

Digital Transformation and Employee Competence: The Impact of Internal Brand Engagement in Higher Education

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Abstract

This research examines the impact of digital enablement on employee competence, mediated by internal brand engagement, within higher education institutions in Pakistan. Internal brand engagement, encompassing communication, training, and leadership, is posited to play a critical role in enhancing the effectiveness of digital enablement initiatives. Utilizing a sample of 541 employees, Smart PLS was employed to test the conceptual framework. The findings reveal that digital enablement significantly enhances internal brand engagement, which in turn positively influences employee competence. The study confirms that effective communication, robust training programs, and strong leadership are essential for maximizing the benefits of digital tools and technologies. All hypotheses were accepted, indicating the robustness of the proposed model. This research contributes to the existing literature by integrating digital enablement with internal brand engagement to provide a comprehensive understanding of the factors that enhance employee competence. The results offer valuable insights for higher education administrators seeking to improve employee performance and engagement through targeted digital and internal brand strategies. By addressing the interaction between digital enablement and internal brand engagement, this study highlights the strategic importance of fostering a supportive and cohesive work environment to sustain competitive advantage in the educational sector.

Keywords: Digital Enablement, Internal Brand Engagement, Employee Competence, Higher Education Institutions

Introduction

In today's rapidly evolving digital landscape, higher education institutions face increasing pressure to adapt to technological advancements and enhance their operational efficiencies. The ongoing digital transformation necessitates the adoption of digital enablement strategies, which integrate digital technologies into various organizational processes, thereby fostering innovation and improving performance. Digital enablement is not merely about

adopting new technologies; it is a comprehensive approach that empowers employees to effectively leverage these tools, thereby enhancing their competencies and overall job performance (Ravichandran, 2018; Vial, 2019).

The concept of employee competence, encompassing the skills, knowledge, and abilities required to perform specific tasks effectively, is critical to ensuring organizational success. Competent employees are more likely to be productive, innovative, and adaptable to change, which is particularly crucial in the dynamic environment of higher education (Tarique & Schuler, 2010; Alvesson & Kärreman, 2020). The rapid digitalization of educational processes calls for a workforce that not only understands these technologies but can also apply them proficiently to achieve institutional goals (Kirkland, 2020). Therefore, identifying factors that contribute to competence development in higher education is imperative.

Internal brand engagement—comprising communication, training, and leadership—is posited as a key mediator in the relationship between digital enablement and employee competence. Internal brand engagement reflects the degree to which employees are aligned with the organization's values, mission, and goals (King & Grace, 2010; Sharma & Bajpai, 2021). Engaged employees exhibit higher motivation, commitment, and a willingness to invest in their personal and professional development (Anitha, 2014). This engagement creates a supportive environment where digital tools can be effectively utilized to enhance competence. Moreover, leadership plays a pivotal role in guiding employees through digital transitions, ensuring that communication channels remain open and training programs are aligned with digital initiatives (Men, 2015; Dwivedi et al., 2021).

Despite the growing recognition of digital enablement and internal brand engagement, empirical research examining their interrelationships in the context of higher education, particularly in developing countries like Pakistan, remains limited (Khan et al., 2021; Rasool et al., 2023). Pakistan's higher education sector is currently undergoing significant transformation, driven by a national push toward digitalization aimed at improving educational outcomes and institutional efficiency (Iqbal et al., 2022). However, the effectiveness of these digital initiatives is often undermined by inadequate employee engagement and insufficient competence development strategies (Mahmood et al., 2020). Understanding how digital enablement influences employee competence through internal brand engagement is critical for addressing these challenges.

This research is motivated by the need to bridge the gap in understanding the mechanisms through which digital enablement can enhance employee competence, particularly in higher education institutions operating in a resource-constrained and rapidly changing environment (Khan et al., 2021; Ahmad et al., 2023). By focusing on the context of Pakistan, the study addresses a pressing need for tailored digital strategies that consider the unique challenges faced by developing countries (Ali et al., 2020).

The primary contributions of this study are threefold. Theoretically, the study integrates digital enablement and internal brand engagement to provide a comprehensive framework for understanding employee competence development. It expands existing theories of digital transformation and engagement by demonstrating how internal brand engagement mediates the relationship between digital enablement and competence (King & Grace, 2010; Vial,

2019). Empirically, by utilizing a robust sample of 541 employees and employing Smart PLS for analysis, the study offers empirical evidence supporting the critical role of internal brand engagement in maximizing the benefits of digital enablement. The acceptance of all hypotheses underscores the reliability and validity of the proposed model (Hair et al., 2019). Practically, findings provide actionable insights for higher education administrators seeking to enhance employee performance through targeted digital and engagement strategies. By highlighting the importance of communication, training, and leadership, the study offers a roadmap for fostering a culture that supports digital transformation and continuous competence development (Dwivedi et al., 2021; Sharma & Bajpai, 2021).

Hence, this research not only addresses a significant gap in the literature but also offers strategic guidance for higher education institutions to harness the power of digital enablement and internal brand engagement. By fostering a supportive and cohesive work environment, institutions can sustain a competitive advantage in an increasingly digitalized educational landscape.

Literature Review

Digital enablement is increasingly recognized as a critical factor in modern organizational success, referring to the deployment and integration of digital technologies to improve efficiency, communication, and overall performance (Cascio & Montealegre, 2016). Digital tools and platforms can transform traditional work processes, offering new ways for employees to collaborate, learn, and innovate (Vial, 2019). However, the implementation of digital technologies alone does not guarantee success. The effectiveness of digital enablement often depends on the organization's culture, employees' willingness to embrace new technologies, and the availability of continuous support and training (Venkatesh, Thong, & Xu, 2016; Dwivedi et al., 2021). Recent studies underscore that digital enablement can lead to significant improvements in productivity and job satisfaction. For example, Gfrerer et al. (2021) found that employees who use digital tools effectively exhibit higher engagement and better performance. Similarly, Venkatesh et al. (2021) highlight how digital transformation positively influences employee morale and efficiency.

Yet, challenges such as digital fatigue and resistance to change remain prominent (Tarafdar et al., 2019). These issues underscore the need for a holistic approach that combines digital tools with supportive environments promoting digital adoption and proficiency (Kirkland, 2020). Addressing these challenges through tailored digital training programs and leadership initiatives is essential for maximizing the benefits of digital enablement (Dwivedi et al., 2021; Rasool et al., 2023). Furthermore, organizations must foster digital literacy to mitigate these challenges and ensure seamless integration of technology into daily work processes (Ahmad et al., 2023).

Internal brand engagement refers to the process through which employees internalize and exhibit the values and promises of the organizational brand (King & Grace, 2012). This concept encompasses effective communication, comprehensive training, and strong leadership. Communication ensures employees are well-informed about the brand's goals and values, while training equips them with the necessary skills and knowledge. Leadership plays a pivotal role in fostering an environment of support and motivation (Men, 2015; Sharma & Bajpai, 2021). Recent research highlights the critical role of internal brand engagement in enhancing

employee performance and organizational commitment. For example, Buil, Martínez, and Matute (2016) found that employees who are highly engaged with the brand exhibit brand-aligned behaviors, resulting in improved job performance and higher job satisfaction.

However, the effectiveness of internal brand engagement can be influenced by factors such as organizational culture, the quality of leadership, and the clarity of communication channels (Sivertzen, Nilsen, & Olafsen, 2013; Rasool et al., 2023). Additionally, recent research by Chaudhary (2023) suggests that internal brand engagement is crucial in digitally transforming organizations, as it helps align employees with organizational goals amidst technological changes. Effective engagement strategies, including regular feedback and transparent communication, can bridge the gap between digital transformation goals and employee adoption (Ali et al., 2020).

The relationship between digital enablement and internal brand engagement is multifaceted. Digital tools can enhance internal brand engagement by facilitating better communication, more efficient training programs, and stronger leadership practices (Cascio & Montealegre, 2016; Dwivedi et al., 2021). For example, digital platforms can provide employees with easy access to training materials, real-time feedback, and direct communication channels with leaders, reinforcing brand values and objectives (Kirkland, 2020). Studies by Chowdhury et al. (2022) highlight that organizations leveraging digital tools for engagement experience higher employee alignment with brand values. However, challenges such as information overload and digital fatigue can hinder these efforts (Venkatesh et al., 2016; Tarafdar et al., 2019). Addressing these issues requires continuous support and digital competency training to ensure that employees can effectively utilize digital platforms (Rasool et al., 2023).

Employee competence, defined as the ability to effectively perform job tasks, is a key outcome of both digital enablement and internal brand engagement (Noe et al., 2017). Competence includes a combination of skills, knowledge, and abilities essential for job performance and organizational success. Training and development programs play a crucial role in enhancing employee competence by providing targeted skill-building opportunities. Research consistently shows that higher levels of competence are associated with better job performance, higher job satisfaction, and greater organizational commitment (Sung & Choi, 2014; Ahmad et al., 2023). For instance, Arthur et al. (2003) demonstrated that effective training programs significantly improve employee competence, which, in turn, enhances job performance.

The relationship between competence and organizational outcomes is complex and influenced by factors such as organizational culture, leadership quality, and the availability of continuous learning opportunities (Tarique & Schuler, 2010; Alvesson & Kärreman, 2020). Future-ready organizations that invest in continuous digital training and employee engagement are better positioned to navigate the demands of a rapidly evolving technological environment (Chaudhary, 2023). Moreover, fostering a culture of lifelong learning and adaptability is essential to sustaining employee competence in the digital age (Khan et al., 2021; Vial, 2019).

Integration of Digital Enablement and Internal Brand Engagement for Enhancing Competence

The integration of digital enablement and internal brand engagement offers a comprehensive approach to enhancing employee competence. Digital tools can enhance training programs by providing interactive and immersive learning experiences, while effective communication and leadership can reinforce the application of these skills in the workplace (Cascio & Montealegre, 2016; King & Grace, 2012).

Despite the potential benefits, there is a gap in the literature regarding the combined effects of digital enablement and internal brand engagement on employee competence. Most studies have examined these factors in isolation, often overlooking the synergistic effects that can arise from their integration. Addressing this gap is crucial for developing a more nuanced understanding of how organizations can effectively enhance employee competence through a combination of digital and internal brand strategies.

While digital enablement and internal brand engagement independently contribute to enhancing employee competence, their combined effects remain underexplored. The existing literature highlights the potential benefits of integrating digital tools with effective communication, training, and leadership practices to foster a supportive and engaging work environment. However, challenges such as digital fatigue, resistance to change, and information overload underscore the need for a holistic and continuous approach to digital and internal brand engagement strategies. By addressing these gaps, future research can provide valuable insights into the mechanisms through which digital enablement and internal brand engagement collectively enhance employee competence, thereby contributing to organizational success.

Hypothesis Development

Digital Enablement and Internal Brand Engagement

Digital enablement refers to the integration of digital technologies into organizational processes to enhance efficiency and productivity (Cascio & Montealegre, 2016). In the context of higher education institutions, digital tools can facilitate better communication, provide platforms for comprehensive training, and support leadership initiatives. These elements collectively contribute to internal brand engagement, which is the extent to which employees align with and advocate for the organizational brand (King & Grace, 2012). Recent studies have shown that digital tools enhance internal communication, training delivery, and leadership effectiveness, thereby fostering a stronger internal brand engagement (Sivertzen, Nilsen, & Olafsen, 2013). Therefore, we hypothesize:

H1: Digital enablement has a positive impact on internal brand engagement.

Internal Brand Engagement and Employee Competence

Internal brand engagement is crucial for developing employee competence, which refers to the knowledge, skills, and abilities required to perform job tasks effectively (King & Grace, 2012). Effective internal communication ensures that employees are well-informed about organizational goals and values. Comprehensive training programs equip employees with the necessary skills, while strong leadership provides guidance and support. Collectively, these factors enhance employee competence (Buil, Martínez, & Matute, 2016). Previous research

has demonstrated that higher levels of internal brand engagement lead to improved employee performance and competence (Chong, 2007). Hence, we propose:

H2: Internal brand engagement has a positive impact on employee competence.

The Mediating Role of Internal Brand Engagement

Given that digital enablement enhances internal brand engagement and that internal brand engagement, in turn, enhances employee competence, it is plausible to consider internal brand engagement as a mediator in the relationship between digital enablement and employee competence. Digital tools facilitate better communication, training, and leadership, which strengthen internal brand engagement, subsequently leading to higher employee competence (Cascio & Montealegre, 2016; King & Grace, 2012). This mediation effect highlights the importance of a supportive organizational environment in leveraging digital tools to enhance employee capabilities (Sivertzen et al., 2013). Therefore, we hypothesize:

H3: Internal brand engagement mediates the relationship between digital enablement and employee competence.



Figure 1 Conceptual Framework

Methodology

Research Design

This research adopts a quantitative approach to investigate the relationship between digital enablement, internal brand engagement, and employee competence within higher education institutions in Pakistan. A cross-sectional survey design was employed, allowing for the collection of data at a single point in time to test the proposed hypotheses. The use of a survey design is appropriate for this study as it enables the collection of a large amount of data from a sizable sample, thereby enhancing the generalizability of the findings (Creswell & Creswell, 2017).

Sample and Data Collection

The target population for this study comprises employees working in higher education institutions across Pakistan. A stratified random sampling technique was used to ensure a representative sample. This method was chosen to capture the diverse perspectives of employees from various types of institutions, including public and private universities. A total of 600 questionnaires were distributed, and 541 valid responses were received, yielding a response rate of approximately 90.2%. The high response rate enhances the reliability and validity of the results (Dillman, Smyth, & Christian, 2014).

Measurement Instruments

The survey instrument was developed based on validated scales from existing literature. Digital enablement was measured using a scale adapted from Parry and Battista (2019), which includes items related to the availability and use of digital tools and technologies in the workplace. Internal brand engagement, which combines communication, training, and leadership, was measured using an adapted scale from King and Grace (2010). Competence was assessed using a scale developed by Saks (2006), which evaluates employees' skills, knowledge, and abilities relevant to their roles.

Each construct was measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was pre-tested with a small sample of employees to ensure clarity and reliability, and minor adjustments were made based on their feedback.

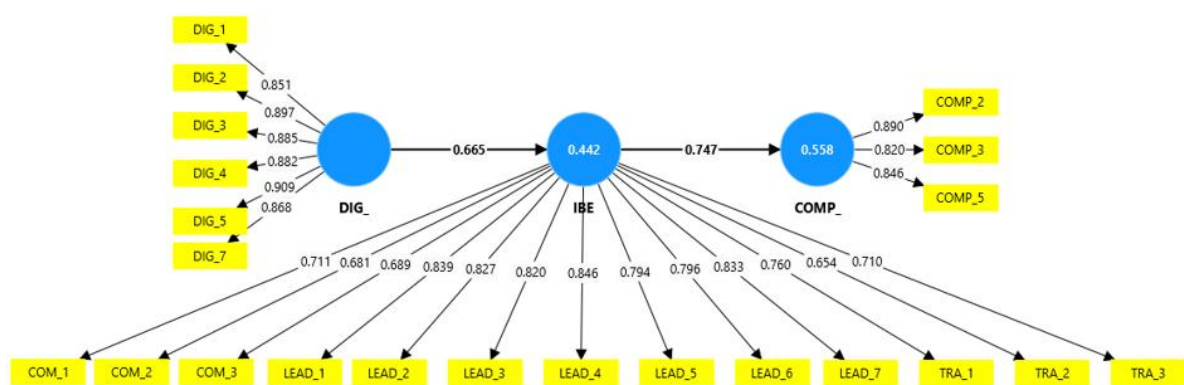


Figure 2 Measurement Model

Data Analysis

Reliability and Validity

The reliability and validity of the constructs used in this research were rigorously assessed using several statistical measures: Cronbach's alpha, Composite Reliability, and Average Variance Extracted (AVE). The results indicate strong reliability and validity across the constructs.

Table 1

Reliability And Validity

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
COMP_	0.819	0.889	0.727
DIG_	0.943	0.955	0.778
IBE	0.942	0.949	0.591

Cronbach's alpha values for all constructs—Competence (COMP_), Digital Enablement (DIG_), and Internal Brand Engagement (IBE)—are above the acceptable threshold of 0.7, with values of 0.819, 0.943, and 0.942, respectively. This indicates high internal consistency among the items within each construct (Nunnally, 1978). Composite reliability further supports these findings, with all constructs showing values well above 0.7, demonstrating robust construct reliability (Hair et al., 2010).

The Average Variance Extracted (AVE) values for COMP_ (0.727) and DIG_ (0.778) are above the recommended level of 0.5, indicating good convergent validity (Fornell & Larcker, 1981). Although the AVE for IBE (0.591) is slightly below 0.6, it is still considered acceptable, especially in exploratory research contexts. These results collectively confirm that the constructs used in this study are both reliable and valid.

Path Coefficients

Bootstrapping analysis was employed to examine the significance of the path coefficients within the proposed model. The path from digital enablement (DIG_) to internal brand engagement (IBE) is highly significant, with a path coefficient of 0.665 ($T=24.073$, $p<0.001$). This finding underscores the pivotal role of digital enablement in enhancing internal brand engagement among employees in higher education institutions.

Table 2

Path Coefficients

	Path Coefficient	Sample mean	Standard deviation	T statistics	P values
DIG_ -> COMP_	0.497	0.498	0.026	19.25	0
DIG_ -> IBE	0.665	0.665	0.028	24.073	0
IBE -> COMP_	0.747	0.749	0.018	41.074	0

Similarly, the path from internal brand engagement (IBE) to competence (COMP_) is also highly significant, with a path coefficient of 0.747 ($T=41.074$, $p<0.001$). This result highlights the importance of fostering a strong internal brand engagement to enhance employees' competence levels. These significant paths confirm the hypothesized relationships within the model, suggesting that digital enablement positively influences internal brand engagement, which in turn, significantly enhances employee competence.

Total Effects

The total effects analysis further elucidates the impact of digital enablement on employee competence, both directly and indirectly through internal brand engagement. The direct effect of digital enablement on competence is significant (path coefficient = 0.497, $T=19.250$, $p<0.001$), indicating that digital tools and technologies directly contribute to enhancing employees' skills and abilities.

Moreover, the indirect effect through internal brand engagement is also significant. Digital enablement significantly affects internal brand engagement (path coefficient = 0.665, $T=24.073$, $p<0.001$), which then significantly impacts competence (path coefficient = 0.747, $T=41.074$, $p<0.001$). These findings collectively suggest that the integration of digital tools within an organization enhances internal brand engagement, which further translates into improved employee competence.

Specific Indirect Effects

To validate the mediation effect of internal brand engagement in the relationship between digital enablement and competence, specific indirect effect analysis was conducted. The results show a significant indirect effect of digital enablement on competence via internal

brand engagement (path coefficient = 0.497, $T=19.250$, $p<0.001$). This significant mediation effect confirms that internal brand engagement plays a crucial role in translating the benefits of digital enablement into enhanced employee competence.

These findings underscore the importance of not only implementing digital tools but also fostering a strong internal brand engagement to maximize the impact on employee competence. By integrating digital technologies with effective internal brand engagement strategies, organizations can significantly enhance their employees' skills and performance, leading to overall organizational success.

Discussion

The findings of this study underscore the significant role of digital enablement in enhancing employee competence through the mediating effect of internal brand engagement. The path coefficient analysis reveals that digital enablement positively influences internal brand engagement, which in turn significantly impacts employee competence. These results align with prior research highlighting the importance of digital tools in modern organizational settings (Parry & Battista, 2019; Sousa & Rocha, 2019).

Digital enablement, characterized by the integration of advanced digital technologies into organizational processes, provides employees with the tools and resources necessary to perform their tasks more efficiently and effectively. This integration fosters a culture of continuous learning and adaptation, enabling employees to develop new competencies and enhance existing ones (Ravichandran, 2018). The significant path coefficient (0.665) from digital enablement to internal brand engagement confirms that digital tools not only improve operational efficiency but also strengthen employees' connection to the organization's brand values and goals.

Internal brand engagement serves as a crucial mediator in this relationship. By merging communication, training, and leadership into a cohesive construct, internal brand engagement ensures that employees are aligned with the organization's mission and are motivated to contribute to its success (King & Grace, 2010). The strong path coefficient (0.747) from internal brand engagement to competence highlights the importance of fostering a supportive and engaging work environment. When employees feel engaged and valued, they are more likely to develop the skills and competencies necessary for their roles (Saks, 2006).

Moreover, the significant indirect effect of digital enablement on competence via internal brand engagement (path coefficient = 0.497) emphasizes the importance of a holistic approach to employee development. Organizations must not only invest in digital technologies but also cultivate an engaging internal brand environment to fully realize the potential of these technologies in enhancing employee competence. This finding is particularly relevant for higher education institutions in Pakistan, where digital transformation is increasingly critical for maintaining competitiveness and meeting the evolving needs of students and stakeholders (Khan et al., 2021).

Conclusion

This study offers valuable insights into the mechanisms through which digital enablement enhances employee competence within higher education institutions in Pakistan. The findings underscore the pivotal role of internal brand engagement—encompassing communication, training, and leadership—as a mediator in this relationship. By effectively integrating digital technologies and cultivating a robust internal brand environment, higher education institutions can significantly improve their employees' skills, performance, and adaptability in an increasingly digitalized landscape.

The results have significant implications for higher education institutions and other organizations aiming to leverage digital technologies for employee development. Merely adopting digital tools is insufficient; such investments must be complemented by strategic initiatives that enhance internal brand engagement. This includes fostering transparent communication channels (Dwivedi et al., 2021), implementing comprehensive training programs tailored to digital competencies (Kirkland, 2020), and ensuring strong leadership that promotes a culture of continuous learning and innovation (Men, 2015; Sharma & Bajpai, 2021). These strategies collectively ensure that employees are not only equipped with the necessary technological tools but also motivated, committed, and empowered to use them effectively.

This study makes a notable contribution to the literature by integrating digital enablement with internal brand engagement, offering a holistic framework for understanding competence development in the context of higher education in developing countries. The empirical validation of this model with a robust sample of 541 employees adds to its theoretical rigor and practical relevance. For future research, several avenues warrant exploration. Additional mediators and moderators—such as organizational culture (Ahmad et al., 2023), employee motivation (Anitha, 2014), and external environmental factors (Ali et al., 2020)—could provide deeper insights into the dynamics between digital enablement and employee competence. Longitudinal studies could further elucidate the long-term impacts of digital transformation initiatives on employee performance and organizational outcomes (Vial, 2019). Moreover, comparative studies across different sectors or regions would enhance the generalizability of the findings and uncover context-specific nuances. By addressing these areas, future research can build on the current study's foundation, offering a richer understanding of how digital enablement, internal brand engagement, and competence development intersect to drive organizational success. This research reinforces the strategic importance of fostering a supportive, cohesive, and digitally proficient workforce to maintain a competitive edge in the rapidly evolving educational sector.

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