



ASEAN International Sandbox Conference 2025
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Editorial Note

ASEAN International Sandbox Conference Proceedings - Volume 7

Dear Readers and Fellow Academicians,

As we present Volume 7 of the ASEAN International Sandbox Conference proceedings, we find ourselves at a pivotal moment in academic discourse. Since our establishment in 2022, AISC has served as a vital platform for innovative research and scholarly exchange across the ASEAN region. Today, as we navigate an era of unprecedented global challenges, two dominant themes have emerged at the forefront of academic inquiry: sustainability and digital transformation.

The convergence of these themes is not merely coincidental—it represents a fundamental shift in how we approach research, innovation, and knowledge creation. The climate crisis demands urgent action, while digital technologies offer both solutions and new complexities. As academicians, we stand at the intersection of these forces, uniquely positioned to drive meaningful change through rigorous research and evidence-based insights.

This volume reflects the intellectual diversity and depth that has come to define AISC. Each paper published herein contributes to a larger narrative about our collective future. Whether exploring renewable energy systems, examining the environmental impact of digitalization, investigating sustainable urban planning through smart technologies, or analyzing the socioeconomic implications of green digital transitions, our contributors are addressing the most pressing questions of our time.

The Call for Academic Leadership

The question that emerges is not whether these trends matter—their significance is undeniable. Rather, we must ask ourselves: What is our role as academicians in shaping sustainable, digitally-enhanced futures? How can our research transcend traditional disciplinary boundaries to address the interconnected challenges facing our societies?

The papers in this volume demonstrate various approaches to this challenge. Some directly tackle sustainability metrics in digital systems, while others examine how emerging technologies can accelerate sustainable development goals. Still others investigate the social dimensions of these transformations, ensuring that technological progress serves human flourishing and environmental stewardship equally.



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Research as Catalyst for Change

Each contribution in this proceedings serves multiple purposes in addressing global sustainability and digital transformation trends. These studies provide empirical foundations by offering robust data and evidence that inform policy decisions and industry practices across the region. Beyond data collection, the research demonstrates methodological innovation, developing new frameworks and approaches for studying complex socio-technical systems that traditional disciplinary boundaries often fail to capture adequately. The papers also engage in critical analysis, examining the unintended consequences and ethical implications of technological solutions that might otherwise be adopted without sufficient scrutiny. Importantly, these contributions offer distinctly regional perspectives, providing ASEAN-specific insights that consider local contexts, cultures, and development priorities often overlooked in global discourse. Finally, the research serves as interdisciplinary bridge-building, connecting insights across fields to foster the holistic understanding necessary for addressing interconnected global challenges.

Looking Forward

As we advance into an increasingly complex global landscape, the research presented in AISC proceedings must continue to evolve. We encourage our academic community to consider not just what we study, but how our methodologies, collaborations, and dissemination strategies can amplify impact. The sandbox concept that defines our conference—a space for experimentation, innovation, and learning—becomes ever more relevant as we tackle challenges that require creative, adaptive approaches.

The sustainability-digital nexus will undoubtedly continue to shape research agendas across disciplines. Our responsibility extends beyond producing knowledge to ensuring that this knowledge translates into meaningful action. Each paper in this volume represents a building block in the larger edifice of understanding we must construct together.

We invite you to engage deeply with these contributions, to question assumptions, to identify connections across seemingly disparate topics, and to consider how your own research might contribute to this vital conversation. The future depends not on any single breakthrough, but on the collective wisdom and collaborative spirit that defines our academic community.

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ASEAN International Sandbox Conference