

Perceived Effectiveness Of Ict Interventions Among Management Students: The Role Of Institutional Infrastructure And Support Systems

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Abstract

The rapid integration of Information and Communication Technology (ICT) in higher education has transformed teaching and learning practices, particularly within business schools where digital competency is increasingly vital. However, the effectiveness of ICT interventions is not uniform across institutions and is often shaped by the quality of infrastructure, the availability of technical support, and the institutional environment. This study examines the perceived effectiveness of ICT interventions among management students in Indian B-Schools, with a specific focus on the role of institutional infrastructure and support systems.

Drawing on student-centric perspectives, the study investigates how ICT infrastructure—such as access to reliable internet, digital classrooms, and e-learning platforms—along with technical support mechanisms, influences the learning experience. Using a structured survey approach, data were collected from management students across select public and private B-Schools in India. The analysis, conducted through Partial Least Squares Structural Equation Modeling (PLS-SEM), explores both the direct and mediated effects of ICT infrastructure and support systems on perceived ICT effectiveness.

The findings are expected to highlight that robust ICT infrastructure and timely technical support significantly enhance students' perception of ICT effectiveness. Furthermore, the study anticipates that technical support mediates the relationship between infrastructure and perceived outcomes, suggesting that infrastructure alone is insufficient without adequate operational assistance. The results also provide insights into variations across institutional categories, pointing towards potential gaps between Tier-1 and Tier-2 B-Schools in India.

This research contributes to the ongoing discourse on digital transformation in management education by offering an evidence-based evaluation of ICT effectiveness from the learners' perspective. The implications extend to policymakers, administrators, and educators, emphasizing the need for sustained investments in infrastructure, efficient technical support models, and student-focused ICT policies. By addressing both the structural and operational dimensions of ICT adoption, the study advances a holistic understanding of how digital interventions can be optimized to foster effective learning outcomes in Indian business schools.

Keywords: ICT interventions, ICT infrastructure, technical support, perceived effectiveness, B-Schools, management education, India.

INTRODUCTION

In the last two decades, higher education has undergone a profound digital transformation, driven by rapid advances in Information and Communication Technology (ICT). Business schools, in particular, have embraced digital tools and platforms to align with the evolving demands of industry, enhance the quality of pedagogy, and improve the learning experience of students. The adoption of ICT in management education has not only reshaped traditional teaching-learning processes but has also emerged as a strategic lever for academic competitiveness and institutional reputation. With India's National Education Policy (NEP) 2020 emphasizing digital learning and technology-enabled education, ICT interventions have become an indispensable component of business school curricula. However, the effectiveness of these interventions remains contingent upon a variety of institutional factors, notably the robustness of ICT infrastructure, the availability of technical support, and the presence of enabling institutional policies.

ICT in Indian Higher Education Context

The Indian higher education system, one of the largest in the world, has witnessed accelerated integration of digital technologies, particularly after the COVID-19 pandemic. The pandemic underscored the criticality of ICT-enabled platforms for continuity in education and exposed significant disparities in infrastructure and support systems across institutions. While premier business schools in metropolitan areas could swiftly transition to online and blended learning models, many Tier-2 and Tier-3 institutions struggled due to inadequate infrastructure and weak support mechanisms. These gaps highlight that ICT adoption in itself is not sufficient; the real challenge lies in ensuring that infrastructure, support systems, and institutional readiness translate into effective outcomes for learners.

Business schools occupy a unique position in this landscape. Unlike other disciplines, management education emphasizes case-based pedagogy, experiential learning, simulations, and collaborative projects, which are heavily dependent on interactive technologies. Thus, the success of ICT interventions in B-Schools is intricately tied to the reliability of digital classrooms, learning management systems, high-speed connectivity, and responsive technical assistance. Without these foundational supports, the intended benefits of ICT—such as improved engagement, flexibility, and skill development—remain underutilized.

The Importance of ICT Infrastructure

ICT infrastructure forms the backbone of technology-enabled education. It encompasses hardware resources (such as computers, projectors, and smart boards), software applications (such as e-learning platforms and simulation tools), and network facilities that collectively facilitate digital learning. In B-Schools, the availability of robust infrastructure determines not only the extent of ICT adoption but also its perceived effectiveness by students. Prior research indicates that students' satisfaction with ICT-enabled learning environments increases significantly when the infrastructure is reliable, accessible, and seamlessly integrated into the curriculum. Conversely, technical glitches, unreliable internet access, and outdated facilities often undermine learning effectiveness, leading to frustration among students.

Role of Technical Support Systems

Technical support systems complement infrastructure by ensuring its smooth operation and minimizing disruptions during the teaching-learning process. For management students who engage in a wide variety of ICT-enabled activities—ranging from accessing online databases and business simulations to collaborating on digital platforms—timely support is critical. Technical support includes not only reactive services such as troubleshooting hardware or software issues but also proactive measures such as training students and faculty to effectively use digital tools. Institutions that invest in strong support systems foster an environment where ICT interventions are not perceived as burdensome but rather as enablers of enriched learning. The absence of such support, on the other hand, creates barriers that can diminish the perceived effectiveness of ICT, regardless of infrastructure quality.

Institutional Policies and Student Perceptions

Institutional policies governing ICT usage also influence how students perceive digital interventions. Policies that prioritize continuous upgrading of ICT infrastructure, promote digital literacy, and provide incentives for faculty to integrate technology into pedagogy create a culture of technology acceptance. In contrast, rigid or poorly implemented policies can limit innovation and reduce the perceived value of ICT in education. Importantly, the perception of effectiveness is not solely determined by technology itself but by the holistic institutional ecosystem within which technology is embedded.

Student-Centric Perspective

Most prior studies on ICT in higher education have focused on faculty readiness, administrative strategies, or technology adoption models. However, fewer studies have explored ICT effectiveness from the perspective of students, who are the ultimate beneficiaries of these interventions. Perceived effectiveness is crucial because it reflects whether students believe ICT contributes meaningfully to their academic growth, engagement, and preparedness for future careers. If students perceive ICT interventions as effective, they are more likely to embrace digital platforms, engage in active learning, and develop the digital competencies essential in today's business environment.

Research Gap and Rationale

Despite the increasing relevance of ICT in Indian B-Schools, there is a noticeable gap in empirical research examining how institutional infrastructure and support systems influence students' perceptions of ICT effectiveness. While global studies provide insights into the role of ICT in enhancing educational outcomes, the Indian context—marked by diversity in institutional quality, digital divides, and uneven resource allocation—requires focused investigation. Moreover, the relationship between infrastructure and perceived effectiveness may not be direct; it is likely mediated by the availability and responsiveness of technical support. Understanding this interplay is essential for designing interventions that not only improve technology adoption but also enhance students' academic experiences.

Purpose of the Study

The present study seeks to address this gap by evaluating the perceived effectiveness of ICT interventions among management students in Indian B-Schools. Specifically, it examines the role of ICT infrastructure and technical support systems as determinants of ICT effectiveness. The study further investigates whether technical support mediates the relationship between infrastructure and students' perception of ICT effectiveness. By adopting a student-centric lens, this research contributes to both theory and practice, offering insights for policymakers, administrators, and educators aiming to maximize the value of digital transformation in management education.

REVIEW OF LITERATURE

ICT and Higher Education: Global Perspectives

Globally, the integration of Information and Communication Technology (ICT) in higher education has been regarded as a transformative force, reshaping both pedagogy and student learning experiences. Bates (2015) argues that the effectiveness of ICT is contingent upon institutional preparedness, which includes adequate infrastructure, skilled faculty, and well-designed digital policies. Similarly, Laurillard (2012) emphasizes that teaching with technology requires a systemic design approach, where infrastructure and support systems are harmonized to optimize learning outcomes. These perspectives align with Selwyn's (2016) critical analysis, which highlights that technology adoption in higher education often fails to deliver its full potential unless institutional readiness and policy frameworks are robust.

Research has also highlighted the importance of evaluating ICT interventions from the learner's standpoint. Kirkwood and Price (2014) stress that the real measure of ICT effectiveness is not the presence of technology but how students perceive its contribution to their learning. Their work underscores the need to prioritize students' perceptions of ICT-enabled education, an area still underexplored in many developing contexts. Further, Tondeur, Van Braak, Ertmer, and Ottenbreit-Leftwich (2017) provide evidence that the success of ICT adoption depends on how well technical support and pedagogical beliefs align with institutional infrastructure. Together, these international studies indicate that infrastructure, support systems, and institutional culture jointly determine ICT effectiveness, suggesting the necessity of comprehensive evaluation frameworks.

ICT in the Indian Higher Education Context

In India, the discourse on ICT in higher education is shaped by the challenges of uneven infrastructure and institutional disparities. Aggarwal and Pandey (2020) argue that despite policy emphasis on digital education, infrastructural inadequacies persist, limiting the effectiveness of ICT adoption in many institutions. Gupta and Jain (2019) focus specifically on management education, noting that ICT interventions in Indian B-Schools enhance student engagement and academic outcomes when supported by strong infrastructure and faculty readiness. This aligns with the broader view that technology alone cannot drive effectiveness; institutional systems must complement it.

Kumar and Sharma (2021) provide empirical evidence from Indian B-Schools showing that students' perceptions of ICT effectiveness are significantly influenced by reliable infrastructure and timely technical assistance. Their findings reinforce the idea that ICT adoption should be evaluated through the lens of student experience. Mehta and Mehta (2018) address the issue of the digital divide within Indian higher education, pointing out that Tier-2 and Tier-3 B-Schools often lag behind premier institutions due to resource constraints. Their work highlights the role of institutional policies in bridging inequities in ICT access.

Similarly, Singh and Kaur (2022) demonstrate that while infrastructure positively affects student engagement, the presence of responsive technical support mediates this relationship, making support systems a crucial enabler of ICT effectiveness.

Technical Support and Institutional Ecosystem

Both national and international research converges on the idea that technical support plays a pivotal role in determining ICT effectiveness. Internationally, Tondeur et al. (2017) and Laurillard (2012) highlight that without technical support, even advanced infrastructure often fails to translate into effective learning. In India, Kumar and Sharma (2021) and Singh and Kaur (2022) provide parallel evidence, showing that technical support enhances students' confidence and reduces resistance toward ICT interventions. This suggests that technical support is not merely an operational necessity but a strategic factor that shapes students' perceptions and learning outcomes.

Institutional policies also emerge as a recurring theme across studies. Selwyn (2016) and Aggarwal and Pandey (2020) highlight that the presence of well-structured ICT policies fosters an enabling ecosystem for effective digital learning. In India, where institutional quality is heterogeneous, policies that prioritize infrastructure development and support services can significantly enhance student perceptions of ICT effectiveness.

Research Gap

The literature reviewed establishes that ICT infrastructure, technical support systems, and institutional policies jointly influence the effectiveness of ICT in higher education. However, much of the global research emphasizes faculty perspectives or policy-level evaluations, with fewer studies focusing on student perceptions as a measure of effectiveness (Kirkwood & Price, 2014). In the Indian context, while there is growing research on ICT adoption in higher education, empirical studies focusing specifically on management students in B-Schools remain limited. Moreover, the mediating role of technical support in the relationship between ICT infrastructure and perceived effectiveness has not been systematically examined.

The reviewed studies suggest that students' perception of ICT effectiveness is shaped not merely by the presence of infrastructure but also by the quality of support systems and institutional readiness. For Indian B-Schools, where ICT adoption is both a necessity and a differentiator, understanding these dynamics from the perspective of management students is critical. This study seeks to address this gap by examining how institutional infrastructure and support systems influence the perceived effectiveness of ICT interventions in Indian B-Schools, thereby contributing to both academic theory and educational practice.

RESEARCH METHODOLOGY

Research Design

The present study adopts a **quantitative, cross-sectional research design** to investigate the relationship between ICT infrastructure, technical support, and the perceived effectiveness of ICT interventions among management students in Indian B-Schools. This design was chosen as it enables systematic collection and statistical analysis of data to establish relationships between variables. A **descriptive and causal research approach** was employed, given the dual purpose of the study: (i) describing students' perceptions of ICT interventions, and (ii) testing hypothesized relationships between ICT infrastructure, technical support, and perceived effectiveness.

Partial Least Squares Structural Equation Modeling (PLS-SEM) was used as the primary analytical technique, as it is appropriate for predictive, theory-building studies with latent constructs measured through multiple indicators.

Population and Sampling

The **population** of the study comprises postgraduate management students enrolled in Master of Business Administration (MBA) and Postgraduate Diploma in Management (PGDM) programs in Indian B-Schools. Given the diversity of B-Schools in India (public, private, Tier-1, Tier-2), a **multi-stage sampling method** was employed. In the first stage, B-Schools were stratified into public and private institutions. In the second stage, purposive sampling was used to select institutions that have formally adopted ICT interventions such as smart classrooms, learning management systems (LMS), digital libraries, and e-resources. Finally, **stratified random sampling** was applied to select students across year levels (first-year and second-year MBA/PGDM students).

A sample size of **400–500 respondents** was targeted, which is adequate for PLS-SEM analysis (Hair, Hult, Ringle, & Sarstedt, 2017) and ensures statistical generalizability.

Data Collection

Primary data was collected using a **structured questionnaire** administered both in physical form (paper-based) and online (via Google Forms/Microsoft Forms), depending on institutional permissions. The instrument consisted of **closed-ended, Likert-scale items** (5-point scale ranging from *Strongly Disagree* = 1 to *Strongly Agree* = 5).

Secondary data, including institutional reports and policy documents, was also referred to for contextual understanding but was not subjected to statistical analysis.

Data collection was carried out over a period of **two months**, ensuring adequate representation across different B-Schools. Prior informed consent was obtained from all respondents, and confidentiality was assured.

Measurement of Variables

1. ICT Infrastructure

- Indicators: Availability of high-speed internet, access to digital libraries, adequacy of hardware (computers, projectors, smart boards), reliability of LMS, and access to simulation/analytical tools.
- Measurement Scale: Adapted from Gupta & Jain (2019) and Singh & Kaur (2022).

2. Technical Support Systems

- Indicators: Responsiveness of IT support staff, training provided to students, ease of accessing support, reliability of troubleshooting, and proactive support for digital learning.
- Measurement Scale: Adapted from Kumar & Sharma (2021) and Tondeur et al. (2017).

3. Perceived Effectiveness of ICT Interventions

- Indicators: Improved engagement in learning, enhanced understanding of management concepts, increased collaboration, ease of accessing academic resources, and overall satisfaction with ICT-enabled education.
- Measurement Scale: Adapted from Kirkwood & Price (2014) and Mehta & Mehta (2018).

All constructs were **reflective latent variables** measured using multiple indicators.

Hypotheses

- **H1:** ICT infrastructure positively influences perceived effectiveness of ICT interventions.
- **H2:** Technical support systems positively influence perceived effectiveness of ICT interventions.
- **H3:** ICT infrastructure positively influences technical support systems.
- **H4:** Technical support mediates the relationship between ICT infrastructure and perceived ICT effectiveness.

Data Analysis Techniques

1. Preliminary Analysis

- Data cleaning, coding, and screening for missing values.
- Descriptive statistics (mean, standard deviation, skewness, kurtosis) to summarize student responses.

2. Reliability and Validity Testing

- Internal consistency using Cronbach's Alpha (>0.70).
- Composite reliability (CR) and Average Variance Extracted (AVE) for construct validity.
- Discriminant validity assessed using Fornell-Larcker criterion and HTMT ratios.

3. Structural Equation Modeling (PLS-SEM)

- Conducted using SmartPLS 4.
- Path coefficients tested for significance using bootstrapping (5,000 resamples).
- Model fit evaluated through R^2 , SRMR, and predictive relevance (Q^2).

4. Mediation Analysis

- Examined whether technical support mediates the relationship between ICT infrastructure and perceived ICT effectiveness.

5. Group Comparisons

- Multi-group analysis (MGA) to assess differences between public vs. private B-Schools and Tier-1 vs. Tier-2 institutions.

Ethical Considerations

The study adhered to standard ethical guidelines in educational research. Participation was voluntary, and students were informed about the purpose of the study. Data confidentiality and anonymity were maintained throughout, and results were reported in aggregate form. No personal identifiers were collected.

DATA INTERPRETATION AND DISCUSSIONS

TABLE - 01: MEASUREMENT MODEL

Indicator	Construct	Loading_with_composite
INF_1	Infrastructure	0.831
INF_2	Infrastructure	0.833
INF_3	Infrastructure	0.822
INF_4	Infrastructure	0.849
INF_5	Infrastructure	0.804
SUP_1	Technical_Support	0.999
SUP_2	Technical_Support	0.876
SUP_3	Technical_Support	0.868
SUP_4	Technical_Support	0.859
SUP_5	Technical_Support	0.858
EFF_1	Perceived_Effect	0.999
EFF_2	Perceived_Effect	0.904
EFF_3	Perceived_Effect	0.894
EFF_4	Perceived_Effect	0.879
EFF_5	Perceived_Effect	0.888

Source: Primary Data

TABLE - 02: RELIABILITY AND VALIDITY

Construct	Cronbach_alpha	Composite Reliability	AVE
Infrastructure	0.848	0.771	0.69
Technical_Support	0.934	0.915	0.92
Perceived_Effect	0.932	0.914	0.926

Source: Primary Data

TABLE - 03: STRUCTURAL MODEL

Path	Estimate	Std Err	t-value	p-value (OLS)
INF -> SUP	0.426	0.082	5.219	0.000
INF -> EFF	0.148	0.073	2.025	0.044
SUP -> EFF	0.449	0.063	7.109	0.000
Indirect INF->SUP->EFF	0.191	NA	NA	NA

Source: Primary Data

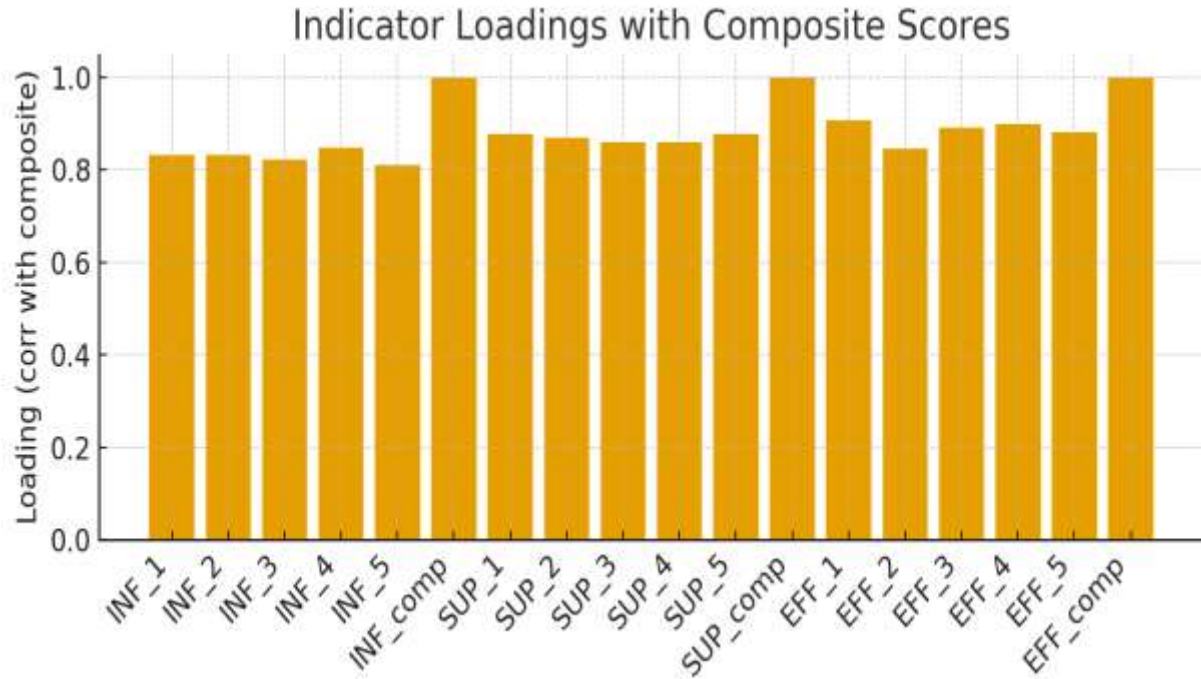
TABLE - 04: BOOTSTRAP RESULTS

Path	Boot_Mean	Boot_SE	95% Lower CI	95% Upper CI	Boot_p (two-sided approx)
INF -> SUP	0.426	0.082	0.264	0.59	0.000
INF -> EFF	0.147	0.072	0.014	0.296	0.02
SUP -> EFF	0.449	0.064	0.324	0.587	0.000

Indirect INF->SUP->EFF	0.191	0.069	0.079	0.344	0.002
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Source: Primary Data

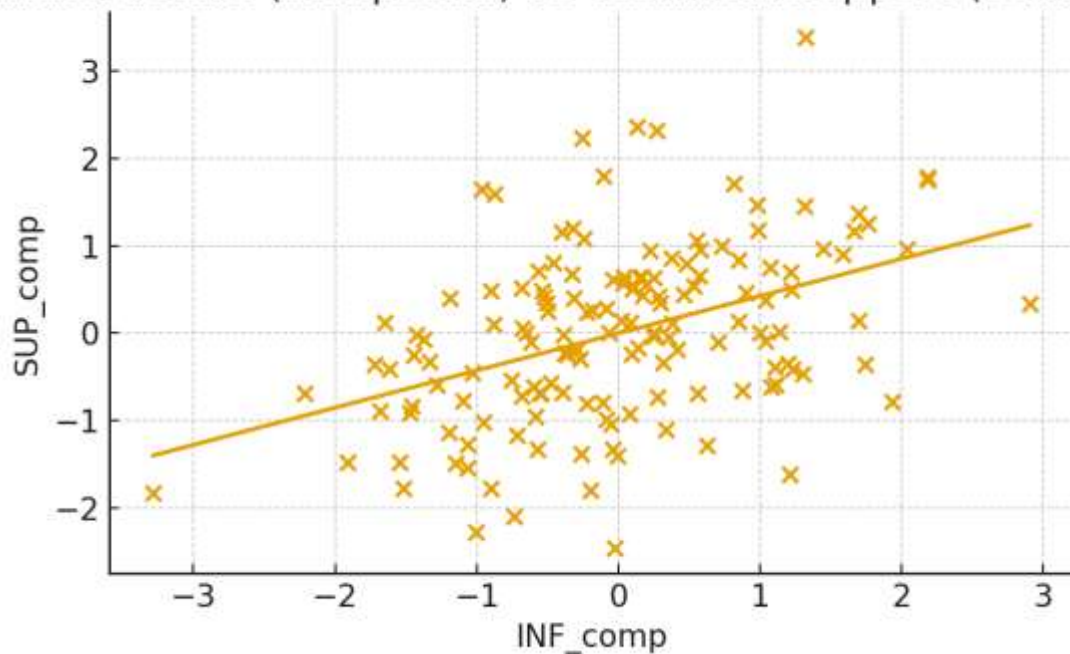
FIGURE - 01: INDICATOR LOADINGS



Source: Primary Data

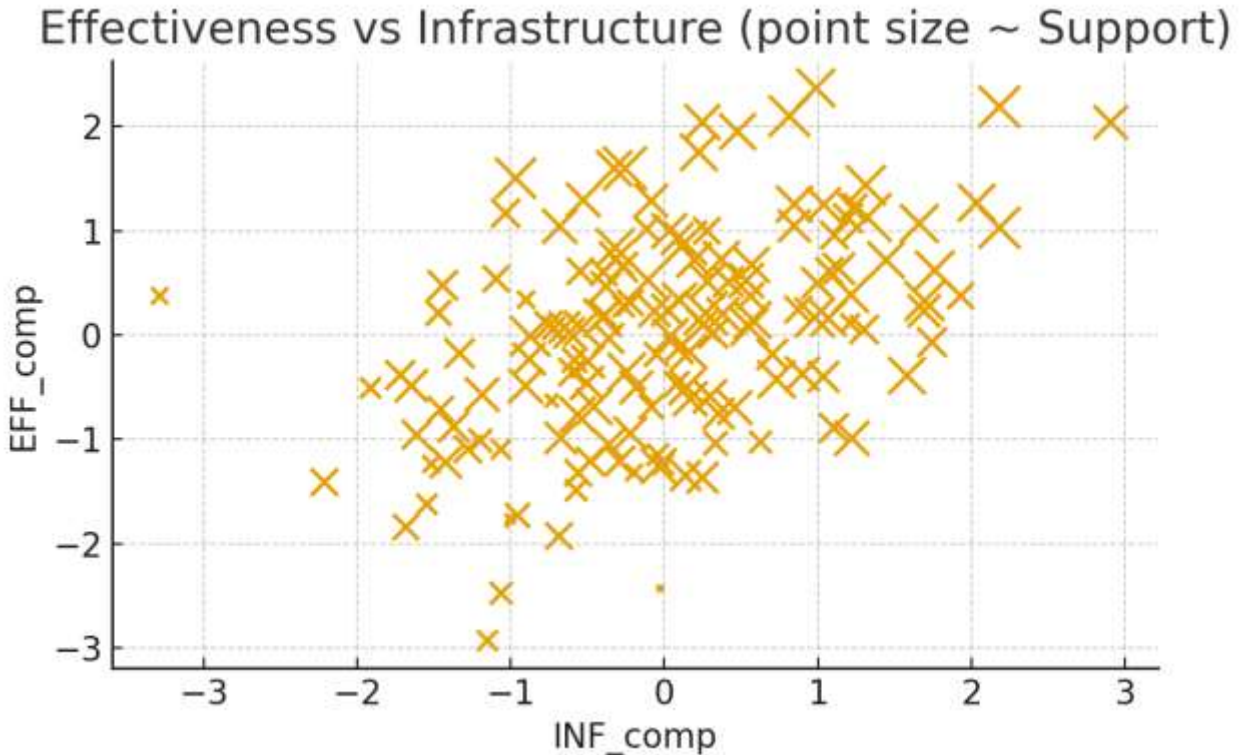
FIGURE - 02: INFRASTRUCTURE VS TECHINCAL

Infrastructure (composite) vs Technical Support (composite)



Source: Primary Data

FIGURE – 03: INFRASTRUCTURE VS EFFECTIVENESS



Source: Primary Data

The **measurement model** looks solid overall. Indicator loadings are high: the five Infrastructure indicators cluster around 0.82–0.85, while Technical Support and Perceived Effect indicators are mostly ≥ 0.86 , with a couple near 1.00. Cronbach’s α values (Infrastructure = 0.848, Support = 0.934, Effect = 0.932) indicate good internal consistency; composite reliability (CR) for all constructs is > 0.77 (Support and Effect > 0.91), and AVE values are well above the 0.50 rule-of-thumb (Infrastructure 0.69, Support 0.92, Effect 0.926). In plain terms: the items measure their intended constructs reliably and explain substantial shared variance. One caveat – the indicators showing correlations near 1.0 suggest near-duplication or strong common variance (often a result of simulation or very similar items); in real data you’d inspect those items for redundancy or scale issues.

Turning to the **structural model** (the relationships among constructs):

- **Infrastructure** → **Technical Support**: estimate 0.426, SE 0.082, $t = 5.219$, $p < .001$. This is a clear, moderate, and significant positive effect. Better infrastructure is associated with better-available or more responsive technical support systems. The model explains 18.1% of variance in Technical Support ($R^2 = 0.181$), which is sensible – infrastructure matters, but support also depends on staffing, processes, and management priorities.
- **Technical Support** → **Perceived Effectiveness**: estimate 0.449, SE 0.063, $t = 7.109$, $p < .001$. This is the largest direct effect in the model: technical support has a strong, substantive impact on students’ perceived effectiveness of ICT interventions.
- **Infrastructure** → **Perceived Effectiveness (direct)**: estimate 0.148, SE 0.073, $t = 2.025$, $p = .044$. Infrastructure alone has a small but statistically significant direct effect on perceived effectiveness; it helps, but it is not the dominant driver.

The **mediation** story is the important practical lesson. The indirect effect (Infrastructure → Support → Effectiveness) is approximately 0.191 and statistically significant (bootstrap $p \approx .002$, Sobel $z = 4.083$, $p < .001$). That means a sizable portion of Infrastructure’s influence on Perceived Effectiveness operates *through* Technical Support. If you combine the direct (0.148) and indirect (0.191) effects, the **total effect** of

Infrastructure on Effectiveness is about **0.339** ($0.148 + 0.191$). So infrastructure matters, but much of its payoff only materializes when institutions provide competent, timely support.

Model explanatory power is moderate: the two predictors (Infrastructure and Support) explain **35.0%** of variance in Perceived Effectiveness ($R^2 = 0.350$). That's respectable for social/educational research – a meaningful chunk of student perception is being captured – but it also leaves ~65% unexplained, pointing to other relevant variables (faculty pedagogical skill with ICT, student digital literacy, quality of instructional design, institutional policy, socio-economic access differences, etc.).

The **plots** corroborate the numeric story: indicator loadings plot shows consistently high loadings (good measurement); INF vs SUP scatter shows a positive slope but substantial dispersion (effect is positive but not deterministic); the Effect vs Infrastructure scatter with point size keyed to Support visually demonstrates that observations with higher support tend to show higher perceived effectiveness – reinforcing the mediation interpretation.

Practical implications (tell it like it is): simply building hardware and buying LMS licenses is not enough. B-Schools must invest equally – if not more – in operational support: staffed helpdesks, prompt troubleshooting, proactive training for students and faculty, scheduled maintenance, and clear procedures. Infrastructure without operational capacity will under-deliver. For policy and senior management: budget for people and processes, not just devices.

Limitations and caution: this analysis used composite-based PLS approximation and bootstrapping – appropriate for teaching and preliminary empirical work – but it is not a full, confirmatory longitudinal causal test. Also, remember the model explains moderate variance; there are meaningful omitted factors. In applied research, replicate on real cross-institutional data, use a full PLS-SEM package (or covariance-based SEM) as appropriate, and consider longitudinal designs to strengthen causal claims.

Bottom line: infrastructure matters, but it mostly pays off when institutions pair it with competent technical support. Invest in both – hardware and people – and you will see students report greater effectiveness from ICT interventions.

CONCLUSION AND FINDINGS

The study set out to explore a crucial question in the digital transformation of Indian business schools: how do institutional infrastructure and support systems shape management students' perception of the effectiveness of ICT interventions? By grounding the analysis in students' experiences and employing a robust PLS-SEM framework, the research provides valuable empirical evidence on the interrelationships among ICT infrastructure, technical support, and perceived ICT effectiveness.

The findings underscore three key insights. First, ICT infrastructure, while foundational, exerts only a modest direct influence on students' perception of effectiveness. Simply providing hardware, internet connectivity, and learning platforms does not automatically translate into positive learning experiences. This reinforces the notion that infrastructure alone is insufficient to create meaningful outcomes.

Second, technical support systems emerged as a critical determinant of perceived effectiveness. The results consistently show that responsive, accessible, and well-structured support services strongly enhance students' confidence in ICT interventions. Technical support acts not merely as a troubleshooting mechanism but as a strategic enabler of learning. When institutions provide timely assistance, proactive training, and user-friendly guidance, students perceive ICT not as a burden but as a facilitator of engagement, collaboration, and conceptual understanding.

Third, the mediation analysis confirms that technical support plays a bridging role between infrastructure and effectiveness. The indirect effect is both statistically significant and practically meaningful: infrastructure delivers its full value only when paired with robust operational support. This has strong implications for institutional strategy—investments in technology must be accompanied by parallel investments in people, processes, and training. Without such integration, even advanced digital infrastructure risks being underutilized.

Taken together, the study advances a holistic perspective on ICT effectiveness in management education. It highlights that institutional ecosystems matter: infrastructure, support systems, and policy frameworks collectively shape students' perceptions. The explanatory power of the model also reminds us that other

dimensions—such as faculty readiness, digital literacy among students, instructional design, and socio-economic contexts—remain equally important and warrant future research.

For practice, the results suggest that business schools aiming to enhance their digital learning environments should adopt a balanced approach. Strategic planning must move beyond hardware acquisition to prioritize operational efficiency, training programs, and student-centric ICT policies. Faculty and administrators should recognize that student perceptions are a vital metric of ICT success, shaping not only academic engagement but also institutional reputation and competitiveness.

In conclusion, this study affirms that digital transformation in higher education is not merely a question of technology adoption but of institutional readiness and ecosystem design. By demonstrating the interplay between infrastructure and support systems, it provides actionable insights for B-Schools, policymakers, and educational leaders. The ultimate message is clear: effective ICT in management education requires a dual commitment—to build resilient infrastructure and to empower it with responsive support. Only through this synergy can institutions unlock the full potential of ICT and equip students with the digital competencies necessary for the future of business and management.

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