

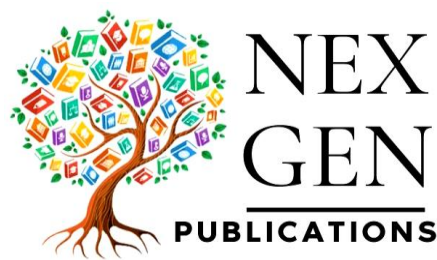
# SUSTAINABLE DIGITAL TRANSFORMATION

## WITH AI IN FINANCE AND ENTREPRENEURIAL ECOSYSTEMS



Dr. Ankit Raj Singh  
Kamal Krishna

# Sustainable Digital Transformation with AI in Finance and Entrepreneurial Ecosystems



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# Sustainable Digital Transformation with AI in Finance and Entrepreneurial Ecosystems

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## Preface

The contemporary global economy is witnessing a profound shift driven by rapid advancements in digital technologies and artificial intelligence (AI). Across industries, digital transformation has become a strategic imperative, reshaping organizational structures, decision-making processes, and value-creation mechanisms. Within this evolving landscape, sustainability has emerged as a critical lens through which digital innovation must be understood, implemented, and governed. This book, *Sustainable Digital Transformation with AI in Finance and Entrepreneurial Ecosystems*, is positioned at the intersection of these transformative forces.

Artificial intelligence has increasingly become a cornerstone of modern financial systems and entrepreneurial ecosystems. From intelligent banking solutions and algorithmic decision-making to data-driven entrepreneurship and platform-based business models, AI-driven innovations are redefining efficiency, scalability, and competitiveness. However, alongside these opportunities arise significant challenges related to ethical governance, data security, regulatory compliance, social inclusion, and long-term economic resilience. Sustainable digital transformation therefore demands a balanced approach—one that aligns technological advancement with responsible innovation and societal well-being.

This book aims to provide a comprehensive examination of how AI-enabled digital transformation can be harnessed to foster sustainable growth in finance and entrepreneurial ecosystems. It explores the convergence of digital technologies, sustainable development principles, and AI-driven innovation, highlighting their collective role in redefining financial inclusion, risk management, governance frameworks, and entrepreneurial value creation. By integrating conceptual perspectives with practical insights, the volume addresses

both the opportunities and constraints associated with AI adoption in rapidly evolving digital environments.

The scope of this book extends across key domains, including intelligent financial services, fintech innovations, data analytics, digital governance, ethical AI adoption, and sustainable entrepreneurship. Special emphasis is placed on understanding how AI can support long-term economic impact while mitigating systemic risks and unintended consequences. The discussions presented aim to bridge the gap between theory and practice, offering insights that are relevant to both academic inquiry and real-world application.

It is intended to serve as a valuable resource for researchers, policymakers, practitioners, and students who are engaged in shaping resilient, inclusive, and future-ready digital economies.

**Dr. Ankit Raj Singh**

**Kamal Krishna**

## Acknowledgement

The editors would like to express their sincere and profound gratitude to all individuals and institutions who contributed, directly or indirectly, to the successful completion of this book, *Sustainable Digital Transformation with AI in Finance and Entrepreneurial Ecosystems*. The development of this volume has been a truly collaborative academic endeavour, supported by the collective efforts of many stakeholders.

First and foremost, we extend our deep appreciation to the contributing authors for their valuable scholarly contributions, intellectual rigor, and unwavering commitment to advancing knowledge in the domains of artificial intelligence, finance, sustainability, and entrepreneurship. Their diverse theoretical perspectives, empirical investigations, and insightful analyses have been instrumental in shaping the academic depth, coherence, and interdisciplinary relevance of this volume.

We are also sincerely grateful to the reviewers and subject matter experts whose constructive feedback, critical evaluations, and scholarly guidance significantly enhanced the quality, clarity, and academic integrity of the individual chapters. Their thoughtful observations and recommendations ensured that the book adheres to high academic standards and contributes meaningfully to ongoing research and professional discourse.

The editors acknowledge with gratitude the support and encouragement received from their respective academic institutions, colleagues, and broader research communities. The intellectual environment fostered by these institutions provided an essential foundation for scholarly engagement, collaboration, and the successful execution of this work.

Our sincere thanks are extended to the publishing team for their professional guidance, editorial expertise, and consistent support throughout the publication process. Their efficiency, cooperation, and attention to detail played a vital role in transforming this manuscript into its final published form.

We wish to express our heartfelt appreciation to our families and well-wishers for their patience, understanding, and unwavering encouragement throughout the course of this academic endeavour. Their continued support has been invaluable in enabling the completion of this work.

**Dr. Ankit Raj Singh**

**Kamal Krishna**



## About the Editors



**Dr. Ankit Raj Singh** is an esteemed academician, researcher, and innovator with over a decade of experience across academia, industry, and research. He currently serves as Assistant Professor of Management at the Panipat Institute of Engineering and Technology (PIET), Samalkha (Panipat), where he teaches courses in Marketing, Brand Management, Corporate Social Responsibility, and International Trade.

He earned his Doctorate in Management from Sharda University, with a research focus on wellness tourism and consumer behaviour. Dr. Singh has published extensively in Scopus-indexed, ABDC-listed, and UGC Care journals, and has presented his work at numerous national and international academic conferences. He has also served as editor of several academic volumes in business and management studies.

With over six years of industry experience in the travel sector, Dr. Singh has contributed to corporate training programs for organizations like Hindustan Coca-Cola Pvt. Ltd. and Tata Power Solar India Ltd. An avid traveler, he has explored all 24 Indian states and 7 Union Territories, which informs his deep understanding of customer behaviour and service dynamics.

A staunch advocate for innovation and Intellectual Property Rights (IPR), Dr. Singh holds multiple design patents and copyrights granted by the Government of India. His research and teaching focus on wellness tourism, consumer behaviour, digital marketing, organizational change, and AI in management. He is actively guiding PhD scholars and postgraduate students in research and innovation projects.

Dr. Singh also holds several key leadership roles at

PIET, serving as Chairman of the Placement & Summer Training Committee, and as a member of both the Research & Development Committee and the Internal Quality Assurance Cell (IQAC). He is also deeply engaged in community development through Rotary International's CSR initiatives, including education, health, and environmental programs. His exceptional contributions have earned him recognition in social service activities, along with commendable service in Delhi Civil Defence.

Through his academic leadership, research innovation, and social commitment, Dr. Singh continues to shape the future of business management education across India and beyond.



**Mr. Kamal Krishna** is an emerging academic and education professional with a strong multidisciplinary footprint across management, technology, and sustainability. Actively involved in major institutional initiatives, he has played key roles in organizing management development programs, international conferences, and workshops on research, with a focus on AI, innovation, leadership, and the future of work.

Mr. Krishna has an impressive publication record that includes multiple book chapters, contributions to edited books, and peer-reviewed research papers across areas such as entrepreneurship, human resource analytics, digital transformation, educational policy, and sustainable business. He frequently collaborates with faculty and researchers from reputed institutions across India, including professors from prominent central universities, strengthening a nationwide network of interdisciplinary scholarship.

He has presented his work at numerous national and international conferences, contributing to academic dialogue with clarity and rigour. He has also been successful in competitive forums, having won major pitching events, which reflects his ability to translate research into practical, high-impact solutions.

Mr. Krishna's professional trajectory demonstrates a sustained commitment to bridging theory and practice, fostering innovation in business education, and advancing collaborative research across India.

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## ABOUT THE BOOK

*Sustainable Digital Transformation with AI in Finance and Entrepreneurial Ecosystems* by **Dr. Ankit Raj Singh and Kamal Krishna** offers a comprehensive exploration of how artificial intelligence is reshaping financial systems and fostering resilient entrepreneurial ecosystems. The book examines the convergence of digital technologies, sustainability principles, and AI-driven innovations that are redefining decision-making, risk management, financial inclusion, and business scalability.

Through conceptual discussions and practical insights, the authors highlight the role of AI in areas such as fintech, digital banking, investment analytics, startup financing, and smart entrepreneurial platforms. Special emphasis is placed on sustainable value creation, ethical AI adoption, data-driven governance, and long-term economic impact. The book also addresses challenges related to regulation, data security, and responsible innovation in rapidly evolving digital environments.

Designed for academicians, researchers, policymakers, finance professionals, and entrepreneurs, this work serves as a valuable reference for understanding how AI-enabled digital transformation can drive sustainable growth, innovation, and competitiveness in finance and entrepreneurial ecosystems globally.



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