



Digital Transformation and Job Satisfaction of Lecturers Influencing Work Performance in Private Universities in Chengdu City, Sichuan Province, People's Republic of China

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Abstract

This study was conducted with the following objectives 1) To examine the extent of transformational leadership, knowledge management, organizational administration, job satisfaction, and work performance 2) To analyze the influence of transformational leadership, knowledge management, organizational administration, and job satisfaction on work performance and 3) To investigate how digital transformation and lecturers' job satisfaction affect work performance within private universities in Chengdu City, Sichuan Province, People's Republic of China. The research employed a mixed-methodology approach, integrating both quantitative and qualitative paradigms. The quantitative sample comprised 1,200 lecturers from five private universities in Chengdu: Chengdu Neusoft University, Guizhou University of China, Sichuan University of Media and Communications, Sichuan Film and Television University, and Sichuan University of Technology and Business. Additionally, 25 key informants from the same institutions were purposively selected for in-depth qualitative insights. The findings revealed that the levels of transformational leadership, knowledge management, organizational administration, job satisfaction, and work performance among the sampled institutions were generally high; Transformational leadership, knowledge management, organizational administration, and job satisfaction exerted a statistically significant influence on work performance; Both digital transformation initiatives and lecturers' job satisfaction were found to be critical determinants of enhanced work performance in private higher education institutions in Chengdu.

Keywords: Digital Transformation, Job Satisfaction, Work Performance

1. Introduction

As In recent years, the higher education sector has been increasingly impacted by digital transformation, which refers to the integration of digital technologies into all aspects of educational processes. The application of technology is not just limited to teaching methods but extends to management, administration, and overall institutional operations. Universities are adopting various digital tools, such as Learning Management Systems (LMS), virtual classrooms, and data analytics, to improve both teaching effectiveness and administrative efficiency (Selwyn, 2016). These technological advancements are reshaping how universities interact with students, faculty, and other stakeholders (Johnson et al., 2016). Along with technological advancements, job satisfaction has emerged as a key factor in determining lecturers' work performance. Job satisfaction directly influences lecturers' motivation, engagement, and their ability to effectively integrate digital tools into their teaching and administrative duties (Spector, 1997). Research has shown that when lecturers are satisfied with their work environment, they are more likely to be productive, creative, and committed to their roles, leading to enhanced performance (Judge & Bono, 2001). This study, therefore, focuses on understanding how digital transformation and job satisfaction influence lecturers' performance in private universities in Chengdu City, Sichuan Province, China. By examining the relationship between these two factors, the study aims to provide valuable insights for educational institutions looking to improve their operational effectiveness and faculty performance in the digital age.

Digital transformation in universities often involves the adoption of new technologies that can improve communication, enhance learning experiences, and streamline administrative processes. These changes can lead to more efficient management of resources, better collaboration between faculty and students, and increased access to educational content through online platforms and digital tools (Bates, 2015). For example, the introduction of Learning Management Systems (LMS), digital assessment tools, and video conferencing platforms enables universities to offer more flexible, accessible, and engaging learning environments. These technological advancements, however, also create challenges for academic staff, who may face both positive and negative implications of new technologies. While these technologies can provide more effective teaching methods, they may also require lecturers to acquire new skills or adjust to unfamiliar platforms, leading to potential stress or resistance (Westerman et al., 2014). In parallel, job satisfaction plays a crucial role in determining how lecturers engage with these changes and how their work performance is affected. When lecturers are satisfied with their work environment and feel supported by the institution, they are more likely to embrace digital transformation and integrate it effectively into their teaching practices (Maslach & Leiter, 2016). On the other hand, dissatisfaction with working conditions, lack of proper training, or inadequate support can hinder lecturers' ability to adapt, thus affecting their performance and job engagement (Schaufeli & Bakker, 2004). Understanding the interplay between digital transformation and job satisfaction is therefore essential for universities to manage change effectively and enhance overall work performance.

The primary objective of this study is to explore the relationship between transformational leadership, knowledge management, organizational administration, job satisfaction, and work performance in private universities in Chengdu. Despite existing research on the individual components of leadership, knowledge management, and job satisfaction, there is a lack of comprehensive studies that examine how these factors collectively influence work performance in the context of higher education, particularly in private universities in Chengdu, Sichuan Province. Additionally, while much has been written about the effects of digital transformation on various industries, limited research has been conducted on how

digital transformation specifically impacts the performance and satisfaction of university lecturers, especially in China. This research seeks to fill this gap by not only investigating how traditional organizational factors like leadership and job satisfaction influence work performance but also by considering the modern challenge of digital transformation. The study will also examine the specific role of digital transformation in enhancing or hindering work performance, an area that has not been sufficiently explored in the context of private higher education institutions in Chengdu. By addressing this gap, this research aims to provide valuable insights for university administrators, policymakers, and educational leaders on how to navigate the complexities of digital transformation while fostering a supportive work environment for lecturers.

2. Literature Review

2.1. Digital Transformation in Higher Education

Digital transformation refers to the integration of digital technologies into organizational practices, fundamentally changing how institutions operate and deliver value. In higher education, this transformation involves the use of technologies such as Learning Management Systems (LMS), e-learning platforms, digital communication tools, and data analytics to improve both administrative functions and educational delivery (Selwyn, 2016). Universities that embrace digital transformation can expect to benefit from improved efficiency, broader access to resources, and more personalized learning experiences for students. These technologies enable universities to provide flexible and accessible education that meets the needs of a diverse, global student body. For example, LMS platforms like Moodle and Canvas facilitate the delivery of courses, assessments, and collaborative activities, while e-learning platforms support asynchronous learning, enabling students to access course content at their own pace (Siemens, 2014).

However, these benefits also depend on the ability of lecturers to adapt to and effectively utilize these technologies in their teaching and administrative roles. The implementation of digital tools requires lecturers to develop new skills, such as familiarity with online teaching platforms, multimedia content creation, and data analysis. This digital shift can be challenging, particularly for lecturers who are accustomed to traditional classroom settings or who may not have received adequate training in technology use. Furthermore, while digital transformation has the potential to enhance student engagement and learning outcomes, it also presents significant challenges in terms of ensuring equitable access to technology and addressing digital divides, especially in regions with limited infrastructure (Hussain et al., 2020).

The success of digital transformation in higher education is therefore contingent on both institutional support, such as ongoing training for faculty and investments in technology infrastructure, and lecturers' willingness and ability to embrace these changes. In addition, universities must consider the impact of digital transformation on the broader organizational culture, as a shift to a digital-first approach often requires changes in management structures, decision-making processes, and the overall academic environment (Westerman et al., 2014). Therefore, while digital transformation holds great promise for improving educational practices, it is essential to understand how faculty members' adaptation to these changes influences their job satisfaction, engagement, and overall work performance.

2.2. Job Satisfaction and Work Performance

Job satisfaction refers to the level of contentment employees feel about their work, which significantly influences their motivation, commitment, and performance (Spector, 1997). For university lecturers, job satisfaction is often influenced by factors such as work conditions, recognition, job autonomy, salary, and interpersonal relationships. Work conditions, for instance, including access to resources, office space, and a positive working environment, can enhance lecturers' satisfaction and, consequently, their work performance. Recognition and appreciation for their contributions also play a crucial role in boosting job satisfaction. Lecturers who feel valued and acknowledged for their efforts are more likely to be motivated and engaged in their teaching roles (Maslach & Leiter, 2016).

Job autonomy, or the degree to which employees can control their work, is another key factor in determining job satisfaction. For university lecturers, having the freedom to design their courses, determine teaching methods, and manage their own schedules can increase job satisfaction and foster a sense of professional fulfillment (Gagné & Deci, 2005). Similarly, competitive salaries and benefits packages have a direct impact on lecturers' overall job satisfaction. Universities that offer attractive compensation packages are more likely to retain high-performing lecturers, which in turn positively affects work performance and institutional productivity (Meyer & Smith, 2000).

Interpersonal relationships within the workplace, including interactions with colleagues, students, and administration, also significantly contribute to job satisfaction. Supportive relationships and a collegial atmosphere in academic settings help lecturers feel connected and valued, which enhances their commitment to the university and its goals (Herman & Rejo, 2016). Furthermore, research has consistently shown that job satisfaction is positively related to work performance, as satisfied employees are more likely to be engaged in their roles, exhibit higher productivity, and contribute to institutional goals (Judge & Bono, 2001).

Lecturers who are satisfied with their jobs tend to have higher levels of motivation and demonstrate greater organizational commitment, which are essential for improving teaching effectiveness and overall work performance. Moreover, job satisfaction has been shown to positively influence lecturers' ability to cope with challenges, including those presented by digital transformation initiatives. Satisfied employees are better equipped to adapt to technological changes, collaborate with colleagues, and remain productive under new working conditions (Crawford et al., 2010). Conversely, dissatisfaction in any of these areas can lead to burnout, disengagement, and reduced performance (Maslach & Leiter, 2016). Therefore, it is essential for universities to monitor and address the factors influencing job satisfaction to ensure lecturers remain motivated, engaged, and capable of delivering high-quality educational experiences.

2.3. The Role of Transformational Leadership and Knowledge Management

Transformational leadership is a leadership style that inspires and motivates followers to exceed expectations by focusing on vision, innovation, and the development of followers (Bass, 1985). In the context of higher education, transformational leadership encourages lecturers to embrace change and improve their teaching and administrative practices. A transformational leader fosters an environment that supports creativity and risk-taking, where lecturers feel empowered to innovate and implement new ideas. This leadership style can drive faculty members to be more committed to institutional goals, improve the quality of their work, and contribute to the overall advancement of the institution. Leaders who adopt this approach emphasize mentoring, provide inspiration, and create a shared vision that aligns

with the university's mission and values, ultimately motivating lecturers to take ownership of their roles and push the boundaries of traditional teaching methods (Leithwood & Jantzi, 2006).

Knowledge management, on the other hand, involves the creation, sharing, and application of knowledge to improve organizational effectiveness (Nonaka & Takeuchi, 1995). In universities, effective knowledge management can foster innovation, collaboration, and continuous improvement, all of which contribute to better work performance. By facilitating the exchange of ideas and best practices among faculty members, knowledge management promotes a culture of learning and improvement. It encourages lecturers to continuously develop their teaching methods, incorporate new technologies, and collaborate with colleagues across departments and disciplines. Furthermore, effective knowledge management systems provide lecturers with the tools and resources they need to access the latest research, teaching materials, and pedagogical strategies, enabling them to enhance their teaching practices and improve student outcomes.

The combination of transformational leadership and knowledge management creates a dynamic environment that can significantly enhance work performance. When leaders encourage the sharing of knowledge and foster a culture of continuous learning, lecturers are more likely to feel motivated and supported in their roles. This leads to greater job satisfaction, higher levels of engagement, and improved overall performance. In the context of digital transformation, the role of transformational leadership and knowledge management becomes even more critical as lecturers navigate new technologies and adopt innovative approaches to teaching and administration (Wang & Noe, 2010).

In summary of the relationships in the conclusion. Digital transformation in educational institutions plays a significant role in enhancing teaching quality and administrative functions. However, the success of this transformation depends on lecturers' ability to adapt to and effectively utilize new technologies (Selwyn, 2016; Hussain et al., 2020). Meanwhile, job satisfaction is crucial in motivating engagement and work performance (Spector, 1997). Job satisfaction is directly related to various factors such as work environment, recognition, and job autonomy (Maslach & Leiter, 2016). Transformational leadership helps motivate lecturers to embrace change and improve their teaching by fostering creativity and adaptability (Bass, 1985; Leithwood & Jantzi, 2006). Effective leaders can create a culture of learning and development within the institution, contributing to improved work performance and achieving institutional goals (Nonaka & Takeuchi, 1995). In terms of knowledge management, sharing ideas and developing teaching methods collaboratively among faculty members creates an environment that encourages continuous improvement (Wang & Noe, 2010). The combination of transformational leadership and knowledge management in a digitally transforming environment encourages lecturers to develop their skills and achieve better work performance. Therefore, digital transformation, job satisfaction, transformational leadership, and knowledge management all play important roles in enhancing lecturers' work performance in universities. These four factors are interrelated and support the effective adaptation of lecturers in the digital age educational environment.

3. Methodology

3.1. Research Design

This study employed a mixed-methodology approach, combining quantitative and qualitative research methods to gain a comprehensive understanding of the factors influencing work performance in private universities in Chengdu.

3.2. Quantitative Data Collection

The quantitative sample consisted of 1,200 lecturers from five private universities in Chengdu: Chengdu Neusoft University, Guizhou University of China, Sichuan University of Media and Communications, Sichuan Film and Television University, and Sichuan University of Technology and Business. A structured questionnaire was developed to measure the levels of transformational leadership, knowledge management, organizational administration, job satisfaction, and work performance. The survey was distributed electronically, and data were collected over a period of two months.

3.3. Qualitative Data Collection

In addition to the quantitative survey, 25 key informants were purposively selected from the same institutions to provide in-depth qualitative insights into how digital transformation and job satisfaction influence work performance. Semi-structured interviews were conducted with university administrators, lecturers, and IT staff involved in digital transformation initiatives. The interviews were transcribed and analyzed thematically to identify key themes related to the research questions.

4. Results

4.1. Quantitative Results

The quantitative data was collected through a survey distributed to 1,200 lecturers from five private universities in Chengdu, including Chengdu Neusoft University, Guizhou University of China, Sichuan University of Media and Communications, Sichuan Film and Television University, and Sichuan University of Technology and Business. The survey aimed to measure various variables such as transformational leadership, knowledge management, job satisfaction, and work performance.

The descriptive analysis revealed that the average score for transformational leadership was 4.3, indicating that the lecturers generally perceive their leaders as motivating, visionary, and supportive of innovation. Knowledge management scored an average of 4.1, suggesting that lecturers have moderate access to effective knowledge-sharing mechanisms and resources within the universities. Job satisfaction had a relatively high average score of 4.2, with respondents reporting a generally positive attitude toward their work environment, recognition, and autonomy. Work performance also received a high average score of 4.0/5, indicating that lecturers perceive their productivity, teaching quality, and engagement with their roles as above average.

Correlation analysis showed statistically significant relationships between the variables. A strong positive correlation of $r = 0.72$ was found between transformational leadership and work performance, indicating that the more transformational leadership behaviors lecturers perceive, the better their work performance. There was a moderate positive correlation of $r = 0.65$ between knowledge management and work performance, showing that better knowledge-sharing practices correlate with higher work performance. A very strong positive correlation of $r = 0.80$ was observed between job satisfaction and work performance, suggesting that lecturers with higher job satisfaction exhibit better work performance. Additionally, a positive correlation of $r = 0.75$ was found between transformational leadership and job satisfaction, suggesting that transformational leadership positively impacts lecturers' job satisfaction.

Multiple regression analysis revealed that job satisfaction had the strongest predictive effect on work performance ($\beta = 0.45$, $p < 0.01$), followed by transformational leadership ($\beta = 0.35$, $p < 0.05$) and knowledge management ($\beta = 0.30$, $p < 0.05$). This suggests that while all three

factors influence work performance, job satisfaction has the most significant impact on lecturers' work performance in the private universities surveyed.

4.2. Qualitative Results

In addition to the quantitative survey, in-depth interviews were conducted with 25 key informants from the five universities, including academic staff, administrative staff, and IT support personnel. The purpose of the interviews was to gain deeper insights into how digital transformation, job satisfaction, and leadership practices influence lecturers' performance.

Thematic analysis of the interview data identified several recurring themes. Many lecturers expressed that digital transformation had significantly impacted their teaching methods. While digital tools such as Learning Management Systems (LMS) and e-learning platforms had the potential to enhance learning, a common sentiment was that the lack of adequate training often hindered their ability to use these technologies effectively. Some lecturers reported feeling overwhelmed by the technological changes, while others appreciated the flexibility and accessibility these tools provided. One lecturer noted, "The new e-learning platforms have made my lectures more interactive, but I feel I need more training to fully utilize all the features effectively."

Lecturers also reported that transformational leadership played a crucial role in facilitating the adaptation to digital transformation. Those who worked under supportive leaders were more likely to embrace change, receive proper training, and feel motivated to improve their teaching methods. One lecturer mentioned, "My department head regularly encourages us to experiment with new tools, and there is always support available if we need help with technology."

Job satisfaction emerged as a central theme in the interviews. Lecturers who felt valued by their institution and received adequate recognition for their work were more likely to report higher levels of job satisfaction and work performance. Recognition was often tied to both teaching effectiveness and contributions to university development. As one lecturer said, "When my work is acknowledged, whether it's through positive feedback or rewards, I feel more motivated to perform better."

However, several respondents mentioned barriers to fully embracing digital transformation. These included inadequate infrastructure, resistance to change from some faculty members, and concerns about the effectiveness of online learning in comparison to traditional face-to-face methods. One lecturer shared, "Some colleagues still prefer the traditional way of teaching and find it difficult to adjust to digital tools. It creates a divide in the department."

The qualitative findings complement the quantitative results, particularly in highlighting the critical role of job satisfaction and leadership in facilitating work performance. Both the quantitative data and qualitative interviews pointed to the importance of adequate support and recognition for lecturers to thrive in a digitally transformed environment. Furthermore, the qualitative data elaborated on the challenges of digital transformation, which were not fully captured by the quantitative survey but are essential to understanding how these challenges affect lecturers' work performance.

5. Discussion

This study confirms the positive relationship between transformational leadership, knowledge management, organizational administration, job satisfaction, and work performance in the context of private universities in Chengdu. The results indicate that when lecturers perceive strong transformational leadership and effective knowledge management practices, they are more likely to report higher levels of job satisfaction and exhibit better work performance.

The findings align with existing research, which shows that transformational leadership fosters a supportive environment where lecturers are motivated to engage with new technologies, improve teaching practices, and collaborate more effectively (Bass, 1985; Leithwood & Jantzi, 2006). Knowledge management practices also emerged as a significant factor, with lecturers who had better access to shared resources and information demonstrating higher levels of performance (Nonaka & Takeuchi, 1995).

Digital transformation plays a crucial role in enhancing work performance, but it must be managed effectively to ensure that lecturers are properly supported and motivated. The implementation of digital tools and technologies, while offering substantial potential for enhancing teaching and learning experiences, can be overwhelming without adequate training and support (Hussain et al., 2020). The results of this study suggest that universities should focus on providing comprehensive training and resources to lecturers to help them adapt to technological changes. It is essential that these training programs not only cover the technical aspects of digital tools but also emphasize pedagogical strategies for integrating technology into teaching practices. By offering these resources, universities can ensure that lecturers are equipped to effectively use digital technologies and improve their work performance.

Moreover, the study highlights the importance of job satisfaction in determining lecturers' work performance. Lecturers who feel valued, recognized, and supported in their roles are more likely to be motivated, engaged, and productive. This is consistent with the findings of Judge & Bono (2001) and Maslach & Leiter (2016), who argue that job satisfaction plays a critical role in fostering employee engagement and improving performance. Enhancing job satisfaction through better working conditions, such as reduced workload, access to modern teaching tools, and opportunities for career development, can lead to better overall performance. Universities that invest in creating a positive work environment are more likely to retain high-performing faculty members and ensure high-quality educational outcomes.

Furthermore, the study shows that transformational leadership and job satisfaction work together to create a culture of continuous improvement and high performance. Transformational leaders who encourage innovation, support professional development, and provide regular feedback contribute to an atmosphere where lecturers are motivated to improve their teaching practices and overall performance. Similarly, when lecturers experience high levels of job satisfaction, they are more likely to embrace change and adapt to digital transformation initiatives, ultimately leading to enhanced performance and institutional success.

The findings also suggest that while digital transformation offers significant benefits for private universities, the process of adoption must be approached strategically. Barriers to digital transformation, such as resistance from faculty members, lack of adequate infrastructure, and concerns over the effectiveness of online learning, must be addressed proactively. University leaders should engage lecturers in the transformation process by fostering a culture of openness and collaboration, where faculty members are encouraged to share concerns and solutions related to the adoption of new technologies. This participatory approach can help mitigate resistance and ensure that digital transformation is implemented successfully and effectively.

In conclusion, the results of this study provide valuable insights for university administrators and policymakers. To enhance work performance in the digital age, universities should prioritize transformational leadership, effective knowledge management, and job satisfaction while providing adequate support and training for lecturers. By doing so, universities can foster an environment where lecturers are motivated to continuously improve their teaching and contribute to the overall success of the institution.

6. Conclusion and Recommendations

This study highlights the significant influence of digital transformation and job satisfaction on work performance in private universities in Chengdu. The findings suggest that digital transformation has the potential to improve work performance, but its success depends on how effectively it is implemented and supported. Job satisfaction plays a central role in ensuring that lecturers are motivated and engaged in their roles, which in turn enhances their productivity and overall work performance. Lecturers who feel valued and supported by their institution are more likely to embrace new technologies and contribute to the university's goals. Therefore, universities should focus on fostering an environment that promotes both technological innovation and lecturers' job satisfaction. The results also emphasize the importance of transformational leadership in facilitating this process. Universities should adopt transformational leadership styles that encourage innovation, creativity, and collaboration. Leaders who actively support their staff, provide mentoring opportunities, and foster a shared vision can drive positive change and inspire lecturers to enhance their teaching and administrative practices.

Additionally, implementing effective knowledge management systems will allow for the sharing of best practices, innovations, and resources, thereby improving lecturers' effectiveness in teaching and contributing to the institution's success. To improve work performance, universities should invest in both technological innovations and strategies to enhance lecturers' job satisfaction. This includes offering comprehensive training and professional development opportunities to help lecturers adapt to digital transformation, providing better working conditions, and recognizing and rewarding their contributions. By creating a supportive environment that balances technology with the well-being and development of lecturers, universities can achieve higher levels of work performance and academic success.

6.1. Recommendations for Future Research

Future studies could explore the long-term effects of digital transformation on lecturers' work performance and satisfaction across different regions or types of institutions. Research that compares public and private institutions, or examines the impacts of digital transformation in rural versus urban areas, could provide deeper insights into how different contexts affect the adaptation to digital tools and overall work outcomes. Additionally, research could examine the role of student satisfaction and engagement in the context of digital transformation in higher education. Since students are the ultimate beneficiaries of teaching innovations, understanding their perspectives on digital tools, learning experiences, and their interactions with lecturers could provide valuable information for universities looking to enhance both teaching and learning environments. Further studies could also investigate how the integration of digital technologies impacts student outcomes, such as academic achievement and retention rates, as these are critical metrics for evaluating the success of digital transformation initiatives. Moreover, future research could explore the role of leadership in facilitating digital transformation from a broader institutional perspective, assessing the different leadership styles and their impacts on the successful integration of digital technologies. Research could also focus on the intersection between digital transformation and organizational culture to understand how cultural factors influence lecturers' acceptance of technological change.

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