Feature Articles

This month's focus: AI in Accounting and Auditing

An Introduction to Artificial Intelligence: Machine Learning, Natural Language Processing, Computational Simulation, and Related Topics

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In recent years, there has been a growing interest in artificial intelligence at various levels of society. This paper provides an overview of several artificial intelligence themes that are closely related to accounting and finance, including machine learning, natural language processing, and computer simulation.

Evolution and Transformation of Management Accounting with AI

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Focusing on the relationship between AI and management accounting, this study explores how the application of AI can contribute to the evolution and innovation of management accounting. Based on the management accounting system, we investigate and clarify the effects and challenges that AI brings to management accounting from both theoretical and practical perspectives. The results show that AI has the potential to evolve management accounting and transform management. More specifically, three management innovations, "forward-looking management," "real-time management," and "automation of management," can be realized through the application of AI. Through this paper, we provide a deep understanding of the relationship between AI and management accounting, and offer guidelines that managers and management accountants can use to apply AI strategically and effectively.

Accounting/Financial Analysis in the AI Era: A New Paradigm for Accounting Research

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Breakthroughs in data and AI technology have advanced the use of machine learning for corporate valuation and securities analysis. In this paper, I review previous studies, mainly in English, and find that AI auditors and analysts can, in some cases, outperform human auditors and analysts. On the other hand, it also suggests that humans and machines have their own unique strengths and weaknesses, and that combining them may lead to better predictions.

Feature Articles

AI/Audit

Tomoaki Geka, Yuichi Miyamura, Junya Kishi & Takashi Mori

AI is a powerful solution for improving audit efficiency and quality and meeting the needs of various stakeholders for reliable financial reporting. However, there are also limitations and challenges related to AI in auditing.

This paper shares actual examples of AI being used in financial audits to demonstrate effective use cases and the capabilities required of certified public accountants.

Article

How Fintech Expands Financial Possibilities: Functional Analysis of Technological Innovation and Implications for the Asset Management Industry

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Fintech, along with the popularization of smartphones and cloud computing, has allowed the emergence of a variety of low-cost services. These changes are likely to reduce the marginal cost of service delivery, thereby changing the nature of financial services and ultimately leading to improvement of user well-being. In this context, the ability to provide human-centered advice will become a challenge for the asset management industry.