



Readiness of Management Students for Digital Transformation in Higher Education under Digital India

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Abstract

This study examines the readiness of management students for digital transformation in higher education, with reference to initiatives like Digital India. The research focuses on important factors such as digital access, digital skills, digital learning readiness, awareness of digital platforms, perceived benefits, and challenges faced by students. A sample size of 50 management students was considered, and data was collected using a structured Likert scale questionnaire. The findings indicate that most students have access to digital devices and stable internet connectivity, which supports their learning. Students also show a satisfactory level of digital skills and are generally comfortable using online tools. The study further reveals that students are open to digital learning and show a positive attitude towards adopting new technologies in education. Some challenges were identified, including technical issues and difficulty in maintaining concentration during online classes. Awareness and usage of government digital learning platforms such as SWAYAM and NPTEL are moderate among students. The study concludes that while management students are largely ready for digital transformation, there is a need to strengthen institutional support and improve awareness to enhance the effectiveness of digital education.

Keywords: Digital Transformation, Digital Learning, Management Students, Digital Skills, Higher Education, Digital India.

Introduction

India's Digital India initiative, launched in 2015, pushes for widespread tech adoption to boost education and create a skilled workforce¹. In higher education, this means shifting to online learning, data tools, and AI to prepare students, especially management ones, for a digital economy². Management students need strong digital skills like analytics and cloud tech to lead in business, but many Indian colleges lag due to uneven infrastructure and training³. This study checks if management students are ready for this change amid Digital India efforts, looking at their tech access, skills, and attitudes⁴. Recently, digital transformation has become increasingly vital in education. As technology progresses, online platforms and digital learning resources are steadily replacing traditional teaching methods. Government initiatives like Digital India, aimed at expanding educational access and promoting digital learning across the country, have accelerated this shift even further.

By making education more flexible, accessible, and interactive, classroom technology offers students exciting new possibilities. Yet this transition comes with real challenges. Issues like inadequate digital infrastructure, unequal access to resources, and limited digital skills—especially among students from diverse backgrounds—continue to block effective digital education rollout.

In this context, understanding students' readiness for digital transformation becomes essential, particularly in higher education. Management students must develop strong digital readiness to meet future academic and professional demands, as they'll work in tech-driven environments⁵. The rapid acceptance of digital technology in higher education has drastically changed how knowledge is produced, disseminated, and experienced, leading to more adaptable and learner-centred learning environments^{6,7}. Digital transformation in education includes pedagogical innovation, institutional reorganisation, and changing to learning behaviour with regard to the simple adoption of technology⁸. Initiatives like Digital India have increased the adoption of digital platforms and tools in India, highlighting the significance of students' digital competency⁹.

Management education is changing fast. Students now need to use digital tools, online platforms, and data-based decision systems^{6,7}. How well this works depends on students' preparation—like their tech skills, drive, and ability to adapt to online learning^{10,11}. New tech like AI and virtual learning is transforming higher education, so students must build strong digital skills¹². That's why this study checks management students' readiness—to help colleges adapt their teaching to fit this digital academic shift.

Literature Review: Chen et al.¹³ explain digital transformation in higher education as a structured and ongoing process rather than a one-time change. The study presents a clear framework that shows how institutions adopt digital technologies while also

dealing with practical challenges such as lack of infrastructure, resistance to change, and skill gaps among students and teachers. The study highlights that successful implementation depends not only on technology but also on proper planning, training, and support systems. This study is relevant to the present research as it emphasizes the importance of student readiness and adaptability in making digital transformation effective in higher education.

De Oliveira et al.¹⁴ conducted a qualitative study to understand how digital transformation is being experienced in higher education institutions. The study shows that while many institutions are adopting digital tools and platforms, the actual outcomes depend on how well students and faculty are able to use them. The study points out that challenges such as limited digital skills, lack of engagement, and uneven access to technology can affect the success of digital learning. This study supports the idea that student readiness is a key factor in digital transformation, especially in ensuring effective participation and learning outcomes. Fernández-Batanero et al.¹⁵ focus on various digital transformation initiatives taken by higher education institutions. The study highlights the role of digital platforms, online learning systems, and innovative teaching methods in improving the quality of education. It also emphasizes the need for institutions to create an inclusive digital environment where all students can benefit equally. The study suggests that along with infrastructure, students must be trained and motivated to use digital tools effectively. This aligns with the current study, as it shows that both institutional efforts and student preparedness are necessary for successful digital transformation.

Lim et al.¹⁶ examine digital transformation in higher education from the perspective of sustainability. The study explains how digital technologies can support long-term educational development by improving access, reducing costs, and enhancing learning experiences. It highlights that sustainable digital transformation requires continuous learning and adaptation from students. Without proper digital skills and awareness, students may not be able to fully benefit from these changes. This study is important for the present research as it connects digital readiness with long-term educational growth and effectiveness.

Digital transformation goes beyond just new tech—it's about strong leadership, getting institutions ready, and smart planning, as Onan⁸ points out. This matters a lot for colleges and universities trying to weave digital tools into their everyday work. In management programs especially, Carmo¹⁷ shows how things like data analytics software and online simulations help students build real-world skills and sharpen their decision-making.

Researchers have long seen student preparedness as a big factor in making digital learning work well. For instance, Hung et al.¹⁰ pointed out that traits like self-motivated learning, tech savvy, and drive are what make students ready for online setups.

Building on that, Sofrankova stresses how solid digital skills help students thrive in high-tech classrooms. Tang¹³ adds that with AI entering education, students need even stronger adaptability and digital know-how to keep up. Studies highlight that successful digital transformation requires a holistic shift involving pedagogical, technological, and cultural changes to enhance student engagement and academic performance in digital learning environments¹⁸.

In India, the Digital India initiative has boosted digital education through online platforms, better infrastructure, and e-resources, opening doors for students—but it also spotlights challenges like access gaps, weak digital skills, and poor tech use, especially among management learners. Overall, research shows digital transformation can transform higher education, but it hinges on student readiness, solid institutional backing, and smart rollout plans.

Research Gap: Many studies discuss digital transformation in higher education, most focus on technology or institutional changes rather than students' actual readiness. There is limited research on management students, specially in understanding their digital access and skills together with their overall readiness. Also, very few studies look at both the benefits and challenges of digital learning from students' perspective. Because of this, there is a need to study how prepared students really are for digital learning by considering these key areas together. This study contributes to the ongoing discussion by exploring the readiness of management students in the context of these changes, in line with the stated objectives:

Objectives: i. To study digital access among management students for academic purposes. ii. To examine students' digital skills in using online tools and adapting to new technologies. iii. To measure management students' readiness for digital transformation in higher education. iv. To understand perceived benefits of digital learning on academic performance and employability skills. v. To identify challenges faced by students, such as technical issues and lack of concentration in online learning.

Methodology

This study uses a descriptive research approach to understand how ready management students are for digital learning in higher education. After removing irrelevant data, 50 management students were included in the study using a simple questionnaire covering areas such as digital access, skills, readiness, awareness, benefits, and challenges. The students were selected using a convenience sampling method. A Likert scale is used in the questionnaire to understand their opinions clearly. The study focuses only on management students, as they are directly involved in digital learning. However, the results may be limited because of the small sample size and because the data is based on students' personal responses.

Results and Discussion

Data Analysis and Interpretation: The demographic data shows that the majority of respondents are young management students, mainly in the age group of 20–22 years, with a mix of undergraduate and postgraduate courses. Most students belong to urban areas, indicating better exposure to digital resources. It is observed that almost all students have access to personal digital devices such as smartphones or laptops, which supports their participation in digital learning. In terms of internet access, most students use both Wi-Fi and mobile data, showing good connectivity. Many students know about Digital India initiatives, but fewer actually use platforms like SWAYAM and NPTEL, showing a gap between awareness and use. The demographic profile suggests that students have the basic infrastructure required for digital education, which supports further analysis of their readiness.

Table-1: Time Spent on Digital Platforms.

Daily (hour)	Frequency	Percentage (%)	Percentage (%)	
			Valid	Cumulative
< 1	8	16.0	16.0	16.0
1–2	17	34.0	34.0	50.0
2–3	15	30.0	30.0	80.0
3–4	2	4.0	4.0	84.0
> 4	8	16.0	16.0	100.0
Total	50	100.0	100.0	

Table-2: Mean Table.

Variable	Mean
Time Spent on Digital Platforms	2.70

The Table-1 and 2 shows that most students spend 1–2 hours and 2–3 hours daily on digital platforms for academic and career-related purposes. The mean score of 2.7 indicates that, on average, students spend a moderate amount of time online. This suggests that while students are engaged with digital content, there is still scope to increase their usage for academic and professional growth. All variables have mean values above 3 (Table-3), indicating a moderate level of agreement and readiness for digital transformation among students. They have basic digital access, skills, and are fairly comfortable with online learning. However, institutional support is lower, indicating a need for better facilities and faculty support. Students are somewhat aware of Digital India initiatives and see

the benefits of digital learning, but still face issues like technical problems and difficulty in focusing. Overall, students are partially ready, but improvements are needed in support systems and effective use of digital tools. The standard deviation values show low to moderate variation, which means most students have similar opinions about digital learning and related factors.

Table-3: Statistical Overview of Key Variables.

Variable	N	Mean	Std. Deviation
Digital Access	50	3.40	0.65
Digital Skills	50	3.32	0.70
Digital Learning Readiness	50	3.36	0.68
Institutional Support	50	3.10	0.75
Awareness	50	3.22	0.72
Benefits	50	3.18	0.69
Challenges	50	3.28	0.73
Readiness	50	3.30	0.67

Table-4: Reliability Test (Variable-wise).

Variable	No. of Items	Cronbach’s Alpha
Digital Access	2	0.78
Digital Skills	2	0.81
Digital Learning Readiness	2	0.83
Institutional Support	2	0.75
Awareness	2	0.77
Benefits	2	0.80
Challenges	2	0.74
Readiness	2	0.82

The Table-4 shows that all variables have Cronbach’s Alpha values above 0.70, indicating acceptable to good reliability. Digital Learning Readiness and Readiness show slightly higher reliability, meaning strong consistency in responses. Digital Skills and Benefits also have good consistency. Institutional Support and Challenges have slightly lower values, but they are still acceptable, showing some variation in responses.

The overall Cronbach's Alpha for all 16 items in the questionnaire is 0.82, indicating good reliability. This shows that the questionnaire is consistent and reliable in measuring variables such as digital access, skills, readiness, benefits, and challenges. This shows that the results of the study are consistent, leading to the following conclusions.

Suggestions: Institutions should organize structured training programs to enhance students' digital competencies. Colleges should strengthen digital infrastructure, including reliable internet connectivity and access to learning resources. Students should be encouraged to actively engage with government-supported platforms such as SWAYAM and NPTEL. Faculty members should be provided with training to effectively integrate digital tools into their teaching practices. Institutions should establish technical support systems to address challenges faced by students in online learning environments.

Conclusion

This study was conducted to understand the readiness of management students for digital transformation in higher education. The findings show that most students have basic access to digital devices and internet facilities, which supports their participation in online learning. Students also have a moderate level of digital skills, which helps them use common tools and platforms for academic purposes. The study further reveals that students are somewhat comfortable with digital learning, but their overall readiness is not very high. While they recognize the benefits of digital education, such as improvement in academic performance and better career opportunities, they still face certain challenges. Common issues include technical problems and difficulty in maintaining concentration during online learning.

It was also observed that institutional support plays an important role, but there is scope for improvement in terms of infrastructure and effective use of digital tools by faculty members. Awareness of initiatives under Digital India is present among students, but actual use of platforms like SWAYAM and NPTEL is still limited, indicating a gap between awareness and actual usage. The study concludes that management students are partially ready for digital transformation, but there is a need for improvement in skills, awareness, and support systems to fully benefit from digital learning.

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