the Indonesian government's vision to enhance public access to certified training and exceptional education opportunities.

HarukaEdu was established in 2013 by professionals and academics who share the same vision, it aims to shape a better future for the people of Indonesia by providing access to high-quality, flexible, and easily accessible online education at any time and from any location. HarukaEdu specializes in offering technology solutions for universities, companies, institutions, and individuals to design online learning experiences. For universities, HarukaEdu provides a range of services, including the development of IT systems, online content, assistance centers, operations support, and student and faculty recruitment. Additionally, HarukaEdu offers CorporateEdu, which enables companies and institutions to deliver flexible and efficient training programs for their employees, overcoming limitations of distance and time through online learning. HarukaEdu firmly believes that online education is one of the most effective means to enhance the quality of Indonesia's highly skilled workforce. Through their services, universities and companies/institutions can provide quality education programs at a more efficient cost, benefiting both learners and organizations.

Comparison Business Model Innovation of IndonesiaX and HarukaEdu

This paper focuses on the business model innovation of IndonesiaX and HarukaEdu, two MOOCs platforms in Indonesia. The business models are conducted using the nine building blocks of Business Model Canvas (BMC), as presented in Table 2 and Table 3. By analyzing these building blocks, we can gain insights into how IndonesiaX and HarukaEdu have innovated their business models to provide accessible and high-quality education through MOOCs in Indonesia.

MOOCs business model innovation of IndonesiaX can be described through nine building blocks: (1) Customer Segments: IndonesiaX's target customers are as market, individual interested in (prestigious) education, individual with lower income or busy schedules, students at school or university. (2) Value Propositions: IndonesiaX provides quality courses (Massive Open Online Course) on an online-based platform that can be accessed for FREE to all corners of Indonesia. Access to online course platform for free, help people improve their lives, wide reach, flexible scheduled and interactive tools, available anywhere anytime with internet access. (3) Channels: IndonesiaX has its own website or online platform and mobile application to deliver its value proposition to the customer. The online platform of IndonesiaX (<https://www.indonesiadx.co.id/>). The mobile application of IndonesiaX is available on app store and google play. (4) Customer Relationship: IndonesiaX can get the customers from their own

website and social media. It has an official website to introduce the MOOC and other promotion campaigns. Moreover, customers can learn about new promotions and contact the store via social media like Facebook, Instagram, Twitter and Youtube Channel and Linked. IndonesiaX also provide a blog to educate and give more information to the customer. IndonesiaX builds customer relationships by providing and maintain the learning community. (5) Revenue Streams: IndonesiaX's revenue streams are from certificate purchase and donation. (6) Key Resources: The key resources of IndonesiaX include online platform engineers and partnership with university and company. (7) Key Activities: For the current business model, IndonesiaX has the key activities are creating and maintaining IT infrastructure, managing current partners and acquiring new ones, managing the learning community. (8) Key Partners: IndonesiaX current key partners are university and teachers and company developer. (9) Cost Structure: IndonesiaX's cost structures include relating of IT infrastructure, blocks of the Business Model Canvas: (1) Customer Segments: HarukaEdu's target customers are mass market, individual job seeker, individual interested in (prestigious) education, individual with lower income or busy schedules, students at school or university, teacher/lecturer, universities, companies and companies. (2) Value Propositions: HarukaEdu's value proposition is to offer a wide range of products to fulfill its customer target by conducting company's employee training easily, help universities to meets the technology for distance learning, a

Table 2. The Business Model Canvas (BMC) of IndonesiaX

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
<ul style="list-style-type: none"> • University and teachers • Company developer 	<ul style="list-style-type: none"> • Creating and maintaining IT infrastructure • Managing current partners and acquiring new ones • Managing the learning community 	<ul style="list-style-type: none"> • Access to online course platform for free, • Help people improve their lives, • Wide reach, Flexible scheduled and interactive tools available anywhere anytime with internet access 	<ul style="list-style-type: none"> • Community • Social Media and • Website 	<ul style="list-style-type: none"> • Mass market • Individual interested in (prestigious) education • Individual with lower income or busy schedules, students at school or university
	Key Resources		Channels	
	<ul style="list-style-type: none"> • Online platform engineers • Partnership with university and company 		<ul style="list-style-type: none"> • Online platform • Mobile application 	
Cost Structure			Revenue Streams	
<ul style="list-style-type: none"> • Creating of IT infrastructure • Business operation • Partnership management 			<ul style="list-style-type: none"> • Certificate selling • Donation 	

Table 3. The Business Model Canvas (BMC) of HarukaEdu

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
<ul style="list-style-type: none"> • UniEdu : Universities • CorporateEdu : Companies • Pintaria Prakerja : Indonesian Government • Teachers / Lectures 	<ul style="list-style-type: none"> • Creating and maintaining IT infrastructure • Managing current partners and acquiring new ones • Managing the learning community 	<ul style="list-style-type: none"> • Conducting company's employee training easily • Help universities to meet the needs of technology for distance learning • A place for qualified lecturers and instructors • Use the Benefits of the Pre-Employment Card in Pintaria 	<ul style="list-style-type: none"> • Community • Social Media • Blog 	<ul style="list-style-type: none"> • Mass Market • Individual job seeker • Individual interested in (prestigious) education • Individual with lower income or busy schedules, students at school or university • Teacher/Lecturer • Companies' employee
	Key Resources		Channels	
	<ul style="list-style-type: none"> • Online platform engineers • Partnership with university and company • Partnership with Teachers/Lecturers 		<ul style="list-style-type: none"> • Online Platform 	
Cost Structure			Revenue Streams	
<ul style="list-style-type: none"> • Creating of IT infrastructure • Business operation • Partnership management 			<ul style="list-style-type: none"> • UniEdu • Corporate Edu • Pintaria Course 	

Table 4. Comparison of Business Model Canvas (MBC) between IndonesiaX and HarukaEdu

Nine building blocks	IndonesiaX	HarukaEdu
Customer Segments	Mass market Individual interested in (prestigious) education Individual with lower income or busy schedules, students at school or university	Mass Market Individual job seeker Individual interested in (prestigious) education Individual with lower income or busy schedules, students at school or university Companies' employee
Value Propositions	Access to online course platform for free Help people improve their lives Wide reach, Flexible scheduled and interactive tools available anywhere anytime with internet access	Conducting company's employee training easily Help universities to meets the of technology for distance learning A place for qualified lecturers and instructors Use the Benefits of the Pre-Employment Card in Pintaria
Channels	Online platform Mobile application	Online platform
Customer Relationships	Community Social Media Website	Community Social Media Blog
Revenue Streams	Certificate selling Donation	Corporate Edu UniEdu Pintaria Course
Key Resources	Online platform engineers Partnership with university and company	Online platform engineers Partnership with university and company Indonesian Government Partnership with Teachers/Lecturers
Key Activities	Creating and maintaining IT infrastructure Managing current partners and acquiring new ones Managing the learning community	Creating and maintaining IT infrastructure Managing current partners and acquiring new ones Managing the learning community
Key Partners	University and teachers Company Developer	UniEdu: Universities CorporateEdu: Companies Pintaria Prakerja: Indonesian Government Teachers / Lectures
Cost Structure	Creating of IT infrastructure Business operation Partnership management	Creating of IT infrastructure Partnership management Business operation

business operation, and partnership management.

HarukaEdu's business model innovation in the MOOCs industry can be understood through the nine building

place for qualified lecturers and instructors, use the benefits of the pre-employment card in Pintaria. (3) Channels: HarukaEdu has its own website or online platform to deliver its value proposition to the customer. The platform HarukaEdu itself (<https://harukaedu.com>) and for the courses are delivered on Pintaria (<https://pintaria.com>) as the MOOC of HarukaEdu. In order to deliver its value propositions and reach more customers, HarukaEdu should provide a mobile platform that is available on app store and Google Play to reach iPhone and Android smartphone users. (4) Customer Relationships: HarukaEdu can get the customers from their own website and social media. It has an official website to introduce the store and other promotion campaigns. Moreover, customers can learn about new promotions and contact the store via social media like Facebook, Instagram, Twitter and YouTube Channel. HarukaEdu also provides a blog to educate and give more information to the customer. HarukaEdu builds customer relationships by providing and maintaining the learning community. (5) Revenue Streams: HarukaEdu revenue streams are from unit sales of the products and teacher recruitment and teaching fees. UniEdu services are. CorporateEdu Services are and Pintaria Course. (6) Key Resources: The key resources of HarukaEdu include online platform engineers, partnership with university and company and partnership with teachers/lecturers. (7) Key Activities: For the current business model, HarukaEdu has the key activities are creating and maintaining IT infrastructure, managing current partners and acquiring new ones, managing the learning community. (8)

Key Partners: HarukaEdu current key partners are uniedu: universities, corporateedu: companies, pintaria prakerja: Indonesian government, teachers / lectures. (9) Cost Structure: HarukaEdu cost structures include rating of IT infrastructure, business operation, and partnership management.

Expanding on the comparison of the Business Model Canvas between IndonesiaX (Table 2) and HarukaEdu (Table 3), the findings and results of this analysis are presented in Table 4. This table provides a comprehensive overview and comparison of the business model canvas elements of both IndonesiaX and HarukaEdu, highlighting their similarities, differences, and key aspects of their respective business models.

Conclusions and Implications

This paper analysis conducted highlights the significant role played by the nine blocks of the Business Model Canvas (BMC) in driving Business Model Innovation (BMI). Specifically, it emphasizes the importance of these blocks in strengthening and facilitating changes in business model innovation, particularly during the early stages when the company's position and value proposition are still evolving. By providing a clear understanding of the company's target market and value proposition, the BMC serves as a guide for creating, implementing, and capturing value. From another perspective, emerging countries can leverage the potential of MOOCs business model innovation in Indonesian perspective to improve access to quality education, bridge the educational divide, and foster lifelong learning opportunities for their citizens.

The findings of this paper have significant implications for various business sectors, particularly in the field of education and the implementation of MOOCs. Specifically, managers and business actors involved in MOOCs can benefit from the four insights. (1) Utilizing the Business Model Canvas (BMC): The BMC can serve as a valuable tool for managers to comprehend the local context of the educational sector, identify the specific needs of different fields of education, assess the value proposition of their company, and make informed decisions based on the considerations presented in the nine building blocks of the BMC. (2) Alignment for Value Creation: Managers should aim to align their activities, resources, and partnerships to create greater value in meeting the current and future market needs. Furthermore, capturing the intangible value within the value network, as depicted by the nine building blocks of the BMC, should be a key objective. (3) Integration of Marketing, Sales, and Distribution Channels: It is crucial to integrate these functions and establish strong customer relationships in order to effectively deliver value to different customer segments. (4) Team Building and Commitment: Managers and investors in MOOC companies should prioritize building teams that share common goals and possess a strong commitment to making a positive impact. This aspect should be considered as an important factor in decision-making processes. By implementing these four managerial implications, MOOC companies can enhance their operations, optimize value delivery, and ultimately achieve greater success in the educational industry.

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