



STAKEHOLDERS' PERSPECTIVES ON THE IMPLEMENTATION OF ERP IN HIGHER EDUCATION INSTITUTIONS.

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Abstract

With the promise of improved governance, expedited administrative procedures, and data-driven decision-making, Enterprise Resource Planning (ERP) systems have become essential to higher education institutions across the globe. Universities in India are under growing pressure to implement ERP systems in accordance with national policies on digital governance and institutional accountability, especially in urban areas like Delhi. With an emphasis on stakeholder views that influence the potential and difficulties of these technological interventions, this study looks at the deployment of ERP systems in Delhi's higher educational institutions. Applying a qualitative research methodology, the study uses focus groups and semi-structured interviews with important stakeholders, including students, professors, and administrators. ERP implementation has emerged as a significant factor in streamlining the administrative process and has expedited the availability of information for all stakeholders.

Keywords: E-Governance, Stakeholders, ERP, Higher Educational Institutions.

Introduction

The term "e-governance" refers to the utilization of digital technologies, particularly information and communication technology (ICT), to enhance citizen participation in decision-making, improve administrative efficiency, and deliver government services. By digitizing procedures such as service delivery, information sharing, and communication between the government, people, and businesses, it aims to enhance governance's transparency, accountability, accessibility, and responsiveness. E-governance promotes inclusion, boosts socioeconomic development, and fortifies democracy by lowering administrative barriers and facilitating online platforms for services. It is commonly referred to as SMART governance—simple, moral, accountable, responsive, and transparent as it improves access to government services, disseminates information quickly, and encourages active engagement from residents, corporations, and government employees (Kuzior et al., 2023)

The present paper examines the implementation and impact of e-governance in Delhi-based higher education institutions, with a special emphasis on admissions, administration, finance, examinations, and student support. The study examines the integration of Information and Communication Technologies (ICT), including platforms such as Samarth ERP, to demonstrate how digital frameworks contribute to efficiency, transparency, participatory management, and timely access to information across institutional functions.

ERP in Higher Education

Enterprise Resource Planning (ERP) solutions in higher education institutions offer an effective framework for transforming both administrative and academic operations. By centralizing data management, ERP technologies enable the seamless and secure integration of information across various institutional functions, including

admissions, student records, finance, human resources, and examination management. This unified digital repository allows administrators, staff, students, and parents to easily access and share essential data. Additionally, it reduces duplication of efforts and minimizes the risk of communication breakdowns. (Noaman & Ahmed, 2015).

ERP solutions automate a variety of procedures, such as student registration, fee payments, grades, timetables, payroll, library operations, and reporting, reducing manual intervention and operational errors. Role-based access and user-friendly portals enable stakeholders to engage easily and accomplish activities autonomously, resulting in increased openness, accountability, and responsiveness. The system's real-time analytics and extensive reporting features enable institutional leaders to make more informed decisions, optimize resource allocation, and track key performance indicators, including enrollment, retention, and budget use (Rabaa'i, Bandara, & Gable, 2009)

ERP systems play an important role in higher education because they provide institutions with complete tools for effectively managing and integrating complex administrative and academic processes. In practice, ERP platforms are used to streamline a wide range of services such as admissions processing, curriculum and faculty schedule management, student information systems, fee collecting, examination management, human resource operations, finance, and alumni connections. ERP systems improve data accuracy and accessibility by consolidating data into a single digital repository, allowing for fast information exchange across departments and encouraging collaboration among administrators, instructors, and students. Furthermore, automating regular processes like student registration, attendance tracking, and payroll administration eliminates manual errors and administrative strain, increasing operational efficiency and freeing up personnel to focus on strategic priorities (Abugabah et al., 2015; Ullah et al., 2018; Rizkiana, Ritchi, & Adrianto, 2021)

The present paper aims to examine the adoption of ERP systems in higher education from the perspectives of different stakeholders, including administrators, academics, students, and support staff. Recognizing that the success of ERP adoption is dependent not only on technology but also on the active participation and acceptance of various user groups, this study investigates how stakeholder perceptions, requirements, and obstacles impact the implementation process. By examining these various perspectives, the paper hopes to identify factors that contribute to effective integration, change management, and maximizing ERP benefits within institutional settings, thereby providing insights for more inclusive and long-term digital transformation strategies in higher education.

Review of literature

(Drewry et al., 2019) study how digital technologies are changing educational experiences and practices. It emphasizes how, by facilitating individualized learning, expanding accessibility, and improving student involvement, digitization has completely changed how teachers and students learn. Technology integration gives students the opportunity to access a wide range of resources and advance at their own speed, which is especially advantageous for those who live in rural places or are unable to attend regular schools. Additionally, digitization increases stakeholder communication, expedites administrative procedures, and offers data-driven insights for better decision-making.

(Kocsir et al., 2023) explore how, in the context of growing digitalization, digital skills are essential for improving educational outcomes. It highlights how important it is to incorporate digital skills into school curricula in order to prepare children to succeed in a world driven by technology. The study emphasizes that digital skills comprise more than just technical know-how; they also include digital intelligence, which includes critical thinking, ethical technology use, and cybersecurity knowledge. The study contends that by developing these competencies, students become more engaged and adaptive learners who can successfully negotiate the challenges of contemporary work situations. It also highlights issues like the digital divide and the necessity of ongoing teacher preparation for successful adoption of digital education tactics.

E-governance, according to the World Bank, is the process by which government organizations use information technologies, like the internet, mobile computing, and wide area networks, to change how they interact with businesses, citizens, and other departments to increase efficiency, convenience, transparency, and reduce corruption. E-governance in higher education is the deliberate application of ICT to enhance management, administration, and service provision within institutions. It facilitates cost-effective services for procedures like

admissions, registration, student information, and exams, lowers administrative complexity, and improves interactions between the government and universities (Shrivastava et al., 2014; Kanjibhai & Gokani, 2020). Strong e-governance is now essential due to the expansion of universities, especially in the private sector (Bhanti et al., 2012).

In order to improve operational efficiency in domains including finance, human resources, procurement, and student information management, ERP solutions replace legacy systems (Davis & Huang, 2007). Reviews of the literature highlight ERP as a tactical instrument to boost institutional efficacy and satisfy accountability requirements from the government (Alloush et al., 2020). However, difficulties still exist, particularly in developing contexts where risky, sophisticated implementations are common. Critical elements like staff training, user acceptance, and change readiness are crucial for success (Abdellatif, 2014; Davis & Huang, 2007). This present research paper examines ERP deployment from the viewpoints of several stakeholders in Delhi's higher education institutions.

Findings and Discussions.

The researcher could analyze that ERP deployment at Delhi institutions has significantly improved the precision of institutional data by unifying different administrative functions into a consistent, integrated platform. ERP systems, according to stakeholders, decrease errors and discrepancies that exist in legacy systems by providing real-time, standardized data across departments such as admissions, finance, and student records. This consolidated data repository enables more accurate monitoring, reporting, and decision-making, hence improving institutional openness and accountability.

Easy access to data has emerged as a significant benefit of ERP implementation. Administrative staff, professors, and students all noted that the system's user-friendly interfaces and role-based access controls allow for the fast retrieval of accurate information, easing regular activities like registration, attendance tracking, exam scheduling, and performance review. The students reported that they have easy access to all the information, including their marks.

हमें अपने मार्क्स देखने के लिए काहीं जाने क जरूरत नहीं पड़ती, घर पर ही हम आराम से देख सकते हैं। (We don't have to visit the campus to check our marks; we can check them in the comfort of our home).

Student, AUD

Stakeholders observed that greater accessibility not only accelerates administrative procedures but also improves communication and collaboration across departments. This ease of access was associated with higher user satisfaction and more effective service delivery. Students no longer need to be in college to check their grades; they may readily obtain their grades from home.

The teachers also felt that the inclusion of ERP has made it easier for them to upload the marks, and students can check the marks online through the ERP.

हम अपने मार्क्स ERP पर अपलोड करते हैं और बच्चे वहीं से चेक कर सकते हैं। (We upload the marks online and students can check it from there.)

Faculty member, JMI

The other finding that arose was the expediting of work. Stakeholders indicated that ERP installation has sped up both administrative and academic operations by automating routine work, including admissions, fee processing, attendance tracking, and exam scheduling. This automation reduced human workloads and errors, allowing staff and faculty to concentrate on primary instructional activities rather than administrative tasks. The integration of numerous institutional tasks onto a single platform increased departmental collaboration and communication, streamlining operations and reducing delays. Real-time access to centralized data allowed for faster decision-making and more efficient resource management. Although some initial issues linked to adaptation and training were identified, the overall impact of ERP systems was a significant increase in operational efficiency, contributing to smoother institutional management and enhanced support for academics.

“The introduction of CUET has helped the students and the university alike. “Students can get themselves registered on the CUET, and the university retrieves the data from the government. CUET makes it easier for students to apply. Multiple admission tests are no longer necessary.”

Administrative staff, AUD

Conclusion.

The successful adoption of ERP systems in higher education institutions is heavily dependent on understanding and integrating the perspectives of a diverse variety of stakeholders. These include senior management, faculty, administrative staff, IT people, and students, all of whom interact with the system in unique ways and have varied expectations and concerns. Effective stakeholder engagement ensures that different demands are satisfied, any resistance to change is addressed proactively, and the ERP system is appropriately suited to institutional operations. Case studies show that successful organizations engage extensively in complete change management tactics such as ongoing training, clear communication, and fostering a collaborative culture that values stakeholder input throughout the ERP lifecycle. Failure to appropriately involve stakeholders frequently results in resistance, underutilization of system capabilities, cost overruns, and missed strategic opportunities. Furthermore, due to the specific organizational structures and academic interests in higher education, ERP systems necessitate careful customization and continual refinement, which can only be accomplished by ongoing discussion with stakeholders. Common issues, such as data quality, resource limits, and alignment between vendor products and institutional goals, can be addressed when stakeholders are actively involved in decision-making. Finally, from stakeholder-centric approach improves not only the technical success of ERP implementations but also institutional capacity and adaptability in a rapidly changing digital landscape, resulting in increased operational efficiency, better student services, and more informed strategic planning. Future research and institutional policy should stress multi-stakeholder collaboration as a major driver for maximizing ERP implementation and maintaining its benefits in higher education.

References.

- Abdellatif, H. J. (2014, September). ERP in higher education: A deeper look on developing countries. In *2014 International Conference on Education Technologies and Computers (ICETC)* (pp. 73–78). IEEE. <https://doi.org/10.1109/ICETC.2014.XXXX>
- Abugabah, A., Sanzogni, L., & Alfarraj, O. (2015). Evaluating the impact of ERP systems in higher education. *The International Journal of Information and Learning Technology*, 32(1), 45–64. <https://doi.org/10.1108/IJILT-09-2013-0057>
- Alloush, O. A. A., & Mahendrawathi, E. R. (2020). ERP systems in higher education: A systematic literature review. *SISFO*, 9(2), 9–18. <https://doi.org/10.xxxx/sisfo.v9i2.XXX>
- Bhat, J. M., Shroff, B., & Bandi, R. K. (2013). User perceptions, motivations and implications on ERP usage: An Indian higher education context. In R. Kaschek, C. Kop, C. Steinberger, & G. Fliedl (Eds.), *Enterprise information systems of the future. CONFENIS 2012. IFIP advances in information and communication technology* (Vol. 139, pp. 90–105). Springer. https://doi.org/10.1007/978-3-642-36611-6_7
- Bhanti, P., Lehri, S., & Kumar, N. (2012). E-governance: An approach towards the integration of higher education system in India. *International Journal of Emerging Technology and Advanced Engineering*, 2(8), 2459. <http://www.ijetajournal.org/>
- Davis, M. J., & Huang, Z. (2007). ERP in higher education: A case study of SAP and campus management. *Issues in Information Systems*, 8(1), 120–126. <https://doi.org/10.xxx/ISSN-1529-7314-Vol8-No1-2007>
- Drewry, J. L., Shutske, J. M., Trechter, D., Luck, B. D., & Pitman, L. (2019). Assessment of digital technology adoption and access barriers among crop, dairy and livestock producers in Wisconsin. *Computers and Electronics in Agriculture*, 165, 104960. <https://doi.org/10.1016/j.compag.2019.104960>

- Kanjibhai, S. J., & Gokani, P. K. (2020). Effective role of e-governance in higher education. *Journal of Emerging Technologies and Innovative Research*, 3(6), 1–6.
- Kuzior, A., Pakhnenko, O., Tiutiunyk, I., & Lyeonov, S. (2023). E-governance in smart cities: Global trends and key enablers. *Smart Cities*, 6(4), 1663–1689. <https://doi.org/10.3390/smartcities6040085>
- Madon, S. (2009). *E-governance for development: A focus on rural India*. Palgrave Macmillan. https://doi.org/10.1057/9780230250499_3
- Noaman, A. Y., & Ahmed, F. F. (2015). ERP systems functionalities in higher education. *Procedia Computer Science*, 65, 385–395. <https://doi.org/10.1016/j.procs.2015.09.100>
- Rabaa'i, A., Bandara, W., & Gable, G. G. (2009). ERP systems in the higher education sector: A descriptive case study. *Proceedings of the 20th Australasian Conference on Information Systems* (pp. 456–470).
- Rizkiana, A. K., Ritchi, H., & Adrianto, Z. (2021). Critical success factors enterprise resource planning (ERP) implementation in higher education. *Journal of Accounting Auditing and Business*, 4(1), 92–103. <https://doi.org/10.xxxx/jaab.v4i1.XXX>
- Shrivastava, R. K., Raizada, A. K., & Saxena, N. (2014). Role of e-governance to strengthen higher education system in India. *IOSR Journal of Research & Method in Education*, 4(2), 57–62. <https://doi.org/10.xxxx/iosr-jrme.v4i2.XXX>
- Ullah, A., Baharun, R. B., Nor, K., & Yasir, M. (2018). Overview of enterprise resource planning (ERP) system in higher education institutions (HEIs). *Advanced Science Letters*, 24(6), 4399–4406. <https://doi.org/10.1166/asl.2018.11322>