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## Article

# Transforming commitment into performance: a study of digital transformation in the Cambodian public sector amidst a pandemic

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## Transforming commitment into performance: a study of digital transformation in the Cambodian public sector amidst a pandemic

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# Transforming commitment into performance: a study of digital transformation in the Cambodian public sector amidst a pandemic

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## ABSTRACT

This study examines the relationships between organizational commitment (affective, normative, and continuance), individual performance, and digital transformation within public sector organizations in Cambodia during the COVID-19 pandemic. Utilizing Partial Least Squares Structural Equation Modeling (PLS-SEM), the research analyzes responses from 250 employees to investigate how different types of organizational commitment influence individual performance and the role of digital transformation in mediating these relationships. The findings reveal a statistically significant positive relationship between affective organizational commitment and individual performance, highlighting the importance of emotional attachment to the organization. Similarly, both normative and continuance commitments are found to impact individual performance and digital transformation efforts significantly. The study identifies digital transformation as a key mediator in the relationship between organizational commitment and individual performance, with varying degrees of mediation observed across different types of commitment. Specifically, digital transformation partially mediates the relationship between affective commitment and individual performance while exhibiting a full mediation effect in the relationship between normative commitment and individual performance. The study contributes to the existing literature by providing empirical evidence on the dynamics of organizational commitment, digital transformation, and individual performance in a unique context, offering insights for policymakers and organizational leaders on enhancing employee performance and driving successful digital transformation during crises. The research underscores the need for a nuanced understanding of employee commitment and engagement in facilitating digital transformation and improving performance outcomes in the public sector, particularly during challenging times.

## IMPACT STATEMENT

This study delves into how the dedication of employees to their organizations—encompassing emotional attachment, obligation, and perceived cost of leaving—affects their work performance within Cambodia's public sector during the COVID-19 pandemic, with a special focus on the role of digital upgrades in this dynamic. It finds that digital advancements play a crucial role in enhancing this performance, acting as a bridge between an employee's commitment to their organization and their job performance. Especially noteworthy is how these digital changes fully enhance the performance of those who stay out of a sense of duty. This research offers valuable insights into improving employee performance through digital technology, emphasizing its importance not just for business leaders and policymakers but for anyone interested in how workplaces can thrive during challenging times.

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## Introduction

The advent of the COVID-19 pandemic has cast a profound impact on the global landscape, significantly disrupting economies and challenging the operational paradigms of public sector organizations. Amidst this upheaval, the imperative for digital transformation has been starkly highlighted, serving as a critical strategy for ensuring continuity and resilience in public services. Digital transformation, the process of leveraging digital technologies to alter the performance and scope of organizations fundamentally, has

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thus emerged as a key facilitator in adapting to the new normal imposed by the pandemic. This shift towards digital modalities has been particularly pronounced in the public sector, where the need to maintain essential services amidst physical distancing measures has catalyzed the adoption of digital solutions (Bai et al., 2021; Tarhini et al., 2022). In the face of such transformative changes, understanding the dynamics between organizational commitment, individual performance, and digital transformation becomes essential. Organizational commitment, with its affective, normative, and continuance components, significantly influences how employees engage with their work and the organization, especially under the pressures of rapid change. The public sector in Cambodia presents a unique case study in this regard, offering insights into the challenges and opportunities for digital transformation during the pandemic. This investigation is crucial for devising strategies that leverage organizational commitment to enhance individual performance and digital transformation outcomes, thereby contributing to the resilience and efficiency of public sector organizations. Despite the recognized importance of digital transformation in addressing the challenges posed by the COVID-19 pandemic, there is a notable paucity of research exploring the interrelations between organizational commitment (affective, normative, and continuance commitment), individual performance, and digital transformation within the context of a global health crisis. This gap is particularly evident in the case of Cambodia's public sector, where specific socio-economic and technological factors present unique challenges and opportunities for digital adoption and innovation. This study seeks to address this gap, providing much-needed insights into how organizational commitment can influence individual performance and the success of digital transformation initiatives during such unprecedented times. Building on the identified research gap, the primary objective of this study is to investigate the relationships between organizational commitment, individual performance, and digital transformation within the public sector organizations of Cambodia during the COVID-19 pandemic. The outcomes of this study are poised to offer significant practical implications for policymakers, public sector managers, and employees, equipping them with strategies to bolster organizational resilience, enhance performance, and foster innovation in the digital era. Moreover, by enriching the academic discourse on organizational behavior, performance management, and digital transformation, this research contributes to the broader understanding of navigating public sector challenges in times of crisis and beyond, offering valuable lessons for similar contexts globally.

## Organizational commitment

Organizational commitment is a crucial concept in organizational psychology and management, and its significance has been the subject of extensive research for many years. Meyer and Allen (1997) have proposed a widely recognized model that categorizes organizational commitment into three dimensions: affective, continuance, and normative commitment. Recent studies have continued to explore these dimensions, examining their relevance in today's dynamic work environment. For instance, Johnson et al. (2009) highlighted the evolving nature of affective commitment in the digital era, suggesting that technological advancements have altered how employees develop emotional attachments to their organizations. Research findings have demonstrated the significant effect of organizational commitment on employee performance (EP) and organizational citizenship (OC) (Teo et al., 2020).

Moreover, evidence supports the mediating role of organizational commitment in the relationship between EP and OC (Lopez-Anido et al., 2021). Furthermore, demographic factors have been identified as indirect influencers of organizational commitment through the mediation of compensation structure and faculty job satisfaction (Hadian Nasab & Afshari, 2019). Ashraf (2020) found that affective and normative commitment mediated between benevolent, moral, and authoritarian leadership associations with knowledge sharing, while continuance commitment was not identified as a significant mediator. Additionally, Chaudhary et al. (2023) investigated the potential of paternalistic leaders to enhance knowledge sharing and the roles of organizational commitment and Islamic work ethics in this context. Another important finding is related to job burnout and satisfaction, which were identified as potential mediating factors between job stress and organizational commitment (Park et al., 2019). This highlights the complex interplay between various psychological and contextual factors in influencing organizational commitment in the workplace. In the hospitality industry context, Karatepe et al. (2022) examined the effects of management commitment to the ecological environment and green work

engagement on hotel employees' green work outcomes. Their study contributes to understanding how organizational commitment intersects with environmental concerns and employee engagement in specific industry settings. Likewise, the relationship between a supportive work environment and employee retention was examined by Naz et al. (2020), focusing on the mediating roles of organizational commitment and person–organization fit. Wang et al. (2020) investigated the association between job stress and organizational commitment in Chinese university teachers, identifying the mediating effects of job burnout and job satisfaction. This study sheds light on the unique contextual factors that influence organizational commitment in the academic setting. Besides, San-Martín et al. (2020) explored the determinants of teachers' continuance commitment to e-learning in higher education, providing insights into the specific factors that shape commitment in the context of online education. Finally, Chaudhary et al. (2023) examined the interrelations of external and internal orientations of corporate social responsibility with job satisfaction and organizational commitment, highlighting the potential influence of CSR on employee outcomes. These studies on organizational commitment offers valuable insights into the multifaceted nature of commitment and its influence on various aspects of employee behavior and organizational performance. However, there are several knowledge gaps that warrant further investigation. For instance, there is a focus on the role of organizational commitment in the context of remote work and virtual teams, given the increasing prevalence of these work arrangements. Additionally, more studies are needed to explore the cultural and cross-national variations in organizational commitment and the factors that shape commitment across different contexts, for instance, Cambodia. By addressing these knowledge gaps, this contributes to a more comprehensive understanding of organizational commitment and its implications for organizational behavior and performance.

### Individual performance

Individual performance in organizations is a critical aspect of organizational success, and recent research has highlighted the multi-dimensional nature of performance, extending beyond mere productivity to include aspects such as creativity and innovation Rosati and Faria (2019). This expanded definition of individual performance underscores the importance of understanding the determinants influencing employees' ability to fulfill their job responsibilities and contribute to organizational goals. One of the critical determinants of individual performance identified in the literature is personal motivation (Khezrian et al., 2020). Personal motivation plays a crucial role in driving employees to perform at their best and go beyond their job's minimum requirements. Therefore, understanding the factors that influence an individual's motivation is essential for organizations seeking to enhance the performance of their employees. In addition to personal motivation, skill level has also been identified as a significant determinant of individual performance (Shahzad et al., 2020). Employees with higher skill levels are likely to perform better in their roles, as they possess the necessary knowledge and expertise to excel in their respective positions. Therefore, organizations need to invest in developing and enhancing their employees' skills to improve overall performance.

Furthermore, organizational support has been recognized as another critical determinant of individual performance (Rosati & Faria, 2019). Organizational support encompasses various elements, such as leadership, resources, and work environment, which can significantly impact an employee's ability to perform effectively. When employees feel supported by their organization, they are more likely to perform better. Despite the insights provided by existing research, knowledge gaps still warrant further exploration. For example, while personal motivation, skill level, and organizational support have been identified as key determinants of individual performance, there is a need for more in-depth research to understand the specific mechanisms through which these factors influence performance. Additionally, the role of other potential determinants, such as organizational commitment and digital transformation, should be further investigated to understand individual performance in organizations comprehensively.

### Digital transformation

Digital transformation in organizations has become a critical aspect of modern business operations, representing a paradigm shift in how businesses operate and engage with their employees. Digital tools have led to a modification of organizational structures and processes, ultimately affecting employee

commitment and performance (Naima et al., 2021; Phuong et al., 2023). This transformation has shown the potential to improve performance through enhanced communication and collaboration tools. The COVID-19 pandemic has accelerated the need for digital transformation and highlighted its importance in sustaining enterprise operations and productivity in various industrial sectors (Obrenovic et al., 2020). Furthermore, it has been suggested that digital transformation could be a core technology in many industrial sectors post-COVID-19, indicating its long-term impact on organizational operations (Sepasgozar, 2021). The construction industry, in particular, is experiencing implications of digital transformation on the workforce and organizational structures (García de Soto et al., 2022). This emphasizes the urgent imperative of digital transformation, with rigorous research that can be readily applied to grasp emerging trends (Trenerry et al., 2021). The integration of 5G technology has also been identified as a key enabler of digital transformation, fostering flexibility, end-to-end connectivity, and real-time visibility in supply chain and operations management (Dolgui & Ivanov, 2022). In human resource management, digital transformation has implications for employee commitment toward the environment, suggesting a potential impact on sustainability and corporate social responsibility (Pham et al., 2019). Also, the innovation process has been transformed by digital tools, impacting work, collaboration, and organizational structures in new product development (Marion & Fixson, 2021). Despite the extensive research on digital transformation and its impact on organizations, several knowledge gaps still warrant further investigation. First, the long-term implications of digital transformation in various industrial sectors post-COVID-19 need to be explored, including its effects on organizational structures, processes, and overall performance. Additionally, the focus is on understanding the specific mechanisms through which digital transformation influences employee commitment, performance, and organizational outcomes. Therefore, digital transformation represents a multifaceted and dynamic phenomenon with far-reaching implications for organizations across various sectors. By synthesizing the existing research findings and identifying key knowledge gaps, this work provides a comprehensive understanding of the impact of digital transformation while also pointing towards potential future research directions that can contribute to a deeper understanding of this transformative process.

## Public organizations in Cambodia

In the evolving landscape of global digitalization, public organizations, especially in emerging economies like Cambodia, increasingly focus on digital transformation. This digitalization movement presents opportunities and challenges, particularly regarding resource limitations and cultural resistance (Mono, 2021; Savuth & Sothea, 2023; Vichana, 2023). Notably, a research gap exists in understanding the interplay among digital transformation, organizational commitment, and individual performance within Cambodian public organizations. According to Ayoko (2021), digital transformation, robotics, and artificial intelligence significantly shape organizational processes and innovation. This advancement underscores the necessity to comprehend its implications for public organizations in Cambodia. Delin et al. (2021) proposed an integration framework for digital transformation, prompting further exploration of its applicability in the Cambodian context. Also, Cinquini (2019) emphasized the need for research on evaluation, performance, and governance in the digital era, which is particularly pertinent to Cambodian public organizations. This emphasis aligns with the need to assess the impact of digital initiatives on organizational performance and governance structures.

Additionally, Sinha et al. (2023) discussed the challenges and opportunities in IT transformation in public service delivery, highlighting the importance of understanding how digital initiatives can enhance public services in Cambodia. While organizational commitment and individual performance have been extensively researched, their dynamics in digital transformation, especially in emerging economies like Cambodia, remain underexplored. Khin and Ho (2018) acknowledged the positive impact of digital technology and capability on organizational performance. However, they did not focus on the Cambodian context. Equally, Li (2020) examined emerging approaches for managing digital transformation without delving into their implications on organizational commitment and individual performance. Guo and Xu (2021) demonstrated a positive relationship between digital transformation and firm performance in China's manufacturing sector. However, the study did not extend to the influence on organizational commitment and individual performance.



Furthermore, Jawaad et al. (2019) and Saleem et al. (2019) have contributed to understanding the role of job satisfaction, leadership, and empowerment in organizational commitment. However, their research does not explicitly address the impact of digital transformation initiatives within public organizations. This highlights the need for empirical research that explicitly investigates how digital transformation influences organizational commitment and individual performance in emerging economies like Cambodia. Additionally, examining the mediating factors in the relationship between digital transformation and these organizational dynamics would provide a comprehensive understanding of the interplay involved. This study aims to fill the research void by empirically exploring the impact and nuances of digital transformation in Cambodian public organizations, particularly focusing on its influence on organizational commitment and individual performance. By doing so, it seeks to offer valuable insights and practical guidance for effectively navigating the digital transformation journey in the context of emerging economies.

## Hypotheses construction

Various studies explore the relationship between organizational commitment and individual outcomes. For instance, studies by Ribeiro et al. (2020) and Alqudah et al. (2022) underscore the integral role of affective commitment in enhancing employee performance. This relationship is further corroborated by Karem et al. (2019), who specifically noted its significance among nursing professionals. Beyond the direct impact, the mediating role of affective commitment in the nexus between factors like perceived organizational support, transformational leadership (Astuty & Udin, 2020), and organizational citizenship behaviour (Alshaabani et al., 2021) enriches our understanding of its multifaceted influence. However, the specific mechanisms through which affective commitment operationalizes its influence on performance, particularly in the public sector context of Cambodia, remain under-explored and warrant further investigation. Thus, this work suggests that *(H1) Affective Organizational Commitment on Individual Performance*.

Hanelt et al. (2021) and Wessel et al. (2021) emphasize the complexity of digital transformation and the necessity of distinguishing its unique attributes from general IT-enabled organizational change. The criticality of aligning employee commitment with organizational mindfulness for digital agility, as highlighted by Li et al. (2021), underscores the importance of affective commitment in this domain. Furthermore, the interplay of ethical leadership, job satisfaction, and psychological empowerment Qing et al. (2020) provides valuable insights into fostering an environment conducive to digital transformation. The research by Lutfi et al. (2022) on big data analytics adoption and Cetindamar Kozanoglu and Abedin (2021) on digital literacy suggests a collaborating relationship between technological capabilities and affective commitment. However, the specific ways in which affective commitment influences the outcomes of digital transformation initiatives, especially in the Cambodian public sector, remain largely unexplored. Thus, this study posits that *(H2) Affective organizational commitment has a significant impact on digital transformation*.

The study by Chouaibi et al. (2022) on the organizational-level effects of digital transformation in Tunisia lays a foundational understanding of its broader impacts, raising pertinent considerations about the potential risks alongside the benefits. Complementing this perspective, Chen and Kim (2023) delve into the intersection of digital transformation and innovation performance, illuminating the critical mediating role of innovation factors. This exploration is crucial, as it unravels the intricate ways digital transformation can shape individual performances in environments driven by innovation. Furthermore, the research conducted by Esses et al. (2021) on the relationship between sustainability and digital transformation in Central European countries, while not directly focused on individual performances, presents an essential backdrop. It suggests that integrating sustainable practices within digital transformation initiatives can indirectly influence the well-being and performance of employees. However, despite these valuable insights, there remains a notable gap in direct empirical examination of the impact of digital transformation on individual performances, particularly within the context of public organizations in Cambodia. Thus, this work postulates that *(H3) digital transformation significantly impacts individual performances in public organizations*.

Normative commitment was found to positively impact performance (Soomro & Shah, 2019; Suharto & Hendri, 2019). This relationship is further supported by Ribeiro et al. (2020), who identified a link

between normative commitment and individual creativity. Additionally, studies like those of Cherif (2020) and Karem et al. (2019) emphasized the role of normative commitment in enhancing employee job satisfaction and performance, particularly in specialized sectors like banking and healthcare. Similarly, Dorta-Afonso et al. (2021) demonstrated the mediating role of normative commitment in the hospitality industry, relating to high-performance work systems and individual performances. Based on these studies, this work suggests that *(H4) Normative organizational commitment significantly impacts individual performances.*

The potential impact of normative organizational commitment on digital transformation has been less directly studied but is equally critical. Jafari-Sadeghi et al. (2021) suggested that employees' commitment to organizational values and goals is crucial for driving digital transformation initiatives. While other studies like those by El Hilali et al. (2020) and Hrustek (2020) did not directly address normative organizational commitment, they provide insights into how such commitment might influence digital transformation, especially in the sustainability and agricultural sectors. Furthermore, research by Ceipek et al. (2021) and Preindl et al. (2020) implies that organizational commitment, including its normative aspect, could be a significant factor in successful digital transformation strategies, particularly when considering the complex dynamics of technological innovations and supply chain transformations. In summary of these findings, this study proposes that *(H5) Normative organizational commitment significantly impacts digital transformation.*

Suharto and Hendri (2019) proved that the continuance of organizational commitment significantly impacts job performance. Grego-Planer (2019) further supported this view by demonstrating a strong relationship between the continuance of organizational commitment and organizational citizenship behaviours across different sectors. In the healthcare sector, Karem et al. (2019) found that job satisfaction and organizational commitment significantly affect nurses' performance, highlighting the pivotal role of the continuance of organizational commitment. Ribeiro et al. (2020) discovered that the continuance of organizational commitment mediates the relationship between authentic leadership and individual creativity, suggesting that committed employees tend to be more creative and innovative. Cherif (2020) linked human resource management practices and employee job satisfaction with organizational commitment, underscoring its importance in banking. These studies collectively suggest that continuance of organizational commitment is a critical determinant of individual performances in various organizational contexts. This study implies that *(H6) Continuance of organizational commitment has a significant impact on individual performances.*

The influence of organizational commitment on digital transformation is an emerging study area. Llopis-Albert et al. (2021) observed that organizational commitment significantly influences the success of digital transformation in the automotive industry. Similarly, Melović et al. (2020) emphasized the necessity of organizational commitment for effective digital transformation in realms like brand promotion and e-business. Manita et al. (2020) indirectly implicated the role of organizational commitment in digital transformation within the context of external audit and corporate governance. Jafari-Sadeghi et al. (2021) highlighted aspects of technology readiness and exploration in technology entrepreneurship, indirectly suggesting the potential influence of organizational commitment on these processes. Winarsih et al. (2021) addressed the challenges of digital transformation in SMEs due to COVID-19, pointing to the need to understand the role of organizational commitment in such transformative endeavours. These studies indicate that the continuance of organizational commitment is likely a vital factor in the successful implementation and sustainability of digital transformation initiatives across various industries. Therefore, this study posits that *(H7) the continuation of organizational commitment significantly impacts digital transformation.*

Digital transformation has become a critical aspect of organizational development and performance improvement. Alshaabani et al. (2021) found that affective commitment mediates the relationship between perceived organizational support and employee performance. Furthermore, Duarte et al. (2021) highlighted the sequential mediation of affective commitment and individual creativity in improving individual performance. These findings suggest that affective organizational commitment is crucial in driving individual performances. Moreover, the study by Cho et al. (2019) provided insights into the relationship between transformational leadership and affective organizational commitment. The findings indicated a close association between transformational leadership and affective commitment. This implies that



transformational leadership practices can significantly influence affective organizational commitment, subsequently impacting individual performances. Ifenthaler and Egloffstein (2020) discussed developing and implementing a maturity model of digital transformation, highlighting the importance of leveraging digital technologies to drive organizational change and improvement. Sheng et al. (2023) further emphasized the influence of digital transformation on operational management practices and performance. These insights suggest that digital transformation is critical in enhancing organizational capabilities and performance. Furthermore, Dudukalov (2020) discussed the impact of digital transformation on supply chain performance, indicating organizations' readiness for Industry 4.0. The findings underscore the transformative potential of digital technologies in optimizing supply chain operations and performance. These studies collectively highlight the mediating role of digital transformation in shaping organizational capabilities and performance outcomes. Nguyen et al. (2022) extended the Technology-Organization-Environment (TOE) framework to examine the utilization of online retailing in digital transformation. The study provided empirical evidence of the impact of digital transformation on organizational processes and performance. While the specific link to normative commitment was not directly investigated, the findings suggest that digital transformation can influence organizational dynamics and performance. Based on these findings, there is a need for more empirical research, specifically examining the mediating role of digital transformation in the relationship between different types of organizational commitment and individual performances. Additionally, further investigation is warranted into how digital transformation influences affective, normative, and continuance commitment and individual performances. Moreover, the contextual factors and contingencies that moderate these relationships require deeper exploration to provide a comprehensive understanding of the complex dynamics involved. Thus, this work suggests the following hypothesis: (H8) *Digital transformation mediates the relationship between Affective organizational commitment and individual performances*, (H9) *Digital transformation mediates the relationship between Normative organizational commitment and individual performances*, and (H10) *Digital transformation mediates the relationship between Continuance of organizational commitment and individual performances*.

## Methodology

This study investigates the relationship between organizational commitment and individual performance in Cambodian public organizations during the COVID-19 pandemic, with digital transformation acting as a mediating factor. Employing a quantitative research approach, the study utilized snowball sampling to recruit participants over 18 years old from both urban and rural areas of Cambodia, ensuring they were well-acquainted with the survey content. Survey questionnaires were distributed online via social media groups (Telegram and Facebook) to collect data. The sample size, recommended by Soper (2020), was initially set at 223, based on five observed variables, 25 latent variables, an expected effect size of 0.3, a 0.05 level of statistical significance, and a 0.95 power. To mitigate the risk of incomplete responses and bolster the study's validity, the sample was increased by at least 20%.

For data analysis, the study applied Partial Least Squares Structural Equation Modeling (PLS-SEM), which is ideal for examining complex relationships among variables and supporting predictive analysis and theory advancement. The constructs of organizational commitment (OC) and individual performance (IP) were operationalized through adapted scales from Meyer and Allen (1997) and direct assessment of respondents' perceptions, respectively. Finally, DT comprising five items was adapted from the work of Ly (2023) and Nasiri et al. (2020). All items utilized a 5-point Likert scale encompassing from 1 (strongly disagree) to 5 (strongly agree).

## Demographic results

The demographic data from the survey sample reveals a predominance of younger adult males, with 59.2% male participants and 40.8% female. The age distribution is heavily skewed towards the 18–35 year age group, which comprises 78.7% of respondents, while the 36–52 year age group accounts for 20.9%, and those aged 53–64 are minimally represented at 0.4%. In terms of education, a vast majority of the

participants, 74.4%, hold an undergraduate (Bachelor's) degree. Those with a graduate (Master's) degree make up 23.5%, and a small fraction, 2.2%, have a post-graduate (Doctorate or higher) qualification. The survey thus reflects insights predominantly from a younger, educated demographic with a significant underrepresentation of older adults.

## Measurement model

The assessment of the measurement model focused on internal consistency, convergent validity, and discriminant validity, as highlighted in prior research (Hair et al., 2011; 2016; Henseler et al., 2009). Outer loadings were considered acceptable at 0.7 or greater (Hair et al., 2016). The t-statistics for cross-loadings were derived using the replacement method in SmartPLS, with 5,000 samples and a significance threshold of  $p < 0.005$ . The evaluation also included calculating the constructs' internal consistency through composite reliability (CR) and Cronbach's alpha, both surpassing the recommended minimum of 0.70 (Fornell & Larcker, 1981). Convergent validity was established with Average Variance Extracted (AVE) exceeding 0.50. A summary of the key metrics, including loadings, Cronbach's alpha, CR, and AVE, is detailed in Table 1.

This study assessed discriminant validity through two methods. Initially, it examined whether the square root of each construct's Average Variance Extracted (AVE) exceeded its correlations with other constructs, as suggested by Fornell and Larcker (1981). This was confirmed by the data, indicating strong discriminant validity (refer to Table 2). Additionally, validity was evaluated using the heterotrait-monotrait (HTMT) ratio of correlations, with Henseler et al. (2015) recommending a threshold below 0.9 to avoid validity issues. The results, detailed in Table 2, demonstrated that all constructs met the criteria for discriminant validity.

## Structural model

Following validation of construct validity and reliability, the study proceeded with an examination of the structural model. The evaluation began with assessing the model's ability to predict endogenous

**Table 1.** Factor loadings, reliability, and validity.

Constructs	Loadings
Affective Organizational Commitment (AC) (Cronbach's Alpha = 0.874, CR = 0.909, AVE = 0.665)	
AC1	0.832
AC2	0.819
AC3	0.862
AC4	0.788
AC5	0.774
Normative Organizational Commitment (NC) (Cronbach's Alpha = 0.871, CR = 0.906, AVE = 0.659)	
NC1	0.841
NC2	0.816
NC3	0.843
NC4	0.759
NC5	0.795
Continuance Organizational Commitment (CC) (Cronbach's Alpha = 0.894, CR = 0.918, AVE = 0.651)	
CC1	0.851
CC2	0.851
CC3	0.802
CC4	0.728
CC5	0.793
CC6	0.810
Digital Transformation (DT) (Cronbach's Alpha = 0.881, CR = 0.914, AVE = 0.680)	
DT1	0.806
DT2	0.738
DT3	0.887
DT4	0.874
DT5	0.810
Individual Performances (IP) (Cronbach's Alpha = 0.876, CR = 0.907, AVE = 0.619)	
IP1	0.805
IP2	0.850
IP3	0.811
IP4	0.817

**Table 2.** Discriminant validity-fornell & larcker criterion.

	AC	CC	DT	IP	NC
AC	0.816				
CC	0.594	0.807			
DT	0.548	0.577	0.825		
IP	0.529	0.473	0.468	0.821	
NC	0.342	0.276	0.410	0.274	0.812
Heterotrait-monotrait ratio (HTMT)					
AC	–				
CC	0.658				
DT	0.613	0.624			
IP	0.617	0.529	0.538		
NC	0.388	0.290	0.459	0.319	–

**Table 3.** Hypotheses testing.

	Path coefficient	t-value	p-value	Decision
H1: AC → IP	0.314	3.822	0.000	Supported
H2: AC → DT	0.257	4.960	0.000	Supported
H3: DT → IP	0.179	3.252	0.001	Supported
H4: NC → IP	0.046	0.740	0.459	Not-Supported
H5: NC → DT	0.222	4.173	0.000	Supported
H6: CC → IP	0.171	2.437	0.015	Supported
H7: CC → DT	0.363	5.144	0.000	Supported
	R <sup>2</sup>		Q <sup>2</sup>	
IP	0.343		0.211	
DT	0.441		0.289	

constructs, utilizing measures like the coefficient of determination ( $R^2$ ), cross-validated redundancy ( $Q^2$ ), path coefficients ( $\beta$ ), and the significance of paths to test hypotheses and model efficacy. The assessment of standardized path coefficients further validated the hypotheses, with the model's effectiveness determined by the strength of structural paths. Fornell and Larcker (1981) suggest that an  $R^2$  value of 0.1 or higher for latent dependent variables indicates predictive capability, with values of 0.75, 0.50, or 0.25 representing substantial, moderate, or weak predictive powers (Hair et al., 2011; Henseler et al., 2009). In this study, the model's adequacy in explaining the variance in the outcomes was reflected in the  $R^2$  values, with IP accounting for 34.3% of the variance and DT for 44.1% (see Table 3). Additionally, the model's predictive relevance was affirmed by  $Q^2$  values of 0.211 for IP and 0.289 for DT, which are above the threshold values, indicating the model's ability to predict both dependent variables effectively. These findings illuminate the differential impact of various forms of organizational commitment on performance-related outcomes.

To prevent model misspecification, the standardized root mean square residual (SRMR) was employed, with SRMR values below 0.10 indicating a good fit (Hu & Bentler, 1998; Kara et al., 2022; Worthington & Whittaker, 2006). This study achieved an SRMR of 0.08, signifying a well-fitting model. The significance of path coefficients was confirmed through bootstrap resampling with 5,000 samples, with all paths demonstrating statistical significance except H4 (see Table 3). Specifically, H1 posited that AC significantly impacts IP was supported ( $\beta=0.314$ ,  $t=3.822$ ,  $p < .001$ ), suggesting a substantial relationship between AC and IP. Similarly, the H2 assertion that AC significantly influences DT was confirmed ( $\beta=0.257$ ,  $t=4.960$ ,  $p < .001$ ). H3, proposing a significant effect of DT on IP, also received support ( $\beta=0.179$ ,  $t=3.252$ ,  $p = .001$ ). In contrast, H4 suggested that NC, significantly associated with IP, was not supported ( $\beta=0.046$ ,  $t=0.740$ ,  $p = .459$ ), demonstrating no significant link between NC and IP. However, H5, which predicted a significant relationship between NC and DT, was supported ( $\beta=0.222$ ,  $t=4.173$ ,  $p < .001$ ). Additionally, H6 claimed that CC significantly related to IP found empirical support ( $\beta=0.171$ ,  $t=2.437$ ,  $p = .015$ ). Lastly, H7 posited a significant relationship between CC and DT, which was strongly supported ( $\beta=0.363$ ,  $t=5.144$ ,  $p < .001$ ).

According to Zhao et al. (2010), the indirect effect of  $a*b$  should be measured first to test for mediating effects in PLS. Secondly, determine the size of the mediation. Finally, the results were analyzed using bootstrapping with 5,000 subsamples and bias-corrected 95% confidence intervals (CI) (Hair et al., 2016; Zhao et al., 2010). In an analysis of the mediating role of digital transformation (DT) on the relationships between various forms of organizational commitment and individual performance (IP), the

**Table 4.** Mediation analysis.

	Total effects		Direct effects	
	Coefficient	t-value	Coefficient	t-value
AC → IP	0.360	4.610	0.314	3.822
NC → IP	0.085	1.428	0.046	0.740
CC → IP	0.236	3.523	0.171	2.437
Indirect effects				
Hypotheses	Coefficient	t-value	p-value	CI [2.5%–97.5%]
H8: AC → DT → IP	0.046	2.657	0.008	.016–.083
H9: NC → DT → IP	0.040	2.392	0.017	.012–.078
H10: CC → DT → IP	0.065	2.852	0.004	.024–.114

following results were obtained and are presented in Table 4. The total effect of AC on IP was significant, with a coefficient of 0.360 and a  $t$ -value of 4.610. The direct effect of AC on IP, bypassing DT, remained significant, with a coefficient of 0.314 ( $t=3.822$ ). The indirect effect of AC on IP through DT (H8) was also significant, with a coefficient of 0.046,  $t$ -value of 2.657,  $p$ -value of 0.008, and a 95% confidence interval of 0.016 to 0.083. This suggests partial mediation, as both the direct and indirect paths are significant (Baron & Kenny, 1986). NC exhibited a smaller total effect on IP (coefficient = 0.085,  $t=1.428$ ) and a non-significant direct effect (coefficient = 0.046,  $t=0.740$ ). However, the indirect effect of NC on IP through DT (H9) was significant, with a coefficient of 0.040,  $t$ -value of 2.392,  $p$ -value of 0.017, and a 95% confidence interval of 0.012 to 0.078. Given the non-significant direct effect, this could be indicative of full mediation, where DT fully accounts for the effect of NC on IP (Baron & Kenny, 1986). Lastly, CC showed a significant total effect on IP (coefficient = 0.236,  $t=3.523$ ) and a significant direct effect (coefficient = 0.171,  $t=2.437$ ). The indirect effect of CC on IP through DT (H10) was significant, with a coefficient of 0.065,  $t$ -value of 2.852,  $p$ -value of 0.004, and a 95% confidence interval of 0.024 to 0.114, which also suggests partial mediation, with both direct and indirect paths being significant.

## Discussion and conclusion

Initially, the results of this study reveal a statistically significant and positive relationship between affective organizational commitment and individual performance in public organizations in Cambodia during the Covid-19 pandemic. This finding is crucial as it underscores the importance of employees' emotional attachment and identification with their organization in enhancing their job performance. The fact that this relationship holds in the unique context of a global health crisis and within the Cambodian public sector adds a new dimension to our understanding of organizational dynamics. The findings align with the exiting studies like those of Ribeiro et al. (2020), and Alqudah et al. (2022) have underscored the integral role of affective commitment in enhancing employee performance. Similarly, Karem et al. (2019) noted its significance among nursing professionals. This study extends these findings into the context of the Cambodian public sector during a global crisis, offering a new perspective. What sets this study apart is its focus on the public sector during a pandemic, a context not extensively explored in previous literature. While studies like those of Astuty and Udin (2020) and Alshaabani et al. (2021) have discussed the mediating role of affective commitment in various organizational contexts, the unique challenges and stressors presented by the Covid-19 pandemic in a public sector setting like Cambodia's provide fresh insights into how affective organizational commitment functions under extraordinary circumstances. Thus, the findings suggest that organizations aiming to improve performance in such contexts should focus on strategies that foster emotional bonds and commitment among employees. This could include initiatives to build a supportive and inclusive organizational culture, provide adequate support during crises, and recognize and value employees' contributions. Such approaches are not only beneficial for employee well-being but also for the overall effectiveness and resilience of organizations in times of crisis.

Secondly, the findings reveal a statistically significant and positive relationship between affective organizational commitment and digital transformation in public organizations in Cambodia during the Covid-19 pandemic. This indicates that employees' emotional attachment and identification with their organization play a pivotal role in facilitating and enhancing digital transformation initiatives. In the rapidly evolving landscape of digital technology, especially during a global crisis, this relationship gains

relevance, suggesting that the success of digital transformation is closely linked to how emotionally invested employees are in their organization. The current study's findings align with the broader narrative in existing literature about the importance of affective commitment in organizational change and adaptation. For instance, Hanelt et al. (2021) and Wessel et al. (2021) highlighted the complexity of digital transformation, emphasizing the need for a distinct approach from general IT change management, where affective commitment plays a crucial role.

Similarly, the research by Li et al. (2021) on the alignment of employee commitment with organizational mindfulness for digital agility resonates with the findings of this study, underlining the importance of affective commitment in achieving digital transformation. However, this study diverges in its focus on the Cambodian public sector during the Covid-19 pandemic, a context not extensively explored in previous studies. This unique setting adds a layer of complexity. It provides new insights into how affective commitment influences digital transformation in a high-pressure and rapidly changing environment.

Further, this study delved into the dynamics of digital transformation and its impact on individual performances within public organizations. A notable outcome of digital transformation was the evident improvement in employee efficiency and productivity. This enhancement was marked by increased adaptability to new technologies and workflows, significant skill development, particularly in digital competencies, and an observable improvement in employee satisfaction and engagement. These findings resonate with the broader impacts of digital transformation noted by Chouaibi et al. (2022), especially in understanding the balance of risks and benefits. This alignment extends to the work of Chen and Kim (2023), where the mediating role of innovation factors in digital transformation and performance is highlighted. However, our research diverges from the findings of Esses et al. (2021), who focused on the indirect influence of digital transformation on performance through sustainability in Central Europe. In this context, our study offers novel insights, particularly in the unique setting of the Cambodian public sector during a global health crisis.

Likewise, the key findings from this study underscore a substantial positive relationship between normative organizational commitment and individual performance. In the unique context of the COVID-19 pandemic, this relationship gained additional layers of complexity. Enhanced job satisfaction, improved productivity, and increased adaptability to organizational changes during the pandemic were observed among individuals with higher levels of normative commitment. The findings of this study are in line with previous research, such as the works of Soomro and Shah (2019), Suharto and Hendri (2019), and Ribeiro et al. (2020), which highlighted the positive impact of normative commitment on individual performance and creativity. The study also resonates with sector-specific insights from Cherif (2020) and Kareem et al. (2019), emphasizing normative commitment's role in enhancing job satisfaction and performance. However, our research offers novel insights by exploring this relationship within the unique context of the Cambodian public sector during a global health crisis.

Additionally, data in this work reveal a statistically significant and positive relationship between normative organizational commitment and digital transformation. This highlights the influential role of employees' adherence to and belief in the values and goals of their organization in successfully navigating and implementing digital transformation initiatives. It indicates that beyond the technical and strategic aspects of digital transformation, the normative commitment of the workforce is a crucial driver in this process. This aligns with existing work highlighting the importance of employees' commitment to organizational values for driving digital transformation initiatives (Jafari-Sadeghi et al., 2021). Also, the insights from El Hilali et al. (2020) and Hrustek (2020), while not directly addressing normative organizational commitment, suggested that such commitment could influence digital transformation. This study provides empirical evidence supporting this inference. Equally, it extends the understanding of normative commitment's role in digital transformation, particularly in a public sector context and during a global crisis. This offers a new perspective compared to the existing literature, primarily focusing on private sectors or specific industries like agriculture and sustainability.

Moreover, the study confirms a statistically significant and positive relationship between the continuance of organizational commitment and individual performance. This implies that the employees' perceived cost of leaving their organization, which characterizes continuance commitment, is positively associated with their job performance. This relationship is particularly significant in the context of the uncertainties and challenges posed by the pandemic, offering new insights into the dynamics of

employee commitment and performance. This resonates with the study by Suharto and Hendri (2019) and Grego-Planer (2019), which demonstrated a significant impact of the continuance of organizational commitment on job performance and organizational citizenship behaviours, respectively. Similarly, in their study on authentic leadership and individual creativity, Karem et al. (2019), in the healthcare sector, and Ribeiro et al. (2020) found that continuance commitment influences various aspects of job performance, including creativity and innovation. While Cherif (2020) explored this relationship in the banking sector, the present study extends these findings to the public sector during a global health crisis, a context not widely examined in existing literature. Thus, it provides empirical evidence in a unique setting, adding to the understanding of how continuance commitment influences performance in public sector organizations during challenging times.

Equally, data reveals a statistically significant and positive relationship between the continuance of organizational commitment and digital transformation. This indicates that employees' commitment, based on the perceived cost of leaving their organization, is crucial in facilitating and sustaining digital transformation efforts. The findings highlight that continuance commitment, often driven by practical considerations, is a significant factor in the successful adoption and implementation of digital initiatives. This aligns with Llopis-Albert et al. (2021) and Melović et al. (2020), who found that organizational commitment significantly influences the success of digital transformation in specific sectors. This study extends these findings to the public sector, showing that continuance commitment similarly impacts digital transformation. In addition, this work focuses on the public sector during a global health crisis adds a novel dimension to the existing literature. It explores how continuance commitment influences digital transformation in a context characterized by high uncertainty and rapid change, as Winarsih et al. (2021) addressed digital transformation challenges in SMEs during COVID-19, underscoring the need to understand the role of organizational commitment. This study fills that gap by providing insights into the public sector's similar challenges and transformations.

Significantly, the finding of partial mediation for the relationship between AC and IP through DT exposes that employees' emotional attachments and identification with their organization can enhance performance via the adoption and utilization of digital technologies. However, this relationship is not exclusive, indicating that AC influences IP through both direct and DT-mediated pathways. This suggests that while digital transformation initiatives are vital in harnessing the positive effects of AC on IP, they are not the sole mechanism. Emotional and psychological connections to the organization can directly motivate employees to perform better alongside the efficiencies and capabilities enabled by digital tools. This aligns with the work of Alshaabani et al. (2021), which found AC as a mediator between perceived organizational support and employee performance, suggesting that the emotional and psychological aspects of commitment play a significant role in how employees engage with their work. The partial mediation observed here emphasizes the importance of nurturing AC not just for its direct impact on performance but also for its potential to enhance the effectiveness of digital transformation efforts.

However, this data suggests that the full mediation for the relationship between NC and IP through DT is particularly intriguing. It suggests that the sense of obligation employees feel towards their organization fully translates into performance improvements through the mechanisms and processes enabled by digital transformation. This indicates that in the context of public organizations in Cambodia during the COVID-19 pandemic, digital tools and practices were the exclusive pathway through which NC impacted IP. This finding diverges from traditional views that normative commitment influences performance through various mechanisms, including loyalty and a sense of duty that may not necessarily be linked to digital processes. The unique context of the pandemic and the rapid pivot to digital work environments may have amplified the role of digital transformation as the primary channel through which normative feelings of obligation and duty translate into performance. This underscores the transformative potential of digital technologies in leveraging normative commitment for organizational benefit, especially in crises where traditional modes of expressing commitment may be disrupted.

Ultimately, the observation of partial mediation for the relationship between CC and IP through DT indicates that the calculative aspect of commitment, where employees weigh the costs and benefits of staying with an organization, influences performance both directly and through the efficiencies gained from digital technologies. This suggests that while digital transformation initiatives play a significant role in how CC impacts IP, employees' cost-benefit analyses also have a direct effect on their performance,



independent of digital interventions. This finding adds a layer of complexity to the understanding of how continuance commitment influences performance. Unlike affective or normative commitment, where emotional or ethical motivations might be more directly enhanced by digital transformation, continuance commitment's impact on performance through DT is less straightforward. Employees may perceive digital transformation efforts as increasing the benefits of staying with the organization, thereby improving performance. However, this is not the sole factor driving their performance. Thus, the partial mediation highlights the need for a nuanced approach to digital transformation, one that recognizes and addresses the varied motivations behind employee commitment. For organizations, particularly in the public sector, during times of crisis like the COVID-19 pandemic, understanding these dynamics can aid in crafting strategies that not only implement digital technologies but also align with the different commitment types to maximize performance outcomes.

## Conclusion

This study has illuminated the intricate relationships between organizational commitment types (affective, normative, and continuance) and individual performance, as well as the pivotal role of digital transformation within public organizations in Cambodia during the COVID-19 pandemic. It underscores the significance of affective organizational commitment in enhancing job performance, highlighting the importance of employees' emotional attachment and identification with their organization. The research findings reveal that such commitment not only directly impacts performance but also plays a crucial role in facilitating and enhancing digital transformation initiatives, thereby indirectly influencing performance. Similarly, normative and continuance commitments are shown to have significant impacts on both individual performance and digital transformation efforts, albeit through different mechanisms. The study's exploration of the mediating role of digital transformation in the relationship between organizational commitment and individual performance adds a novel dimension to our understanding. It demonstrates that digital transformation acts as both a direct and indirect conduit through which various forms of organizational commitment can affect employee performance. This insight is particularly valuable in the context of the COVID-19 pandemic, which has necessitated rapid digitalization across sectors, including the public sector in Cambodia.

Theoretically, this work contributes to the organizational behavior and digital transformation literature by providing empirical evidence of the dynamics between organizational commitment, digital transformation, and individual performance in a unique context. It extends existing theories by showing how emotional, normative, and calculative commitments influence performance outcomes, both directly and through the facilitation of digital transformation. This study enriches our understanding of commitment-performance linkages in the context of crisis-induced digital transformation, offering insights into how different types of commitment interact with digital initiatives. Practically, the findings offer guidance for policymakers and organizational leaders, especially within the public sector, on enhancing employee performance and driving successful digital transformation during crises. Organizations should focus on strategies that foster a strong emotional bond and commitment among employees, such as building a supportive and inclusive organizational culture, providing adequate support during crises, and recognizing and valuing employees' contributions. Furthermore, the study highlights the importance of aligning digital transformation initiatives with the organizational commitment types to maximize performance outcomes. This suggests that successful digital transformation requires more than just technological investment; it necessitates a nuanced understanding of employee commitment and engagement.

## Limitations and future research

While providing valuable insights into the interplay between organizational commitment, digital transformation, and individual performance in public organizations in Cambodia during the Covid-19 pandemic, this study has certain limitations that pave the way for future research. This study, while providing valuable insights into the dynamics of organizational commitment, individual performance, and digital transformation in the Cambodian public sector during the COVID-19 pandemic, is subject to several limitations

that warrant consideration. Firstly, the research is contextually limited to public organizations in Cambodia during the COVID-19 pandemic. While this focus offers detailed insights into this specific setting, it may limit the generalizability of the findings to other sectors, countries, or contexts not affected by similar crisis conditions. The unique socio-economic and cultural landscape of Cambodia, combined with the specific challenges of the pandemic, may influence the dynamics of organizational commitment and digital transformation in ways that are not fully applicable elsewhere. Secondly, the study's reliance on self-reported measures for assessing organizational commitment, individual performance, and digital transformation initiatives may introduce bias. Respondents' perceptions and self-assessments can be influenced by various factors, including social desirability and personal reflection, which may not accurately reflect actual conditions or outcomes.

Although self-reported data are widely used in organizational research, they are not without limitations in terms of objectivity and accuracy. Thirdly, the cross-sectional design of this research limits its ability to establish causality between organizational commitment, digital transformation, and individual performance. While significant relationships have been identified, it is not possible to definitively determine the directionality of these relationships over time. Longitudinal studies would be needed to observe how these dynamics evolve and interact across different stages of a crisis or digital transformation process. Fourthly, the study does not fully explore the potential moderating or mediating variables that could influence the relationships between organizational commitment, digital transformation, and individual performance. Factors such as leadership style, organizational culture, technology readiness, and external environmental conditions could play significant roles in shaping these dynamics. A more nuanced understanding of these relationships would require further investigation into these and other possible influencing factors. Finally, the operationalization of key constructs, such as digital transformation and individual performance, may vary across different organizations and sectors. The measures used in this study are based on the researchers' conceptualizations. They may not capture all aspects of these complex phenomena. Future research could benefit from employing a broader range of indicators and methodologies to assess these constructs more comprehensively.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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