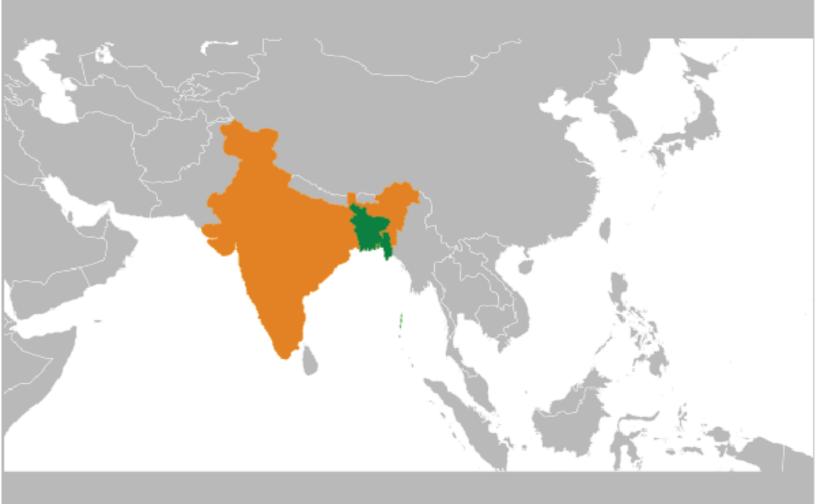# EMERGING MOOC MARKETS:

## Perspectives from India and Bangladesh



## BY

## ZARIF AJHAN, SAJID AMIT & SIMI MEHTA

# EMERGING MOOC MARKETS:

## *Perspectives from India and Bangladesh*

**April 18, 2022**

Zarif Azhan Dhruba, *Project Research Associate, Center for Enterprise and Society*

Sajid Amit, *Director, Center for Enterprise and Society, ULAB*

Simi Mehta*, PhD, CEO & Editorial Director, IMPRI Impact and Policy Research Institute*

Cover Design by Tahmina Tunazzina

## Contents

## Executive Summary

This research is generated as part of the University of Liberal Arts Bangladesh (ULAB) Center for Enterprise and Society (CES) Project sponsored by the National Endowment for Democracy (NED). ULAB CES is in the process of implementing Phase IV of this Project - "Building Resilient Universities". The target of Phase IV is to develop a Massive Open Online Course more commonly referred to as "MOOC" to promote a conceptual understanding of "Diversity", "Tolerance" and "Pluralism".

MOOC is a relatively new concept in Bangladesh during the ongoing COVID 19 pandemic. Prior to launching this MOOC in the Bangladesh market, the MOOC markets in the Asia Pacific region have been explored. This report includes the comprehensive findings of this exercise along with a comparative study of the MOOC markets in India and Bangladesh. Following are the areas of comparison accompanied by a brief overview:

- **Education market background:** This section compares the education market of Bangladesh and India in terms of government budget allocation and access to online education. The Bangladesh government has proposed to allocate USD 8.3 billion of the budget to the education sector for the 2021-22 fiscal year. This accounts for 11.9% of the total budget and is only 2.09% of the GDP (Gross Domestic Product) whereas, UNESCO (United Nations Educational, Scientific and Cultural Organization) suggests allocating 4-6% of the GDP. This allocation is meant for the development of the primary, secondary, higher, technical, and *madrasa* education sectors, but the pandemic has prompted the significance of online education and therefore it has become essential to ensure access for all students. Due to lack of infrastructure, this has not been possible yet. On the other hand, the Indian government allocates 4.6% of its GDP to the education sector and was an early adopter of technology-based education. This market is currently valued between USD 700-800 million and is expected to grow up to USD 30 billion in the next 10 years, given the considerable number of market entrants.

- **The current government and non-government market leaders:** This section presents the market leaders and government initiatives taken to digitize education on a large scale. Education institutions across the country went into lockdown back on March 17, 2020, and only reopened on September 12, 2021, after 543 days. Over 35 million students were affected, and this loss required the Bangladesh government to consider taking initiatives to make the education sector more resilient. With a view to increase access to education through online platforms, Bangladesh government has successfully developed projects like *Muktopath* and the Bangabandhu Sheikh Mujibur Rahman Digital University targeting different segments and age

demographic of the education sector. 10 Minute School, a private sector initiative, started in 2015 and is currently one of the leaders in the online education landscape in the country. Private sector engagement in this market is gradually increasing since the onset of the pandemic however, Bangladeshi students have been using platforms like the Khan Academy, Coursera, Udemy, etc. for several years now. India has had a head start over Bangladesh with NPTEL (National Programme on Technology Enhanced Learning), a government-funded initiative from 2003, and continues to bring in public sector funding for government projects like Swayam and mooKIT.

- **Recent startups:** This section covers the competitive landscape of the MOOC markets in terms of the funding generated in the EdTech market in recent times. Bangladesh is witnessing an increase in the rate of investment and funding generated from national and international sources in the EdTech market. Companies like Shikho, secured USD 1.3 million in seed money, which is the largest round of financing by a local EdTech startup till date. According to LightCastle Partners, Bangladesh startups have secured a total funding of USD 36.2 million, in 2021 alone, of which USD 33 million comes from foreign investment. India, with one of the largest populations at 1.4 billion, has been reporting very high investments in the EdTech market in recent years. In 2021, UpGrad raised USD 102 million in its first external fundraising which is expected to bring the company's valuation between USD 575 to 675 million. India's EdTech giant, Byju's, reached a valuation from USD 16.5 billion in June 2021 to USD 18 billion in October 2021 and is keen on expanding its international business through mergers and acquisition opportunities.

- **Opportunities and limitations:** Although the EdTech markets of India and Bangladesh show promising developments and great potential, the lack of adequate infrastructure continues to be a major drawback. Although India entered the EdTech market much earlier than Bangladesh, the common problem for both, being developing countries has been low internet penetration which hinders access for all. This section explains the impediments faced by the countries. In Bangladesh, only 37% of the rural population have internet connectivity, whereas 96% have mobile phones, 59% have smartphones and 46% know about the internet. In India, there are 106 internet subscribers out of 100 people in the urban areas as opposed to just 30 in the rural areas. Lockdowns imposed due to the COVID 19 pandemic confined students within their homes, their access to education has been restricted which created a vacuum in the absence of the required access. This has generated a demand for introducing and strengthening the online education sector. Increased funding is, therefore, expected to develop the market quickly for the significantly large young population of both countries.

- **Challenges and Recommendations:** This section presents the challenges of running a concept-oriented MOOC and recommendations for overcoming them. It has been developed with the help of interviews with several industry experts from

India and Bangladesh. The interviewees comprise faculty members, EdTech owners, and analysts among others. They discussed the challenges faced while developing a MOOC during the pandemic, such as active vendor management, production-issues due to hindrance in collaboration with experts. Since the MOOC is a relatively novel concept, the lecturers faced problems gathering academic material for students, and the lack of instructions in the process at times made it difficult to understand the course. The experts also shared insights as to how they solved these problems as lecturers and how to improve the outreach of the course. Their suggestions included developing an internal website platform that would promote interaction among the stakeholders of the course. Also, NGOs should be engaged to promote the course and reach the appropriate target market. Finally, the experts shared their perspectives on developing more engaging academic materials through animation, illustrations, and video descriptions.

## Introduction

The rapid spread of COVID-19 since December 2019, has brought everything to an unprecedented lockdown. For most of 2020 and 2021, lockdowns and similar mobility restrictions continued and are also being witnessed in early 2022 when the report is being drafted. The result of all these restrictions has led to several adversities. Businesses had to shut down, banks had to limit their operations, and non-governmental organizations had to stop their activities, educational institutions closed indefinitely, among others.

Fortunately, by 2020 several paths opened up, that not only addressed these issues but involved safer human interaction during this pandemic. One of these paths has been the use of Massive Open Online Courses (MOOC) for higher education. The global MOOC market was estimated to be worth USD 3.9 billion in 2018. With an annual growth rate of 40.1%, the predicted market size for 2023 was reported at USD 20.8 billion (*Markets and Markets, 2018*). In light of the pandemic, it is expected that the actual MOOC market size of 2023 will surpass this 2018 prediction.

It is expected that a key contributory factor to the global expansion of the MOOC market is the growing market in the Asia Pacific region. The Asia Pacific MOOC market size is estimated to reach USD 13.6 billion by 2027 (*Data Bridge Market Research, 2020*). This paper will closely observe the MOOC market patterns and prospects of two countries in the Asia Pacific Region: Bangladesh and India.

## Objective of MOOC on Diversity, Pluralism, and Tolerance

The purpose of the courses available on the platform, is to develop a conceptual understanding of "diversity", "pluralism" and "tolerance". Upon completion of the courses, the students are expected to acknowledge the values held in different cultures, identities, and histories. They will be able to dissect the various social impacts that different cultural and ethnic groups have when functioning under one governance. The comprehension of the dynamic social factors that intersect with social, political, religious, and racial diversities, will help the students navigate through misinformation in a pluralist, democratically governed society.

## Implementer

**Center for Enterprise and Society (CES):**
Center for Enterprise and Society (CES) is one of Bangladesh's leading university-based independent research centers and a think tank that implemented over USD 500,000 worth of international grants till now. They have over 60 publications with several world-leading journals and organized over 60 successful events. CES recently secured a grant

of USD 1,60,000 from a prestigious US-based donor for two years. It has also secured 39th position out of the top 50 universities in the Global Top 100 Innovative Universities in the World's Universities with Real Impact (WURI) ranking for 2021. WURI Founding Director, Project Leader, and Professor Emeritus of Seoul National University Moon Hwy-Chang officially acknowledged ULAB's global position during a virtual event in South Korea.

CES also undertakes social research, and within which a consistent topic was undertaken by CES over the last few years has been understanding, encouraging, defending, and promoting diversity, tolerance, and pluralism in Bangladesh.

## Collaboration with:

**Impact and Policy Research Institute (IMPRI):** IMPRI is a proactive, independent, non-partisan think tank, to ideate and informs policy through focused, evidence-based and action-based policy research; and augment the process of the creation of an equitable, just, peaceful and prosperous society, nation and world. To attain this objective, IMPRI provides meticulously researched analyses with intense precision that enables policymakers, practitioners, the private sector, academia, and the civil society (both in India and around the world) to make informed decisions.

**Collaboration details:** IMPRI and CES collaborated in conducting research to develop a MOOC platform with experts from different parts of the world including ULAB and IMPRI India. The objective is to test whether a certifiable online course can promote the concepts of pluralism, tolerance, and diversity among undergraduate students in India and Bangladesh. The course was launched on the Bohubrihi website in the second week of June 2021.

## Bangladesh MOOC Market Analysis:

### Background

Education institutions in Bangladesh reached a government-mandated shutdown back in March 2020 and resumed partially in September 2021. The whole sector faced a disruption, albeit temporary, because of the lack of infrastructure in many universities including the public. As a result, it took some time until private and public universities alike could resort to online classes using video calling platforms like Zoom and Google Meet. Course materials are shared with students using online drives and clouds. Teachers collect submissions and provide feedback electronically as well under such circumstances, a structured MOOC system will not only make access to education more efficient in the country but also put in place the required infrastructure to strengthen the education industry making it more resilient to future unforeseeable disruptions.

Students in Bangladesh are familiar with online platforms like the Khan Academy and 10 Minute School and have been using them to supplement their learning way before the pandemic struck. Therefore, a market was already there for MOOC in Bangladesh, the pandemic only heightened its demand. In an interview conducted by the ULAB CES as part of a market assessment on July 14, 2021, Mr. Ruhul Kader, Founder of Future Startup, stated that "Bangladesh will see an increasing rise in the demand for online skills sharing platforms and education platforms for the K-12 bracket." In the past few years, there has been an increase in the number of consumer EdTech (education technology) companies that target K-12 or kindergarten to 12th-grade education and life-long verticals. This area offers a lot of opportunities for companies to diversify into other relevant verticals once the K-12 segment is established considering the median age demographic of Bangladesh is about 26 years.[1]

According to UNESCO, the net enrollment rate in secondary education in Bangladesh was 67.6%, and only 22.8% in tertiary education in 2020[2]. In the proposed budget for the 2021-22 fiscal year, the government has allocated USD 8.3 billion for the education sector which is only 2.09% of the GDP[3]. About 51% of this budget is allocated to the secondary and higher education sector which amounts to 1.06% of the GDP[4]. Experts advise that this budget ought to be implemented properly under a unique framework in order to address the loss suffered during the pandemic. They have emphasized training for teachers and students, and internet connectivity for conducting online classes among others for ensuring access to education for all.

Bangladesh has seen an average growth rate of 13.5% in internet penetration over the last 5 years. About 67% of the country's total population now uses the internet. Even though Bangladesh takes the backseat in terms of smartphone usage among the Asia Pacific countries, 41% of its total mobile phone users have smartphones. The Bangladesh Telecommunication Regulatory Commission posted on their website that the total internet penetration as of October 2021 stood at 74.64%. At this rate, as part of online education, it will be easier to reach out to the target MOOC market in the country.

[1] Kader, R. (2021, July 29). Bangladesh Tech Briefing: 12 Observations about EdTech Market in Bangladesh Plus Dorik, Evaly, Shikho, and Tap. Future Startup. https://futurestartup.com/2021/07/29/bangladesh-tech-briefing-1-dtech-bangladesh/
[2] UNESCO Institute for Statistics. (n.d.). Bangladesh. UNESCO. Retrieved December 5, 2021, from http://uis.unesco.org/en/country/bd?theme=education-and-literacy#slideoutmenu
[3] Abdullah, M., & Shovon, F. R. (2021, June 3). Experts for proper planning as education budget up. Dhaka Tribune. https://www.dhakatribune.com/bangladesh/education/2021/06/03/experts-for-proper-planning-as-education-budget-up
[4] Bangladesh Ministry of Finance. (n.d.). Statement II Operating and Development Expenditure. Ministry of Finance, Government of the People's Republic of Bangladesh. Retrieved December 5, 2021, from https://mof.gov.bd/sites/default/files/files/mof.portal.gov.bd/budget_mof/3beecce9_51f4_4555_ba93_f0bd86de0526/ST_02_E.pdf

## Public Sector Initiatives

The government of Bangladesh announced its vision for a "Digital Bangladesh" in December 2008 which included universal access to education with a view to developing skilled and creative human resource[5]. Since then, the government has taken various initiatives to meet SDG 4 – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. The pandemic has only made it more urgent to adopt more measures toward access to education. The government has negotiated with various internet service providers to provide internet services to students at low prices; Bangladesh Telecommunications Company Limited (BTCL) has been offering the same through the student sim card. In August 2020, the Minister for Education, Dr. Dipu Moni, MP mentioned at a forum that, the long-term effects of the COVID 19 "can only be limited by digitalizing education, comprehensively and quickly."[6] Virtual classrooms for universities, multimedia classrooms for primary and secondary students, teachers' portal have been implemented. Considering limited access to the internet, television-based learning has been introduced.

Under the Access to Information (a2i) project, supported by the United Nations Development Program (UNDP), the government has developed platforms like Muktopath, the largest Bangla-based e-learning platform, with over a million registered students (including government employees) having access to 180 courses[7]; Kishore Batayan, a platform for teenage Bangla speaking students who can access online classes, read and download books, watch movies, etc.; Shikkhok Batayan, provides training and learning opportunities to teachers at their convenience and have access to offline contents[8]; multimedia talking books ensure access to education to the visually impaired (https://a2i.gov.bd/education/).

Bangladesh Open University was the first public university to promote distance education established in 1992. Classes were conducted using national television, radio, and regional centers. Subsequently, the government launched Bangabandhu Sheikh Mujibur Rahman Digital University (BDU) with permission from the University Grants Commission (UGC) Bangladesh, which will provide MOOCs with certificates to students with access to the internet at a low price.[9]

[5] Bangladesh Awami League. (2021, February 2). Digital Bangladesh - Vision 2021: The Secret of Bangladesh's Transformation. https://www.albd.org/articles/news/35867/Digital-Bangladesh---Vision-2021:%0D%0AThe-Secret-of-Bangladesh%E2%80%99s-Transformation

[6] Moni, D. (2020, August 17). Digital education is both a necessity and an advantage for the Global South. Here's why. World Economic Forum. https://www.weforum.org/agenda/2020/08/bangladesh-digital-education-pandemic/

[7] Bangladesh Awami League. (2021, February 2). Digital Bangladesh - Vision 2021: The Secret of Bangladesh's Transformation. https://www.albd.org/articles/news/35867/Digital-Bangladesh---Vision-2021:%0D%0AThe-Secret-of-Bangladesh%E2%80%99s-Transformation

[8] Hassan, M. M. (2021, August 27). Digital services in Bangladesh and progress of education. The Independent. https://m.theindependentbd.com/post/267325

[9] Islam, M. D. (2019, May 25). Bangladeshi Platforms for Online and Distance Learning. Bangladesh Education Article. https://bdeduarticle.com/distance-learning/

## Private Sector Initiatives

Public sector engagement in any field is often met with proportional private sector interest. With the public sector investing in online education platforms, private sector advances are unavoidable. Bangladesh's privately-run MOOC, 10 Minute School, which started operations in mid-2014, is said to be the pioneer in the Bangladesh EdTech landscape and has 1.79 million subscribers today. It is a platform dedicated to teaching the K-12 student bracket with comprehensive syllabi for different courses.  It offers preparation for university admission, and standardized test preparation for SATs, GRE, and GMAT. In 2015, *The Daily Star* reported another privately owned online education platform in Bangladesh, MOOCxchange, which at the time had 800 subscribers.

The local EdTech startups offer government-recognized degrees and certificates, a learning management system, enterprise planning resources, tuition and test preparation resources, and training for job placements, among others. Target consumers include pre-school, K12, university, job seekers, and individuals seeking to develop their skills. Being private sector initiatives, they have a target to generate revenue through monetization of their content and also increase the number of subscribers. Many such startups have successfully raised funds for development and expansion. There are about 90 startups currently operating in the Bangladesh EdTech market. Along with 10 Minute School, Interactive Cares, Bohurbrihi, Thrive EdTech, Shikho, and Upskill are among the popular ones. Coursera, an American MOOC provider founded in 2012 now has over 482,000 subscribers in Bangladesh, which accounts for a staggering 196% year-on-year increment[10].

## Recent Developments in the Competitive Landscape

In Bangladesh, the coaching center culture has been around for over two decades and continues to dominate the education industry especially after obtaining government approval in 2020. Out of the combined annual public and private investment of approximately USD 15 billion in the education sector, coaching centers alone control USD 6 billion worth of the market. EdTech companies are chasing after this lucrative market and some have been successful. Shikho aims to make education accessible and affordable in the country. It has secured USD 1.3 million funding in seed money this year which makes it the largest round of financing by a local EdTech startup. In 2021, Bangladesh startups have generated about USD 36.2 million till July of which USD 2 million accounts for EdTech startups. Pre-pandemic EdTechs controlled about 5% of the education market which is expected to rise to 10% post-pandemic. Experts suggest that Bangladesh EdTech startups have the potential to secure USD 700 million worth of market by 2025[11].

---

[10] The Daily Star. (2020, November 20). Coursera builds online education in Bangladesh. https://www.thedailystar.net/bytes/news/coursera-builds-online-education-bangladesh-1997825

[11] Upskill Classroom. (2021, September 12). EdTech in Bangladesh. https://www.upskillclassroom.com/blogs/83

**Table 1:** List of Bangladeshi EdTech startups

| New Companies | Target Customers | Interesting Facts |
|---|---|---|
| Bohubrhihi | Young professionals | This is the vendor for the MOOC on "diversity, pluralism, and tolerance" |
| Shikho | 9th and 10th grade | It recently generated funding of $1.3 million (Kader 2021) |
| Durbin Academy | K-12 | 50,000+ downloads on Playstore |
| Thrive EdTech | K-12 | Allows educators to help individual students through automation. |
| Upskill | Young professionals | Working to create a bridge between job seekers and industries |
| Eduhive | K-12 | The app has been downloaded over 100,000 times |

## Opportunities for Growth

COVID 19 was an unforeseen event and as much as we all hoped that it would go away ever since the vaccination campaigns began, not much has changed. On the contrary, new variants of the virus keep us guessing about its duration of stay. Under such circumstances, another lockdown might just be inevitable and education institutions will be forced to go back to online classes. Considerable time has passed since the first lockdown and institutions are expected to be equipped with the technology and expertise to continue both on and offline classes as needed. According to a 2015 report by the Bangladesh Bureau of Statistics, 90% of the 15 to 24 year old population in Bangladesh has access to the internet using either computer or mobile-phones[12]. On top of that, the concentration of universities in Dhaka and Chittagong alone is 70%, which limits the access of the young population to higher education (*Mannan 2015*). Therefore, a structured and comprehensive MOOC system will provide a much-needed solution to the problem. In recent times the K-12 market and professional skill sharing market have experienced an increase in interest from investors. This may add multiple avenues of growth in the EdTech space (*Kader 2021).*

## Barriers

Although the future of MOOCs in Bangladesh is promising, it can only be scalable once the country shows improvement in its digital literacy level and an increase in internet penetration in rural areas along with access to smartphones among individuals. Only

---

[12] Sarker, M.F.H., Mahmud, R.A., Islam, M.S. and Islam, M.K. (2019), "Use of e-learning at higher educational institutions in Bangladesh: Opportunities and challenges", Journal of Applied Research in Higher Education, Vol. 11 No. 2, pp. 210-223. https://doi.org/10.1108/JARHE-06-2018-0099

37% of the rural population of Bangladesh have internet connectivity, and 49% have access to smartphones, while only 8% have computer skills[13].

A common challenge faced by EdTech startups is the perception of the effectiveness of online education. People quite often consider online education to be ineffective due to its lack of interactive features (*Kader 2021)*. However, innovation and creativity among the startups can resolve this problem. For instance, Shikho has found gamification of its learning process to be successful.

Bangladesh only uses 2.03% of its GDP for the education sector. Experts believe that at least 6% of the GDP needs to be utilized to establish a proper digital education platform. It has been observed that investment from the public sector in a particular field is reciprocated, in many cases proportionately, by private sector investment. This implies that private sector investment is directly proportional to public sector investment. Lack of government investment can be interpreted as a lack of confidence in the market, thus decreasing the chances of private sector investments.

## India MOOC Market Analysis

### Background

India has already sustained two waves of the COVID 19 pandemic which has exhausted all its medical resources and significantly impacted the economy as a whole. Currently, 60% of the population is below the poverty line which accounts for about 812 million people. This number is expected to rise by 104 million in the worst-case scenario[14]. In an attempt to control the situation, the government had to impose a nationwide lockdown. Since March 2020, education institutions have remained closed with the exception of a few days when the infection rates were under control. Nonetheless, the future of educational institutions is uncertain. Fortunately, the country is already familiar with the concept of online education and has the required platforms both from the private and public sectors to support the education system under such a situation. MOOCs are also common in India and formed part of the required infrastructure to combat the loss sustained due to the pandemic.

The current EdTech market size in India is estimated to be between USD 700-800 million. Reports claim that the EdTech market size is expected to grow up to USD 30

---

[13] Rabbani, M., Matin, M., Zahan, I., Islam, M. S., & Rahman, S. (n.d.). Digital Literacy and Access to Public Services in Bangladesh. BRAC Institute of Governance & Development. Retrieved February 18, 2021, from https://bigd.bracu.ac.bd/study/digital-literacy-and-access-to-public-services-in-bangladesh/

[14] Manish, S. (2020, April 17). Coronavirus impact: Over 100 million Indians could fall below poverty line. Business Standard. https://www.business-standard.com/article/economy-policy/coronavirus-impact-over-100-million-indians-could-fall-below-poverty-line-120041700906_1.html#:%7E:text=At%20present%2C%2060%20per%20cent,live%20below%20that%20poverty%20line

billion in the next ten years. Online education offerings for classes 1 to 12 are projected to increase 6.3 times by 2022 from the base year of 2019. The post-K-12 market is expected to grow 3 times to touch USD 1.8 billion.

## Current Conditions

India launched its own public MOOC in 2016 with 2000 courses and over USD 30 million paid to instructors. It has 50,000 subscribers as of 2020. The country also holds the position for second-highest Coursera subscriptions after the United States. SWAYAM (Study Webs of Active–Learning for Young Aspiring Minds) is an initiative of the Ministry of Education of India which may be a relatively new addition to India's MOOC systems. India's MOOC history dates back to 2003 with NPTEL (National Programme on Technology Enhanced Learning). MookIT and IITBX came into the picture in the early 2010s.

The number of Indian users according to each MOOC platform:
- NPTEL- 1.5 million
- mooKIT- 0.1 million
- IITBX-1.25 million[15]
- Swayam- 10 million[16]
- Coursera- 4.8 million[17]

## Recent Developments in the Competitive Landscape

Considering the current follower base of the Indian MOOCs, India has seen an influx of private sector interest in the EdTech market. Given the large number of the young population that is becoming more technologically adaptive, they have entered the EdTech learning market very early on, compared to Bangladesh. They have developed over 25 EdTech startups in the last 7 years. Some of the most promising startups are mentioned below:

---

[15] Chauhan & Goel. (2017). An Overview of MOOC in India. *International Journal of Computer Trends and Technology*, 49(2), 111–116. https://www.researchgate.net/publication/320038196_An_Overview_of_MOOC_in_India

[16] Shah, D. (2020, November 30). By the Numbers: MOOCs in 2019 — Class Central. The Report by Class Central. https://www.classcentral.com/report/mooc-stats-2019/

[17] Kapur, M. (2019, October 21). Stanford and Michigan University are the most popular among Coursera's 5 million Indian users. Quartz India. https://qz.com/india/1729832/indians-on-coursera-are-lapping-up-stanford-michigan-courses/

**Table 2:** List of popular EdTech startups in India

| New Companies | Target Customers | Interesting Facts |
|---|---|---|
| Byju's | K-12 | A net worth of USD 16 billion (Chandrasekaran, 2021). |
| UpGrad | Higher education seekers | Valued at US$ 102 million |
| Masai School | Beginners and experienced professionals in software development | Masai School follows an Income-sharing Agreement model |
| Testbook | Government job seekers | Startup claims to improve exam scores by 53% |
| LEAD school | K-12 | Recently secured funding of USD 30 million (Chandrasekaran, 2021). |

## Opportunities for Growth

A report by the Central Statistics Office of India in 2017, projected that 34% of the country's population will be between the ages of 15 and 24 years by the year 2020. This age group also shows the highest digital mobile consumption. It is estimated that by 2023, India will be home to 760 million smartphone users. It currently hosts 560 million internet subscribers (*Kaka et al., 2020*). 75% of the districts in India lack higher education institutes because most universities are either located in or around urban areas (*Varghese et al., 2020*), hence the students from rural areas face difficulties in accessing higher education. In this scenario, MOOCs can provide a cheaper solution to this problem. With the number of Coursera users showing a 505% annual increment rate in India[18], it is safe to say that India has good prospects of expanding its MOOC market.

## Barriers

The two biggest impediments to reaching India's desired MOOC market expansion are its digital literacy level and internet access. Although the number of internet users in India is higher than that of the United States, two-thirds of the Indian population does not have access to the internet and only 29% of the women in India are internet users (*Khokhar 2016*). With 60% of the Indian population living below the poverty line,[19] it will be difficult for many users to bear the secondary costs (cost of a smartphone, internet bills) of accessing.

---

[18] Dash, S. (2020, April 9). Over 1,225 universities sign up with Coursera in India, enrollments in public health content shoot up by a whopping 2280%. *Business Insider*.

[19] Manish, S. (2020, April 17). Coronavirus impact: Over 100 million Indians could fall below poverty line. https://dl.acm.org/doi/10.4018/IJDLDC.2016070101

## Challenges and Recommendations for MOOC markets in Developing Countries

For the purposes of this market assessment, several industry leaders from the EdTech community in Bangladesh and India were interviewed. During these interviews, they shared a number of challenges they had faced and also made recommendations on how to resolve the same. Discussions were also held with faculties, EdTech startup owners, and business analysts to generate awareness about various market strategies and associated drawbacks. Attached is a summary of the findings:

### Challenges

#### COVID-19:

- Due to the pandemic, **coordination and communication were limited** between all guest lecturers, vendors, and staff involved in the process.

- The **lecturers could not participate in all the meetings** to further discuss the topics in depth. Since MOOC is a fairly new concept in the field of education in Bangladesh, in-person meetings and discussions would have been very helpful for all parties involved.

- **Vendors faced difficulty in maintaining the quality of production** while designing the 14 lectures. Considering the health and well-being of all parties involved, only one in-person meeting was held during the pandemic. It was not possible to record all the lectures in-person. The independent consultants, staff, and the MDC (MOOC Development Coordinator) coordinated via online calls and zoom meetings. This provided very little opportunity for a briefing on the lecture preparation.

#### Material development

- The concept of courses promoting pluralism, diversity, and tolerance is relatively new in Bangladesh. It was **difficult to find data in the context of Bangladesh on the topics provided** by the experts. There was limited published work on the date which contained inconsistencies during the review.
- Since the **experts could not communicate with the students they were teaching**, it was not possible for them to assess the level of understanding of the students who were registering for the course. In a discussion with Professor Abantee Harun of ULAB, she mentioned that the "lack of interaction among the students and teachers, posed a communication barrier". As a result, preparing the materials was also difficult. Materials are crucial because the entire process is heavily dependent on the critical thinking abilities of the students.

- One of the major disadvantages of a MOOC is that it **takes away the interactive element away from education**. Where conceptual development is concerned, it is essential that the students have an opportunity to communicate with the teachers.

## Marketing

- To make this project a success, it is important to market it on a large scale. This is also the most challenging aspect of this project. Although Bangladesh developed an emerging MOOC scene during the pandemic, this market is still in its nascent phase to be judged and/or predicted accurately. There is still some **risk involved with the outreach of this MOOC**.
- **Lack of awareness of the importance of courses promoting pluralism, tolerance, and diversity** is an issue. Majority of the students do not know that such a program is available and its significance in understanding the ways of a multicultural society. Reaching out to the students who actually need such programs is going to be an issue since such students cannot comprehend the value of completing this program.
- Only 40% of undergraduate students have access to stable internet connections. While educational institutions remain closed during the pandemic, **access to the MOOC is likely to be minimum.**

## Recommendations

### Development

- Since the experts don't have the opportunity to communicate with the students, it is difficult to understand their pre-existing concepts and level of study in the given topics. It is suggested that the lectures can be designed in a manner that anyone can develop a general conceptual understanding from the provided course material. **The videos should be easy to understand and have a clear summarization process**. The course should not require any pre-requisite knowledge of the topics.
- Since there is insufficient data available in the context of Bangladesh, on some of the lecture topics, the experts can use statistical reading or secondary data from different countries with similar multicultural backgrounds. **Comparing reports and studies from different countries can give the students an opportunity to intake information on a much more conceptual level**. It will allow them to comprehend social conflicts in Bangladesh from an unbiased perspective. **These courses may need more visual aids to hold the attention of students**.

- The online feature of this platform takes away the interactive aspect of such courses. **A portal can be designed on the website that promotes constructive debate and healthy interaction with the lecturers.**

## Marketing

- The pandemic is actually the most opportune time to launch this project. **The students are learning to adapt to online courses, and taking short courses on platforms like Coursera, Udemy, etc**. To make full use of this situation, potential students must be made aware of such courses with the help of social media marketing. Online teaser trailers should be provided to promote what the course has to offer. Testimonials should be prepared and shared in university groups to focus attention on the benefit of such courses.
- **CES can seek permission from the University Grants Commission to help market this course**. The necessity of such courses cannot be overlooked in multicultural societies such as Bangladesh. Getting approval from UGC to market the course in other universities (both private and public) will increase the project outreach significantly.
- **CES can collaborate with NGOs and INGOs** to utilize its network to make it accessible to the right audience. The NGOs can direct this course to the audience who are in need of a change in perspective. This will allow the project to reach out to students from all backgrounds and disciplines.
- **Student discussions and workshops can be hosted by CES** on different student platforms, highlighting the importance of such certificates in today's culture. Graduate students from the MOOC can be contacted to share their experiences and provide a perspective on the value of learning about pluralism, tolerance and diversity.
- **The course should provide benefits to the graduates.** The course can be marketed as a resume-building point. This would add employee value. It can also be marketed with the help of extra credit points for undergraduate students.

## Bangladesh Student Reviews

An initial pool of fifteen registered students was surveyed, to get a comprehensive understanding of the MOOC from the users' perspective. This review group was composed mostly of undergraduate students, with only four graduate members. They were asked to share their views and experience of completing the course, on an online Google form. Their comments and course ratings have been analyzed for further improvements in the course.

A positive start to the review session took place when all 15 students claimed a change in perspective after completing the course. Their experience with the course matched the desired outcome of the course. Some of them even claimed that it positively affirmed their empathy towards minority groups in the country, and made them aware of the struggles faced by these groups on a daily basis. Shuvashish Ray Dip, a registered graduate student, stated that this course sheds light on various practical scenarios happening around us, and helped him conceptualize diversity on multiple layers. Tabassum Propa said she can now look at a multicultural society from different perspectives of different ethnicities and racial groups.

When asked to rate the MOOC on a scale of 1 to 5 in terms of intellectual engagement (5 being the highest level of intellectual engagement), nine of the fifteen students gave it a 4/5 rating, making it the majority opinion on the table. This credits the course to its academic involvement, comprehensive research, and reliable information sources. Jannatul Ferdous, a registered course taker said, she now has a deeper understanding, and a broader picture of the different dynamics in a multicultural society, because of the comprehensive nature of the course.

The students shared their opinions on the course material as well. 14 of the 15 students stated that the material was sufficient enough to create a change in perspective. Whereas only 1 student faced difficulty agreeing with the majority opinion.

Majority of the students gave the course a positive review. They shared a unanimous view on the importance and benefits of such an online course. Arefin Kabir, an undergraduate student, expressed that such courses are essential to the mental development and cultural progress of people in a multicultural society. His opinions were reinforced by that of other students taking the survey. For example, Nisa Khayer evaluated her own thinking-process, about certain social dynamics. She said that she found the course to be enlightening, and can play an integral part in developing social awareness among students.

Upon reviewing the initial stats sent by the MOOC vendor in Bangladesh, we can conclude that the course is more popular among university-going students. The data states that 65% of the student demographic fall between the age bracket of 18-24 years,

and 35% between 25-34 years age range. Therefore, it is expected that most of the registrants for such courses will be young professionals.

The first batch of registrations showed a 1% gap between male and female registrations, with the larger share going to the number of females signing up for the course. The student pool is not yet big enough to make a conclusive analytical statement on the gap in registrations. However, a larger share of registration is likely to form among the highly urbanized areas with better access to the internet. As predicted 59% of registrations were recorded from Dhaka, while the rest are either undetected or from outside Dhaka.

# References

1.  Markets and markets. (2018, December). *MOOC Market by Component (Platforms (XMOOC and CMOOC), Services), Course (Humanities, Computer Science and Programming, and Business Management), User Type (High School, Undergraduate, Postgraduate, and Corporate) and Region - Global Forecast to 2023* (TC 3945). https://www.marketsandmarkets.com/Market-Reports/massive-open-online-course-market-237288995.html

2.  Data Bridge Market Research. (2020, November). Asia-Pacific Massive Open Online Courses (MOOCs) Market – Industry Trends and Forecast to 2027. https://www.databridgemarketresearch.com/reports/asia-pacific-mooc-market

3.  Mannan, M. A. (2015, September). E-Learning in Bangladesh: Country Report. Trans-Eurasia Information Network (TEIN) Workshop for E-Learning Feasibility Study, Seoul, South Korea.

4.  Sarker, M.F.H., Mahmud, R.A., Islam, M.S. and Islam, M.K. (2019), "Use of e-learning at higher educational institutions in Bangladesh: Opportunities and challenges", Journal of Applied Research in Higher Education, Vol. 11 No. 2, pp. 210-223. https://doi.org/10.1108/JARHE-06-2018-0099

5.  Rabbani, M., Matin, M., Zahan, I., Islam, M. S., & Rahman, S. (n.d.). Digital Literacy and Access to Public Services in Bangladesh. BRAC Institute of Governance & Development. Retrieved February 18, 2021, from https://bigd.bracu.ac.bd/study/digital-literacy-and-access-to-public-services-in-bangladesh/

6.  Shah, D. (2019, December 2). By The Numbers: MOOCs in 2019. The Report by Class Central. https://www.classcentral.com/report/mooc-stats-2019/

7.  Central Statistics Office Ministry of Statistics and Programme Implementation Government of India (Social Statistics Division). (2017). Youth in India. http://mospi.nic.in/sites/default/files/publication_reports/Youth_in_India-2017.pdf

8.  Kaka, N., Madgavkar, A., Kshirsagar, A., Gupta, R., Manyika, J., Bahl, K., & Gupta, S. (2019, March 27). Digital India: Technology to transform a connected nation. McKinsey Digital. https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/digital-india-technology-to-transform-a-connected-nation#

9.  Varghese, N. V., Panigrahi, J., & Rohatgi, A. (2018, October). Concentration of Higher Education Institutions in India: A Regional Analysis. Researchgate. https://www.researchgate.net/profile/Jinusha-Panigrahi/publication/329415584_Concentration_of_Higher_Education_Institutions

_in_India_A_Regional_Analysis/links/5c07861e92851c6ca1ff29ba/Concentration-of-Higher-Education-Institutions-in-India-A-Regional-Analysis.pdf

10. Dash, S. (2020, April 9). Over 1,225 universities sign up with Coursera in India, enrollments in public health content shoot up by a whopping 2280%. *Business Insider*. https://www.businessinsider.in/business/startups/news/over-1225-universities-sign-up-with-coursera-in-india-enrollments-in-public-health-content-shoot-up-by-a-whopping-2280/articleshow/75058940.cms

11. Khaitan, S. (2021, January 27). Explainer: Why Budget 2021 is crucial for public school education in India. *Scroll.In*. https://scroll.in/article/985125/explainer-why-budget-2021-is-crucial-for-public-school-education-in-india#:%7E:text=India%20needs%20to%20spend%206,%2D'20%20Economic%20Survey%20showed.

12. Khokhar, A. S. (2016). Digital Literacy: How Prepared Is India to Embrace It? International Journal of Digital Literacy and Digital Competence, 7(3), 1–12. https://doi.org/10.4018/ijdldc.2016070101

13. Manish, S. (2020, April 17). Coronavirus impact: Over 100 million Indians could fall below poverty line. *Business Standard*. https://www.business-standard.com/article/economy-policy/coronavirus-impact-over-100-million-indians-could-fall-below-poverty-line-120041700906_1.html#:%7E:text=At%20present%2C%2060%20per%20cent,live%20below%20that%20poverty%20line

14. Chandrasekaran, K. (2021, April 28). Indian EdTech industry's market size to reach $30 billion in 10 years: Report. *The Economic Times.* https://economictimes.indiatimes.com/tech/technology/indian-edtech-industrys-market-size-to-reach-30-billion-in-10-years-report/articleshow/82295097.cms?from=mdr

15.  Kader, R. (2021, July 29). Bangladesh Tech Briefing: 12 Observations about EdTech Market in Bangladesh Plus Dorik, Evaly, Shikho, and Tap. Future Startup. https://futurestartup.com/2021/07/29/bangladesh-tech-briefing-1-dtech-bangladesh/

16. UNESCO Institute for Statistics. (n.d.). Bangladesh. UNESCO. Retrieved December 5, 2021, from http://uis.unesco.org/en/country/bd?theme=education-and-literacy#slideoutmenu

17. Bangladesh Ministry of Finance. (n.d.). Statement II Operating and Development Expenditure. Ministry of Finance, Government of the People's Republic of Bangladesh. Retrieved December 5, 2021, from

https://mof.gov.bd/sites/default/files/files/mof.portal.gov.bd/budget_mof/3beecce9_51f4_4555_ba93_f0bd86de0526/ST_02_E.pdf

18. Abdullah, M., & Shovon, F. R. (2021, June 3). Experts for proper planning as education budget up. Dhaka Tribune. https://www.dhakatribune.com/bangladesh/education/2021/06/03/experts-for-proper-planning-as-education-budget-up

19. Bangladesh Awami League. (2021, February 2). Digital Bangladesh - Vision 2021: The Secret of Bangladesh's Transformation. https://www.albd.org/articles/news/35867/Digital-Bangladesh---Vision-2021:%0D%0AThe-Secret-of-Bangladesh%E2%80%99s-Transformation

20. Moni, D. (2020, August 17). Digital education is both a necessity and an advantage for the Global South. Here's why. World Economic Forum. https://www.weforum.org/agenda/2020/08/bangladesh-digital-education-pandemic/

21. Hassan, M. M. (2021, August 27). Digital services in Bangladesh and progress of education. The Independent. https://m.theindependentbd.com/post/267325

22. Bhattacharjee, J. (2021, August 27). EdTech Industry Overview: Bangladeshi EdTech Startups. Business Inspection. https://businessinspection.com.bd/edtech-industry-overview-bangladeshi-edtech-startups/

23. The Daily Star. (2020, November 20). Coursera builds online education in Bangladesh. https://www.thedailystar.net/bytes/news/coursera-builds-online-education-bangladesh-1997825

24. Upskill Classroom. (2021, September 12). EdTech in Bangladesh. https://www.upskillclassroom.com/blogs/83

25. Chauhan & Goel. (2017). An Overview of MOOC in India. International Journal of Computer Trends and Technology, 49(2), 111–116. https://www.researchgate.net/publication/320038196_An_Overview_of_MOOC_in_India

26. Kapur, M. (2019, October 21). Stanford and Michigan University are the most popular among Coursera's 5 million Indian users. Quartz India. https://qz.com/india/1729832/indians-on-coursera-are-lapping-up-stanford-michigan-courses/

27. Islam, M. D. (2019, May 25). Bangladeshi Platforms for Online and Distance Learning. Bangladesh Education Article. https://bdeduarticle.com/distance-learning/

# UNIVERSITY OF LIBERAL ARTS BANGLADESH

HS 56, Rd 4A (Satmasjid Road), Dhanmondi, Dhaka 1209
Phone: 9661255, 01730082197, 01713091936, 01714161613

www.ulab.edu.bd

# IMPACT AND POLICY RESEARCH INSTITUTE

92 LGF, J Block, Saket, New Delhi 110017
Email: impriindia@gmail.com, contact@impriindia.org
Phone: +91-011-42630976, +91-9911195184

www.impriindia.com