# ADAPTATION PATTERN OF MOOCS PLATFORM FOR UPSKILLING AMONG LIS PROFESSIONALS

Amruta Nareshchandra Upreti 1 , Dr. Asharam Pal 2

- <sup>1</sup> Research Scholar, Oriental University, Indore, India
- <sup>2</sup> Assistant Professor, Department of Library and Information Science, Oriental University, Indore, India





#### CorrespondingAuthor

Amruta Nareshchandra Upreti, shirkeamruta88@gmail.com

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## **ABSTRACT**

The study explores library and Information Science professional learning behaviour towards MOOCs platform. Data was collected using structured questionnaire analyzing awareness and learning pattern of LIS professionals. The study discusses awareness towards Indian & International platforms. Enrollment of LIS professionals on the MOOC platform for upskilling. International platforms like Alison, Udacity and Coursera had both less awareness and participation among the LIS professionals. The study highlighted challenges related to time management and scheduling conflict, motivation and engagement, technical and infrastructure and adaptation to technology. Findings further revealed that LIS professionals need to engage more in learning through platforms such as MOOCs for career upliftment and professional development.

**Keywords:** Moocs, Professional Development, Library and Information Science Professionals, Learning Pattern, International MOOC Learning Platforms

## 1. INTRODUCTION

In today's technologically infused era, with emerging trends and development in Library and Information Science, it is inevitability for Library and Information Science (LIS) professionals to constantly upgrade themselves with new skills and knowledge. Upskilling empowers LIS professionals redefining their role to support the library patrons. The invent of AI and quick information on finger tips make it more difficult for librarians to serve as patrons get ready made information quickly. Hence it is essential for them to have the current knowledge which is possible only by enhancing learning skills. Due to numerous reasons, it is almost impossible to take new courses or degrees which affects the individual performance of LIS professionals and over all the library of the institution. For professionals in their mid-career, with personal responsibilities it gets challenging to engage in formal learning or attend seminars and conferences. Here the MOOC serve as best alternative for continuous learning. MOOCs provide cost-effective, flexible learning opportunities enabling LIS professionals to stay up to date. In Rapid evolving industries, MOOCs serve as valuable tools for enhancement of professional skills. Integration of MOOCs in formal education is important and recognition of MOOC-

acquired skills by employers to ensure its worth in the labor market. The overall objective of upskilling should not be an individual objective rather a collective one, where the institutions employing should also focus on development of the staff. Factors such as course design, learner motivation, and institutional support influences the effectiveness of MOOCs in upskilling (Goglio and Bertolini, 2021).

Although MOOCS have abundant benefits it also has its own challenges. MOOCs appears to be lucrative beneficial and many a times learners do register themselves but challenges like motivation, time management and commitment makes the learning ineffective. In traditional learning setup learner dedicate time, resource sharing, peer group and teachers' guidance that help them to stay on the topic get less demotivated rather than in Online learning an individual is self-dependent they need to be self-motivated and prioritization of learning factor is necessity. Studies also suggested that limited technical support, low digital literacy and resistance to change are barriers of MOOC learning's (Ahmad et al. 2023). Extended review of literature between 2014 to 2018 identifying key student-related factors such as low motivation, poor time management and unrealistic expectations. The study suggested MOOC platforms to adopt flexible student -centric approaches and improve course design to enhance engagement (Xavier and Meneses, 2020). To improve retention in online learning, psychological and motivational factors were highlighted by (Dirzyte et al. 2023) which also focused on different male -female personality traits leading to dropout.

According to (Li et al, 2021) time investment pattern is related to learning performance. The study found sufficient learning duration, longer session times, intensity of learning and flexible timings are associated with learning patterns. Complementing this (Stephen et al, 2020), focused on psychological factors faced by learners mainly difficulty of balancing education with work and family responsibilities. suggesting institutions to develop strategies to strengthen these attributes. (Perifanou and Economides, 2022) observed that Major global platforms have offered thousands of MOOCs while regional platforms were more likely to have offered dozens, but speed of majorly all the platforms were observed to be slow they also suggested that platforms should develop marketing campaigns on search engines, Websites, and social media.

#### 2. LITERATURE REVIEW

MOOCs provide an opportunity to broaden the scope of traditional learning environment, promoting global collaboration, active learning and innovative pedagogies (Williams, 2024). MOOCs is not syllabi specific it allows learners to explore content other than regular syllabi (Voudoukis and Pagiatakis, 2022). Several studies have been undertaken highlighting impact of MOOCs in fostering lifelong learning attitude and professional growth. To overcome academical inequalities like fewer qualified teachers, regional divide and limited access to technology, MOOCs plays significant role by providing unconventional learning opportunities (Castillo, 2015). It can play a major role in profession of Library and Information Science who needs to continuously upskill to provide efficient and up-to-date services to patrons (Fagbohun et al, 2021). Although it is a known alternative solution for learning issues, it was found that initial awareness of MOOCs was low, exposure to this platform encouraged towards upskilling of working professionals (Sia and Cheriet, 2019).

Even though there are major benefit of MOOCs for upskilling, most persistent issue of MOOCs is high dropout rate to a combination of psychological, social, personal, course related and time aspects (Wang et al. 2023). From the learner's perspective insufficient prior knowledge, economic constraints, and low digital literacy affected learning engagement, whereas instructor related challenges such as poor course design, lack of timely feedback and inadequate learner instructor interaction (Alemayehu & Chen 2023). Gap was found in mismatch between the design of MOOCs and the needs of the intended learners.

To sustain learner interest student teacher interaction, effective feedback, overcoming language barriers are significant (Aldahmani et al. 2020). Tailored features enhancing working adult's needs could improve satisfaction and completion rates amongst these section learners (Dai et al. 2022). Gender disparity as lower participation rates were found among women (De Souza and Perry, 2021). Pre-course surveys could help to Understand female learner's and working adult's expectations which could help in designing MOOCs more inclusively. Lack of internet access, educational equipment's and pedagogical support was reported in African context (Maphosa and Maphosa, 2023) highlighting opportunity through adaptive algorithms.

## 2.1. OBJECTIVE AND SCOPE OF THE STUDY

- To explore the level of awareness amongst LIS professionals towards National and International MOOC platforms.
- To identify major learning challenges faced by LIS professionals while engaging in MOOCs and recommend strategies to overcome them.

## 2.2. STATEMENT OF THE PROBLEM

The study analyses the adaptation pattern of MOOCs amoong LIS professionals and challenges faced in effective participation through MOOCs.

#### 3. METHODOLOGY OF THE STUDY

The study is conducted on 180 LIS professionals from Maharashtra and Madhya Pradesh region on a sampling method. A mixed questionnaire was designed after conducting a pilot study on 30 LIS professionals. The questionnaire explores awareness of nine Indian as well as International MOOCs platforms among the LIS professionals. The barriers help to analyze Learner behaviors pattern, to understand the reasons for keeping them away from the learning process. The Challenges are categorized in four broad categories i.e., time management and scheduling conflict, motivation and engagement, technical and infrastructure and adaptation to technology.

**Awareness of The MOOC platforms:** Every MOOC platform has its own significance; some are best for academic learnings where as some emphasis on non-technical learning. To understand the awareness of LIS professionals towards MOOCs platform the study considered selective 09 national as well as International MOOC platforms. The below table shows level of awareness among LIS professionals about the various MOOC platform.

#### AWARENESS OF MOOC PLATFORM

Platforms	Awareness	Enrolled
SWAYAM	92.2%	58.7%
NPTEL	78.9%	46.8%
Malviya Mission Teacher Training Program (MMTTP)	61.1%	54.1%
Coursera	56.7%	33.0%
Udemy	49.4%	22.9%
The Open University	48.9%	24.8%
EdX	39.4%	19.3%
Udacity	27.8%	15.6%
ALISON	14.4%	11.0%

Table. 1.1

**SWAYAM (Study Webs of Active-learning for Young Aspirant Minds):** SWAYAM aims to offer quality education in online mode as a flexible platform to Indian learners. free and government recognized courses. Many LIS courses are available at free of cost or at reasonable examination fees. The courses are provided in regional languages. The study found 92.2% i.e, majority of the participants were aware of this Indian MOOC platform but only 58.7% enrolled in the SWAYAM MOOC courses.

**NPTEL (National Programme on Technology Enhanced Learning):** NPTEL focuses on delivering engineering and technical education from IIT's across the country. Courses like Research Methodology, Information Retrieval are of great significance to LIS professionals. The study found that 78.9% of the respondents were aware of the NPTEL platform out of which 46.8% of LIS professionals had enrolled in NPTEL courses.

**MMTTP (Malviya Mission Scheme Teacher Training Programme):** MMTTP is an Indian platform offering higher education facility promoting digital learning amongst teaching fraternity and academic Librarians with courses like Academic writing, Leadership, e-Content development, etc. 61.1% of participants were aware of MMTTP while 54.1% of respondents enrolled the courses.

**Coursera:** It is an online platform founded in 2012, offering certificates, and degree program which are free and for fee courses. It has tie-up with institutions like Stanford, Harvard and Google. The study found that 56.7% of respondents were aware of this platform, whereas 33.0% had enrolled the MOOC programme. Suggesting higher enrolment compared to the awareness finding.

**Udemy:** Udemy offers self-paced learning with life time access to its participants. Suitable for all skill levels, courses are created by independent instructors. The platform offers discount making its courses affordable. 49.4% of respondents are aware of Udemy platform whereas only 22.9% had enrolled for the same.

**The Open University:** Founded in 2013, the Open University provides variety of graduate and under-graduate courses, serving students world-wide. It has strong support service of tutoring, online forums for academic guidance. The study shows that 48.9% of the respondents are aware of the platform with 24.8% enrolment concluding that less population is aware with this platform.

**edX:** Founded by MIT and Harvard University in the year 2012, edX offers wide range of courses on data science, computer science, business and humanities. Facilities like forums, assignments and quizzes are conducted to keep the participants engaged in the courses. The study suggests 39.4% of the respondents are aware of edX platform while only 19.3% of LIS professionals had enrolled for the same.

**Udacity:** Udacity provides nanodegrees that helps learners gain job ready skills. Programmes are available in multiple language making it user friendly and global learning platform. The key areas are technology driven courses like Artificial Intelligence, Data Science and Cloud Computing. 27.8% of respondents were aware of Udacity platform and 15.6% of LIS professionals had enrolled for the courses.

**Alison:** Alison is a global learning platform offering free foundational and career-oriented courses. Over 40 million learners across 200 countries are registered with Alison. It earns through advertising and merchandise also through sale of the course certificates as per the learner's requirement. LIS professionals are least aware of this platform at only 14.4% and 11% enrolled for the courses on Alison platform.

The study reveals that Awareness of Indian MOOC platform among the LIS professionals is remarkable but a considerable segment has never enrolled in MOOCs. This gap between awareness and participation shows that even though with higher awareness of MOOCs, it does not necessarily result into active engagement. It highlights presence of underlying barrier which pose challenges for LIS professionals.

These barriers need to be understood deeply to improve participation and understand individual challenges. Table 1.2 discusses barriers faced by LIS professionals that prevents them from fully leveraging MOOC based Learning.

Barriers affecting MOOC participation among LIS professionals

	No. of Respondents	Percentage
Metacognitive skills	123	68.3
Sustaining level of engagement (Motivation)	61	33.9
Feels not worthy	35	19.4
Lack of personalization	44	24.4
Infrastructure	50	27.8
Inadequate knowledge of e-learning tools	45	25.0
Hesitant to use new technology	34	18.9
Adjusting with Session Timings	105	58.3
Work life balance	89	49.4

Table. 1.2

Multiple factors often influence the effectiveness of learning process. For Upskilling of LIS professionals, one of the important factors is Metacognitive skills which refer to self-directed learning process where one is aware of how to plan, monitor and adjust to strategies needed for continuing learning. Motivation and Metacognitive skills differ at path as motivation is the internal drive to engage learning. It is more of emotional or psychological factor. Whereas

metacognitive skills are cognitive and self-regulatory. The study found that 68.3% of LIS professionals observed Metacognitive skills as factor affecting upskilling through MOOCs.

Sustaining motivation throughout the course plays essential role in the success of MOOCs learning. 33.9% of the respondents reported sustaining level of engagement became difficult for them.

The study further delves into factors that affects learning process like time management, scheduling conflicts, technical and infrastructural limitations. Time management is crucial as it helps to manage different tasks together. It is more of prioritization, time management. If not managed properly it can lead to scheduling conflicts ultimately affecting learners' ability to continue courses. With active work-life balance it is difficult to continue upskilling managing family responsibilities, stress and personal well-being. 58.3% of the participants found it difficult to manage time and 49.4% found work-life balance keeps them away from MOOCs.

Technical and infrastructure barriers refer to issues with insufficient digital infrastructure, internet connectivity, limited technical support, incompatibility with MOOC platforms. 27.8% of respondents identified it as hurdle in MOOCs learning.

Adaptation to new technology is crucial for learning process as online learning is heavily dependent on digital platforms. It involves acquiring technical competences and readiness to engage with MOOC learning platforms. Without basic digital skills it is be impossible to continue learning through MOOCs even with high motivation factors. 18.9% of respondents acknowledged that they are hesitant to use new technology.

Knowledge to navigate through MOOC platforms and e-learning tools is also one of the minute factors affecting as challenges. If an individual is not proficient enough to handle the MOOC platform it hampers their ability to stay engaged and complete the course efficiently. 25% of participants responded that they had inadequate knowledge of e-learning tools.

Adaptation of MOOCs is also influenced by its perceived value. Many a times professionals consider MOOCs to be of less valuable, non- essential and less impactful in terms of skill enhancement. 19.4% of participants feel that MOOCs do not hold relevance according to their professional needs hence they avoid enrolling in MOOCs. Institutions and organizations should provide proper validation and recognition to MOOC courses. If MOOCs credentials are not considered for salary increment and career advancement it may lead to less participation of working professionals. 24.4% of participants felt that MOOCs are not tailored as per their need and specialization, the content may be more generic and not as per their expectations.

## 4. MAJOR FINDINGS

The study found LIS professionals had moderate level of awareness of International MOOC platforms. The study revealed maximum respondents are aware about SWAYAM platform. As SWAYAM and NPTEL are both Indian platforms they have higher recognition at 92.2% and 78.9% respectively. The study revealed a noticeable potential gap in awareness of international platform among the LIS professionals. While Indian MOOC platforms like SWAYAM and MOOCs have demonstrated commendable and effective contribution by offering quality education at their best at almost no cost, it is equally important for LIS professionals to explore global platforms like edX, Alison, Coursera and Udacity to untap the potential learning opportunities. These MOOCs will explore LIS professionals to diverse pedagogy, innovative teaching methods and provide access to emerging trends and cross-cultural perspective in Library and Information Science. Learning through Global platforms enhances the professional competencies, improve global outlook enhancing career prospects.

It is observed from the study that significant proportion of LIS professionals are aware of the MOOC platforms. Higher awareness does not necessarily validate high participation. It is essential to understand that despite high level of awareness multiple barriers hinder their engagement and sustainable learning. Barriers such as time management and scheduling conflict, metacognitive skills, sustaining motivation and adaptation to technology, technical and infrastructure, perceived value and professional recognition continues to undermine the ability of LIS professionals from engaging in MOOCs learning opportunities. Hence it is essential to investigate the underlying factors affecting adaptation of MOOCs by LIS professionals. Time related issue are one of the major drawbacks in today's time.

## 5. CONCLUSION

Over the decades, library and Information Science professionals have successively adapted and responded efficiently to technological advancements in their field. With the rise of Digital advancement, the shift from physical learning to online mode has opened up new avenues, enabling access to global standards, networking and opportunities for collaboration and knowledge sharing. LIS professionals should make maximum benefit from this platform to learn technological driven courses as learning has various challenges in physical mode. MOOC challenges help to understand that LIS professionals should rely on self-driven strategies, make maximum usage of free and reasonable platforms for gaining knowledge, investing time in upskilling will surely help the professionals to shine brighter.

### CONFLICT OF INTERESTS

None.

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