

Editorial: Digital transformation, knowledge transfer and policy recommendations: some insights from Bangladesh, India, Indonesia and Saudi Arabia

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Introduction

New and emerging technologies have a significant impact on citizens, companies and economies worldwide. New generations of digital technologies provide innovative solutions that facilitate the transition toward a digital and green future. Governments should leverage these opportunities to design and implement strategies, policies and instruments that support technology transfer, foster strategic research collaboration between academia and industry and promote the development of scientific networks (European Commission, 2026; Gao *et al.*, 2025; Zhang *et al.*, 2025; Zhang *et al.*, 2023, 2024; Yang *et al.*, 2026).

Contents of the issue

Issue 7 of *Journal of Science and Technology Policy Management* contains a collection of nine scientific papers addressing key issues for competitiveness of companies and economies around the world: artificial intelligence, blockchain, digital transformation, e-Money, fintech, knowledge transfer, metaverse, policy and Wealth-tech, among other topics. The issue provides empirical evidence from Bangladesh, India, Indonesia and Saudi Arabia.

The first paper titled “*Catalysts of successful WealthTech continuous usage: the role of fit factors, usage experience and digital nudging*” (by Jisham, Selvaraj and John) affirms that “driven by the explosive growth of artificial intelligence, WealthTech has played a pivotal role in reshaping the wealth management industry in recent years. Within this context, this study aims to explain the antecedents of users’ continuance intention to use the WealthTech platform by integrating the technology continuance theory (TCT), task-technology fit (TTF) and digital nudging. To empirically test the research model, an online survey was conducted among 337 investors who had previously used WealthTech platform. The authors used partial least squares structural equation modeling (PLS-SEM) to assess the research model and test the hypotheses. PLS-SEM results show that the proposed model has moderate explanatory power in explaining WealthTech continuance intention. The results also found that attitude, digital nudging and satisfaction are important drivers in promoting WealthTech continuance intention. According to importance performance map analysis, digital nudging, expectation confirmation and satisfaction are critical factors in explaining continuance intention, which require managerial action. To the best of the authors’ knowledge, this is one of the earliest studies that analyze the determinants of WealthTech continuance intention by integrating TCT with TTF and digital nudging. The study’s findings highlight the importance of fit factors and digital nudging in promoting successful WealthTech services”.

The paper “*Framework and Policy Recommendations for the Design of Metaverse Platforms in Support of Saudi Vision 2030*” (by Alotaibi, Alharbi, Alhalabi and Malibari) proposes “a framework that describes the critical features and design elements that should be considered when creating a metaverse platform. This metaverse framework will assist in



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achieving the goals of Saudi Vision 2030, specifically in making the applied technology transformation goal a reality. In addition, this paper offers valuable recommendations and insights for policymakers to guarantee the actualization of the digital transformation associated with the metaverse in Saudi Vision 2030. This research plans to address the gaps by conducting a thorough literature review to examine the characteristics and design elements of the latest metaverse platforms. It proposes a suggested framework that discusses the distinctive features that should be considered when creating any metaverse platform. In addition, the research provides policymakers with important recommendations and insights to ensure effective contribution to the digital transformation goals of Saudi Vision 2030, thereby supporting the scientific development of the metaverse platform. After a deep review of the literature, this paper proposes a conceptual framework, which identifies the most important design features and elements that need to be considered when building a metaverse platform, which will be a critical component of the digital infrastructure. These design elements include immersive engineering, accessibility, privacy, security, interoperability, digital assets and regulations. They are essential to developing a powerful metaverse platform that has all the features of this virtual reality environment. Immersive engineering concepts in the metaverse world aim to improve user experience by creating more realistic, interactive and engaging virtual environments”.

The paper “*Understanding technology transfer effectiveness in emerging economies: Policy lessons for India*” (by Roy) states that “despite technology transfer being emphasised in most public policy documents globally, it is not always clear how its effectiveness plays out in developing and emerging economies. This paper aims to bridge this gap by providing a systematic understanding of the processes of technology transfer, the antecedents and determinants, and finally how to measure its effectiveness, particularly in technologically dependent and emerging economies. Four major elements of technology transfer are discussed, namely, transfer object, actor characteristics, transfer environment, local environment and how they interact to determine effectiveness. Thereafter, the study shifts its focus to India’s evolving science technology and innovation (STI) ecosystem and discuss the current status, structure and major stakeholders associated with technology transfer. The study also reflects upon the challenges that inhibit effective technology transfer in India. In the last part, the study offers policy recommendations for improving the effectiveness of technology transfer, keeping in view India’s sustainable developmental goals. A significant distinction of the conceptual model from its predecessors lies in its examination of the four dimensions of technology transfer effectiveness through the lens of developing and emerging economies, keeping in mind the inherent strengths, weaknesses and STI practices of the attendant local economy. As a novel contribution, the paper also discusses India’s evolving STI ecosystem backed by recent policy initiatives on technology transfer and the major stakeholders involved”.

The paper “*Adoption of Cloud-based Accounting Solutions in Micro, Small and Medium-sized Enterprises: Insights from the Kingdom of Saudi Arabia*” (by Alshenaifi and El Sayad) presents the results of a study that studies “the extent to which micro, small and medium-sized enterprises (MSMEs) in Saudi Arabia are adopting cloud-based accounting systems, what cloud accounting technologies MSMEs are using and the factors that affect cloud accounting system adoption. The technology, organizational and environmental model was used to assess the factors that affect the adoption of cloud accounting systems. Data were collected via a survey distributed to MSME owners, directors and chief executives in Saudi Arabia. The final sample comprised 174 participants. Descriptive statistics, multiple response analysis and logistic regression were used to analyze the data. This study’s findings show that many MSMEs currently do not use cloud accounting. The findings also show that

Sage One and Xero Accounting are the main cloud accounting technologies MSMEs use. Perceived benefits, security concerns, organizational readiness, government support and vendor support were found to significantly influence the adoption of cloud accounting systems, while compatibility, firm size, top management support and intensity of the competition were not found to affect MSMEs adoption of cloud accounting technologies. To the best of the authors' knowledge, this study is the first to explore cloud accounting adoption by MSMEs in Saudi Arabia. It empirically shows the extent to which cloud-based accounting systems are used in MSMEs and the significant factors influencing the adoption of these systems".

The paper "*Determinants of knowledge transfer activities among university researchers: a systematic review*" (by EL Houari and Idrissi Fakhreddine) identifies "the key determinants of knowledge transfer (KT) activities among researchers. This study systematically reviewed KT literature in academic settings from 1995–2023. The authors searched Web of Science and Scopus using predefined keywords, following PRISMA guidelines for screening and eligibility assessment. From 158 selected articles, the authors extracted data and conducted a descriptive analysis to map KT activities' evolution. A narrative synthesis approach categorized determinants of researchers' KT activities. The systematic review findings revealed a general conceptual framework that categorizes the identified determinants of KT into four categories. At the individual level, the factors are related to the sociodemographic characteristics of the researcher (e.g. gender, age, experience), their psychological aspects (e.g. attitude, intrinsic motivation, intention) and personal characteristics (e.g. self-efficacy, communication skills). At the research team level, leadership style and team dynamics. At the organizational level, the findings emphasize university characteristics (e.g. size, structure and ranking), KT culture installed and university resources. At the inter-organizational level, the key determinants were funding sources, network strength and trust. The studies included in our database were different in terms of contexts, country of the study, the disciplines of KT and the types of KT activities examined. This variety restricts the direct comparison of research findings thus the generalizability of our conclusions. Future research should focus on specific contexts, disciplines, countries or types of KT activities to provide generalizable findings".

The paper "*The eMoney revolution: how culture and technology drive adoption and use*" (by Rahmiati, Hoque, Susanto, Al Mamun, Mazumder and Ahmed) affirms that "the use of electronic money (eMoney) as a noncash payment method is gaining popularity globally. However, the usages of eMoney are culturally influenced and can vary within a country. These cultural disparities can result in divergent patterns of eMoney adoption and use. This study aims to investigate the factors influencing the adoption and use of eMoney in Indonesia. This study integrated the unified theory of acceptance and use of technology model with Hofstede's cultural dimensions to develop a framework examining both technological and cultural perspectives. Data was collected through an online survey of 484 Indonesians and analyzed using partial least squares structural equation modeling. The results showed that the constructs of the unified theory of acceptance and use of technology model, namely, performance expectancy, effort expectancy, social influence and facilitating conditions, all had a significant impact on behavioral intention to adopt eMoney as well as actual usage. However, not all of Hofstede's cultural dimensions moderated these relationships as hypothesized. Surprisingly, masculinity/femininity and power distance emerged as important moderators of eMoney usage. This integrated model provides valuable insights into how to consider cultural influences when designing strategies to promote new payment technologies in Indonesia. The findings point to both technological and cultural factors shaping patterns of adoption and use of eMoney in the country".

The paper “*Blokchain Use in high-tech supply chain: a new perspective of the Unified Theory of Acceptance and Use of Technology*” (by Khelil, Snene Manzli and Louzir Ben Hassine) explores “the impact of blockchain use on the performance of supply chain in the high-tech industry and to elucidate the main factors that drive managers to adopt blockchain in high-tech firms. This study adopts the unified theory of acceptance and usage model and extends it with external constructs such as ‘Trust,’ ‘Technology Readiness,’ ‘Compatibility’ and ‘Awareness.’ The paper uses a quantitative and exploratory approach, collecting and analyzing data from 250 high-tech firms worldwide, using the partial least squares structural equation modeling approach. The findings emphasize the strategic importance of blockchain for supply chain performance in these firms. Furthermore, the results indicate that facilitating conditions, ease of use, technology readiness, compatibility and subjective norms are key enablers for blockchain adoption in high-tech firms. This research advances the literature on technology adoption in the supply chain field, with special focus on blockchain. The field is strengthened by investigating the determinants and barriers to adopting technology within high-tech firms, emphasizing the necessity of developing blockchain literacy for successful international transactions”.

The paper “*Payment Fintech Application Adoption in Low-Income Groups: How Financial Literacy Moderates Influencing Factors?*” (by Singh, Rafat and Srivastava) presents the results of a study that “aims to determine the factors that influence payment Fintech application adoption intention among low-income groups in India. This study used an expanded technology acceptance model (TAM; covering perceived usefulness, perceived ease of use, social influence, perceived risk and financial literacy), which was tested using 310 low-income respondents in Northern India. The PLS-SEM approach was used to analyse the data. The results indicate that perceived usefulness, perceived ease of use, social influence and financial literacy all have a direct positive relationship with the intention to use Fintech. Furthermore, financial literacy was found to be the moderator in moderating the relationship between social influence and intention to use the Fintech app. This study ameliorates existing research and deepens the authors’ understanding of users’ intentions to use Fintech among low-income groups. The findings of the study help both policymakers and academicians in designing effective strategies for promoting Fintech usage. This study examines the factors that determine Fintech application adoption, particularly among low-income individuals. The TAM framework was expanded to include perceived risk and financial literacy as two of the factors influencing Fintech adoption. Furthermore, the moderating role of financial literacy on intention to use Fintech app was considered in this study in the context of a developing country such as India”.

The paper “*Unification of Fintech Platforms: Reshaping the Bangladeshi Financial Frontier*” (by Rahman, Ghosh and Mahmud) studies “the integration of technology platforms of Fintech service providers in Bangladesh and its outcome on the users’ acceptance and intention to use it. It has considered Bangla QR, a Bangladesh-specific unified payment platform, for the said purpose. The study investigates the usage and acceptance of Bangla QR’s financial service application by collecting data on user demographics and usage patterns. The data have been collected from Bangla QR users who have firsthand experience using a unified payment system in Bangladesh. Structural equation modeling (SEM) has been used to analyze the data and investigate the relationships between latent constructs, such as Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM) and Behavioral Intention (BI). Results reveal that the experience of users from earlier platforms and their expectation of improved technologies have a positive and significant relationship with the behavior intention of users regarding the acceptance of a fresh fintech platform. Specifically,

PE, EE and FC have a significant effect on HM. Moreover, HM mediates the relationship between PE and BI, EE and BI and FC and BI. Startlingly, SI does not affect HM and BI. The study posits that users of Bangla QR are embracing the unified payment scheme willingly. Experience with new technology in the financial aspects has given them the confidence to continue this in the future. However, social awareness about the intrinsic worth of unified payment should be raised by financial institutions and regulators in Bangladesh. The lack of Bangla QR's accessibility limits the number of respondents, and its newness hinders the researchers from focusing on price value and habit constituting BI. platform in Bangladesh. Second, it uses the UTAUT2 model with modifications as per the requirement of the study. Finally, this study theorizes specific reasons to develop the overall scenario of a unified payment system in the future in Bangladesh".

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