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Current Trends in Commerce and Management Education in the Digital Era: Challenges and Global-Indian Perspectives

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Abstract: *The landscape of commerce and management education has rapidly evolved in the digital era, notably during 2023–25. Institutions globally, including in India, are increasingly adopting digital transformations online platforms, academic credit banks, and AI analytics to enhance educational outcomes. This paper reviews current trends, reflecting updated data and developments. Indian higher education enrolments reached 43.3 million in 2021–22, with continued growth anticipated through 2025. Globally, business-related fields constitute approximately 20% of tertiary enrolments. Significant investments in digital infrastructure are evident, exemplified by India's University Grants Commission allocating ₹6,409 crore in 2023–24 to support online programs, and substantial global funding from organizations like the World Bank for digital education initiatives. These investments aim to enhance personalized learning and expand accessibility, though considerable challenges remain in overcoming infrastructure disparities and enhancing digital competencies among faculty and students. Additionally, employment trends for commerce and management graduates are shifting, emphasizing digital proficiency, data analytics, and AI skills as essential criteria sought by employers worldwide. This paper highlights enrolment patterns, funding trends, and employment outcomes, offering a comparative perspective between Indian and global contexts. It argues that addressing infrastructure challenges and skill shortages proactively can enable commerce and management education to effectively leverage digital transformation, ensuring competitiveness and inclusivity in the evolving global economy.*

Introduction

Rapid technological advancements are significantly reshaping commerce and management education, especially during the years 2023 and 2024. Across the globe, institutions have ramped up their adoption of digital platforms and tools, propelled by rapid tech breakthroughs and the practical demands highlighted by crises such as the COVID-19 pandemic. This digital transformation includes incorporating online learning management systems, virtual classrooms, and educational software into traditional curricula, fundamentally altering educational delivery methods. Particularly within commerce education, this shift mirrors changes in the broader business landscape, where sectors such as

accounting, finance, marketing, and supply chain management are becoming highly digitalized. Programs that previously relied on face-to-face lectures and physical textbooks are now enriched with e-learning modules, simulations, and cloud-based resources, enhancing accessibility and providing flexible, personalized learning experiences.

Similarly, management education is undergoing a substantial paradigm shift. Contemporary MBA and BBA curricula increasingly embed training in big data analytics, artificial intelligence (AI), digital marketing, and fintech, reflecting the evolving competencies demanded by today's corporate world. Students are now expected to master digital skills, such as analysing large datasets, utilizing AI-driven decision-making tools, and operating effectively in virtual business environments. The World Economic Forum's Future of Jobs Report (2025) highlights these evolving demands, emphasizing that AI, big data, cybersecurity, and technology literacy are among the fastest-growing required skills. Therefore, future managers must combine traditional business acumen with robust digital proficiency.

Digital transformation in education presents notable opportunities alongside substantial challenges. Positively, it democratizes and broadens access to quality education. Top universities now widely offer online business courses and MOOCs, enabling global participation with reduced geographic constraints. Indeed, the global online education market continues to grow robustly, projected to reach nearly $400 billion by 2026, driven by escalating demand for e-learning solutions. However, the digital divide remains a significant barrier, potentially exacerbating educational inequalities. Students from disadvantaged backgrounds or regions lacking robust internet infrastructure face challenges in accessing online education, placing them at risk of lagging behind peers with better connectivity. Furthermore, educators themselves often require training to effectively employ digital tools, highlighting the necessity for ongoing faculty development to keep pace with rapidly advancing technologies.

Addressing infrastructural gaps such as reliable power supply, high-speed internet connectivity, and updated technological hardware and software remains critical, especially in developing regions. For instance, in India, only 22% of schools had internet access as of 2021-22, underscoring significant infrastructure disparities that extend into higher education. Bridging these gaps is crucial for ensuring inclusive and equitable digital transformation in commerce and management education.

This paper builds upon earlier work by Alam (2022), updating and expanding the analysis to include data from 2023–24 and 2024–25. Key areas explored include enrolment trends, governmental and institutional funding, prominent digital education initiatives, associated outcomes, and implications for the job market and career prospects for graduates globally. The analysis employs secondary data from authoritative sources such as UGC Annual Reports, India's Economic Survey, UNESCO, and OECD, providing a comprehensive overview of digitalization's impact on commerce and management education worldwide.

Enrolment Trends in Commerce and Management Education

One significant indicator of change in commerce and management education is student enrolment trends. Table 1 summarizes recent enrolment data for India and globally for 2023–2025, highlighting participation scale and contextualizing India's position.

Table 1: Enrolment in Commerce and Management (2023–25)

Category	2023–24 (India)	2023–24 (Global)	2024–25 (India, proj.)	2024–25 (Global, proj.)
Commerce (UG & related)	5.0 million	45 million	5.3 million	47 million
Management (Business Administration)	1.0 million	0.25 million (MBA)	1.1 million	0.27 million (MBA)

Sources: AISHE 2021-22, PIB Govt. of India, OECD Education Data, GMAC/Business school reports.

India's commerce and management enrolments illustrate significant educational expansion, driven by a large youth population and increasing higher education access. Commerce, notably at the undergraduate level, remains a top choice. In 2021–22, approximately 4.3 million students enrolled in commerce, representing 13.3% of total undergraduate enrolment, projected to exceed 5 million by 2024. Undergraduate management programs, including BBA and BMS, though smaller (2.7%), accounted for roughly 0.9 million enrolments in 2021–22, increasing to approximately 1.0 million in 2023–24. Postgraduate management studies, particularly MBA programs, formed a significant 14% of India's master's degree enrolments (0.73 million students in 2021–22), likely surpassing 0.8 million by 2024.

Commerce postgraduate enrolments (e.g., M.Com) are smaller (0.5 million students), reflecting a preference among graduates to pursue immediate employment or MBA programs.

Globally, commerce and management fields maintain high popularity. Business-related programs consistently rank among the largest enrolment categories worldwide. OECD data indicate "business, administration, and law" as the leading tertiary field, surpassing STEM fields. Globally, around 45–50 million students enrolled in commerce or related programs in 2023–24, representing approximately 20% of total global tertiary enrolment. MBA enrolment globally is comparatively smaller, with around 250,000 students, highlighting the selective nature and professional orientation of MBA programs. Post-pandemic, MBA demand rebounded notably, particularly attracting international students seeking prestigious management education in the U.S., Europe, and Asia.

India significantly contributes to global business education enrolment, supported by over 1,100 universities and more than 42 million students. India's Gross Enrolment Ratio (GER) in higher education reached 28.4% in 2021–22, aiming for 50% by 2035 per the National Education Policy 2020. Increased institutional capacity, including expansion from 13 to 20 Indian Institutes of Management (IIMs), and new specialized programs in fintech, digital business, and supply chain management, further facilitate enrolment growth.

Digital transformation significantly influences enrolment patterns, with online education enhancing access for rural and professional learners. UGC regulations enabling accredited institutions to offer online degrees without prior approval have boosted remote participation significantly. However, enrolment challenges persist, notably digital divide issues, equity in access, gender disparities, and maintaining education quality and employability amidst growing student numbers. Addressing these challenges remains essential for leveraging the full potential of digital transformation in commerce and management education.

Digital Transformation Initiatives and Outcomes in Education

Digital transformation has shifted from an option to an imperative in commerce and management education. During 2023-24, India advanced several flagship measures that both reflect and outpace global developments. The University Grants Commission's Academic Bank of Credits (ABC) lets students accumulate and transfer credits earned across multiple institutions and MOOCs, while the National Academic Depository (NAD) houses verifiable digital certificates. Together, they underpin a more flexible, student-centric ecosystem consistent with the multidisciplinary vision of NEP 2020.

After the pandemic, hybrid delivery stabilised as the mainstream model. Business schools now blend online lectures and flipped classrooms with on-campus workshops, deploy real-time simulation games, and host industry-expert webinars. Platforms such as SWAYAM, along with IIM and EdTech collaborations, routinely serve thousands of learners per course rather than a handful. Evaluations report significantly higher reach at scale, adaptive pacing via analytics-driven quizzes, and deeper engagement when blended modes are thoughtfully structured.

In 2023 the government expanded its agenda to linguistic inclusion and artificial intelligence. The Bharatiya Bhasha e-Pustak project is generating commerce and economics resources in regional languages, widening access for non-English-medium students. A proposed ₹500-crore Centre of Excellence in AI for Education aims to deliver adaptive tutoring, automated assessment, and real-time case simulations. Worldwide, universities are piloting GPT-based chatbots under strict ethical oversight to provide scalable yet accurate learner support.

These initiatives have already spurred a surge in fully online MBA and executive programmes that let working professionals' study without career breaks, and boosted enrolment from rural districts and women learners. By October 2023 dozens of Indian universities had applied to run complete online degrees in business disciplines. Surveys show high satisfaction with flexibility; nevertheless, students miss networking, so many schools retain short in-person residencies for experiential learning.

Challenges temper progress. Faculty readiness varies widely, demanding ongoing training in learning-management systems, data-visualisation tools, and interactive pedagogy; workloads have risen as materials require constant refinement and out-of-class support. Academic integrity is another pressure point: plagiarism and unproctored assessments push institutions toward open-book exams, project-based evaluation, and quality oversight. The UGC recently exposed several unaccredited online providers, underscoring the need for standards as quantity expands.

Overall, India's strategy combining supportive regulation, digital infrastructure, and an inclusive outlook offers a compelling template for other developing regions, while Western schools converge on similar technology-enabled models. Yet sustained investment in quality control, faculty capability, and equitable access will decide whether digital transformation becomes a genuine catalyst for better learning or merely a technological veneer.

Government and Institutional Funding for Digital Transformation

Digital transformation is capital-intensive: campuses must finance networks, devices, platforms, faculty upskilling, and localised digital content. 2023-25 budgets show that India, the United States, and multilateral banks are treating EdTech as essential infrastructure, although their spending profiles differ.

Table 2: Major Digital-Education Funding (2023-25)

Funding source / programme	2023-24 allocation	2024-25 (planned / BE)
UGC (India) – Grants for Higher Education	₹6,409 crore (Revised Estimate)	₹2,500 crore (Budget Estimate)
USA – NTIA Digital Equity Competitive Grants	US $750 million (FY 2024)	US $500 million* (FY 2025 expected)
World Bank & IDB – LAC Digital Education Facility	US $512 million (active projects)	US $400 million (2024-26 programme)

*Estimated continuation of the five-year US $1.25 billion Digital Equity Act programme.

India: High Initial Spends, Sharp Consolidation

New Delhi's 2023-24 revision pushed UGC spending to ₹6,409 crore, enabling a rapid expansion of SWAYAM courses, virtual labs, and campus networks. In the FY 2024-25 interim budget the line falls to ₹2,500 crore 61 % cut but overall education outlay rises to ₹1.20 lakh crore as more money is channelled directly to IITs, IIMs and new public-private vehicles such as the National Education Technology Forum. Universities must now extract more value from the digital stack already built and tap external sources (industry sponsorship, multilateral grants, bond issues) for upgrades.

United States: Closing the Access Gap

The NTIA administers the Digital Equity Competitive Grant Program US $750 million authorised for FY 2024, with the balance of a US $1.25 billion envelope to be disbursed in later rounds. States use awards to extend broadband to rural schools, supply low-income students with laptops, and fund community digital-skills training actions that directly support remote and blended university courses. NTIA guidance indicates a further competitive tranche in FY 2025 (roughly US $500 million) to keep the programme on schedule. The US approach underlines that equitable connectivity, not campus hardware, is the binding constraint.

World Bank & IDB: A Regional Accelerator

At the "Connected: Digital Transformation to Accelerate Learning" event (30 Oct 2023), the World Bank and Inter-American Development Bank announced US $512 million in projects aimed at linking 12,000 schools, reaching 3.5 million learners and training 265,000 teachers across 16 Latin-American and Caribbean countries. An additional US $400 million is programmed for 2024-26 to scale platforms, devices and analytics. The multilateral model pools risk and expertise, offering a template for regions where national budgets remain tight.

Early Results and Forward Risks

The 2023-24 spending surge produced tangible wins: SWAYAM's user base exceeded 12 million, Indian B-schools rolled out cloud simulation labs, and Latin-American pilot schools joined national online teacher-training networks. Universities report higher online enrolment especially among rural learners, women and working professionals yet sustainability now hinges on:

- **Faculty Capability**: ongoing LMS and data-visualisation training to avoid tech stagnation.
- **Quality Assurance**: vigilance against fake online providers and ineffective "ed-tech grafting."
- **Refresh Funding**: devices, servers and licences age quickly; blended programmes must prove learning gains to secure the next round of grants or corporate sponsorship.

Overall, funding trends reveal a two-phase cycle capital build-out followed by optimisation and diversified finance. Commerce and management faculties, which often enjoy stronger fee revenues, are early beneficiaries (think smart trading floors and AI-driven case repositories). The strategic challenge for

2025 and beyond is to ensure that the momentum of 2023-24 does not stall as budgets tighten, so digital transformation matures into durable, inclusive learning rather than a short-lived tech veneer.

Opportunities and Challenges in the Digital Era

The rapid digitisation of commerce and management education is both expanding horizons and exposing fault-lines. By 2024 most institutions have moved beyond emergency remote teaching toward a "digital-first, human-enhanced" model; the opportunities and challenges below trace the contours of this new normal.

Opportunities

- **Greater Accessibility and Inclusivity:** Cloud platforms and low-cost devices let students in small-town India or sub-Saharan Africa enrol in online B.Com. or MBA programmes from leading universities. Screen readers, captions and transcripts widen access for differently-abled learners, while asynchronous delivery accommodates varied schedules and bandwidths.
- **Flexible, Personalised Pathways:** Recorded lectures, adaptive quizzes and AI-curated learning plans allow students to learn at their own pace and dive deeply into chosen niches (e.g., marketing analytics or fintech). Indian B-school studies show higher engagement and completion in blended courses that embed such personalisation.
- **Interactive, Experiential Learning:** Simulators, VR walk-throughs, live data dashboards and gamified case studies turn abstract theory into hands-on practice. Finance classes can trade virtual portfolios on live feeds; supply-chain cohorts can model disruptions in a digital twin. Research links these experiences with stronger concept retention and decision-making skills.
- **Global Collaboration and Exposure:** Video-conferencing and shared-workspace tools enable transnational group projects and guest lectures from industry leaders at marginal cost. Students encounter diverse perspectives, while faculty swap pedagogical innovations in near-real time.
- **Data-Driven Improvement:** Learning-management analytics reveal where learners hesitate or drop off, giving instructors granular insight into pain-points. Institutional dashboards that correlate engagement, grades and placement outcomes inform curriculum tweaks and targeted mentoring.

Challenges

- **Digital Divide and Infrastructure Gaps:** Connectivity, device shortages and erratic power still exclude millions. Urban Indian students may stream HD lectures while rural peers rely on patchy 4G or offline files, risking wider inequity unless broadband, affordable data plans and community access hubs reach the last mile.
- **Quality Assurance and Accreditation:** The surge of online providers has outpaced regulators. Diploma mills and unaccredited MBAs erode trust, prompting bodies such as India's UGC and NAAC to tighten norms and publish lists of fake institutions. Credible accreditation frameworks must evolve quickly to safeguard learner and employer confidence.
- **Pedagogical Retooling and Faculty Readiness:** Effective online teaching demands instructional-design know-how, multimedia production and community-building skills that many lecturers were never trained for. Continuous professional development, incentives and peer mentoring are essential to prevent courses becoming passive video monologues.
- **Sustaining Student Engagement:** Flexibility can breed procrastination, isolation and "Zoom fatigue". Online dropout rates remain higher than on-campus figures. Successful programmes counter this with live polls, breakout rooms, gamified milestones and periodic face-to-face residencies that restore peer interaction.
- **Assessment and Academic Integrity:** Remote proctoring is intrusive yet imperfect; open-book or project-based tasks ease surveillance but complicate authenticity checks. Generative-AI tools raise fresh plagiarism concerns. Oral-vivas, timed problem-solving with screen-sharing and advanced similarity detectors are emerging countermeasures.
- **Cost and Sustainability:** Marginal delivery costs fall at scale, yet platforms, licences, cybersecurity and content refreshes strain public budgets. With Indian UGC allocations tightening in FY 2024-25, universities must seek blended financing—industry sponsorships, multilateral grants, alumni funds—and cooperate on open-source materials to keep fees affordable.

Impact on Job Market and Career Prospects

Digitalisation is redrawing the employment map for commerce and management graduates. Employers now treat facility with data, automation and AI as baseline competencies, and institutions that keep pace are enjoying stronger placement outcomes while laggards see their alumni drift into the "unemployable" half of the statistics.

- **Evolving Roles and Skills:** Automation has reshaped classic functions (accounting, auditing, marketing) and birthed new ones such as RPA analyst, digital-marketing strategist and fintech product manager. The World Economic Forum estimates that 44 % of workers' core skills will be disrupted by 2027 and that 170 million new jobs will emerge globally by 2030, more than offsetting 92 million displaced roles. Consequently, leading Indian programmes now teach Python-based analytics, blockchain logistics and AI-driven strategy alongside traditional subjects; internships increasingly involve remote projects with SaaS start-ups.
- **Employability Snapshot:** India's Economic Survey 2023-24 puts graduate employability at 51.3 %, up from 34 % a decade ago yet still leaving nearly one in two job-seekers short of market expectations. The improvement is real but fragile: employers still flag insufficient practical exposure, soft skills and hands-on digital fluency. Encouragingly, the India Skills Report 2025 shows employability climbing to 54.8 % when graduates add industry-recognised micro-certifications, confirming the payoff from targeted upskilling.
- **Closing the Gap:** B-schools and commerce departments are partnering with industry for live consulting projects, boot camps and hackathons. Students who bundle core degrees with niche badges say, Google Analytics, SAP-FICO or Meta Ads Manager command faster placement and better starting packages, while routine bookkeeping and entry-level processing roles are already being automated out of existence. Employers now prize "T-shaped" talent: depth in finance or marketing plus working knowledge of coding or machine learning.
- **Remote Work and Global Mobility:** Flexible work patterns that exploded during the pandemic have hardened into habit: by January 2025, 23 % of Indian white-collar vacancies offered hybrid or fully remote options, up from just 1 % in 2020. This widens the market for graduates who can collaborate across time zones and cultures; a data analyst in Pune can service a European client without emigrating, provided they master virtual-team tools and cross-cultural etiquette.
- **Entrepreneurial Pathways:** Low-cost cloud services and digital payment rails have lowered entry barriers for start-ups. Many campuses now host incubators where students pilot fintech, edtech or D2C ventures for credit, sometimes securing seed funding before graduation. For a segment of graduates, success will be measured not by landing a job but by creating jobs.
- **Salary and Advancement:** Recruiters routinely offer premium packages for digital specialists: MBAs in business analytics or digital strategy out-earn general MBAs, and commerce graduate's adept in ERP and data visualisation step directly into analyst roles. Conversely, graduates without demonstrable tech or soft-skill currency face compression of wages and opportunities as automation scales.
- **Bottom Line:** The job market's verdict is clear – digital competence is foundational, not optional. Institutions are racing to align curricula, industry is leaning into continuous skilling partnerships, and students who seize online certifications, live digital projects and global collaboration opportunities enter 2025 with demonstrably stronger career prospects. Those who ignore the digital signal risk becoming part of the still-significant unemployable fraction. The task ahead for government, academia and industry alike is to sustain the momentum so that India's demographic dividend converts into a digitally fluent workforce ready for the next decade's 170 million new roles.

Conclusion

Commerce and management education pivoted decisively toward technology-enabled, job-aligned learning. Enrolment tops 43 million in India, with commerce and management retaining double-digit shares and online modes widening access. UGC's Academic Bank of Credits, virtual simulations and AI tools have fostered flexible, interactive study, yet digital divides, quality assurance and faculty upskilling remain urgent. 2023-24's large funding burst must be sustained through innovative partnerships as government budgets tighten. Employability is rising, but nearly half of graduates still lack

workplace-ready digital and soft skills, underscoring the need for curricula that blend theory with hands-on, data-driven projects. The sector is shifting from campus-bound courses to a porous, lifelong-learning ecosystem; scaling best practices, sharing open resources and following NEP 2020's multidisciplinary vision are critical to reaching India's 50 % GER goal. Institutions that continually adapt will produce globally agile, future-ready professionals for the digital-first business landscape.

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