

# Guest editorial: “Digital transformation of healthcare and finance: the role of blockchain, fintech and AI”

This Special issue of the *American Journal of Business (AJB)* presents the selected refereed papers of the Digital Transformation of Healthcare and Finance: The Role of Blockchain, Fintech and AI from the joint International Conference on Healthcare IT Advancement (ICHITA), and Western Michigan IT Forum that was hosted by the Department of Business Information Systems at the Haworth College of Business. The key theme of this conference was how information technology has and will impact the two broad fields of healthcare and finance.

The conference brought together business leaders, academics, administrators and students from across the globe to exchange ideas and discuss challenges and opportunities in these fields. Panel and poster sessions were also held in the areas of artificial intelligence, blockchain, health informatics and financial technologies. The initial screening/review process resulted in 14 submissions being presented at the conference. The special issue considered 18 submissions, including eight invited from the conference for publication. Four excellent papers after the completion of the full *AJB* review process are published in this issue.

The first paper (or one paper) provides an analysis of the field of financial literacy. This bibliometric analysis provides insight into the development of financial literacy and the issues scholars have and will face, and increasing awareness will have individuals make informed choices. Policymakers should also benefit from the comprehensive review to aid in future policy settings.

The second paper takes what might seem to be a unique approach to studying the application of ethical AI requirements in a healthcare use case. The results are based on a hackathon session to bring together students and experts to evaluate the challenges of an existing AI solution against EU Trustworthy AI requirements. A healthcare research team participated in the Hackathon by presenting the use case and then analyzing and assessing the outcomes' usefulness. The teams had to discuss and provide recommendations on seven requirements for the use case. The results show that educational resource application is effective for trustworthy AI in a real use-case, healthcare. The results of an ethical AI hackathon have resulted in recommendations for an AI solution in the healthcare domain.

The third paper looks at a different application in the healthcare field. Smart technologies are experiencing exponential growth in healthcare systems. Healthcare and smart technologies are becoming more intertwined. The paper explores the factors that influence human health and healthcare systems and the advent of new technologies. The study designed a conceptual model to investigate the elements that affect individuals' openness to accepting and using mobile healthcare applications. The results indicate that the identified factors, user preference, consultant preference, developer preference, and mediating variable (performance) have a positive and significant impact on the acceptance of mobile healthcare technologies. Mobile health technologies (mHealth apps) can have a remarkable role in preventing and treating a medical condition.



The fourth paper investigates the determinants and effectiveness of blockchain adoption and organizational performance in health care. As in implementing new requirements, an organization must primarily have top management support, readiness and competitive pressure. The results show that technology does improve results, but the keys are the non-technological factors of employee training and development to ensure they have the appropriate knowledge and skills to manage blockchain technologies effectively.

The *AJB* and the joint conference congratulate the guest editorial team for managing the article reviews and selecting papers for inclusion in this special issue. The editor and guest editors thank all Digital Transformation of Healthcare and Finance contributors. The future of healthcare and finance will continue to advance with the robust development of information technology and digital applications.

Sincerely,  
Utkarsh Shrivastava (primary guest editor),  
Mohammad Daneshvar Kakhki (guest editor),  
Jiahe Song (guest editor),  
Matthew M. Ross (guest editor).

**Utkarsh Shrivastava**

*Haworth College of Business, Western Michigan University, Kalamazoo, Michigan, USA*

**Mohammad Daneshvar Kakhki**

*Department of Business Information Systems, Haworth College of Business,  
Western Michigan University, Kalamazoo, Michigan, USA*

**Jiahe Song**

*Department of Business Information Systems, Western Michigan University,  
Kalamazoo, Michigan, USA, and*

**Matthew M. Ross**

*Department of Finance and Commercial Law, Western Michigan University,  
Kalamazoo, Michigan, USA*