Editorial

This special issue of *The Swiss Journal of Business Research and Practice* focuses on the Promises and Challenges of Artificial Intelligence. The rapid growth of artificial intelligence in recent years has led to its use in a variety of areas, including visual perception, speech recognition, and decision-making. AI has the potential to make businesses more efficient and effective by improving products and services and discovering new patterns through data analysis. However, AI also poses ethical challenges such as biases and trust issues. This special issue aims to provide a platform for original theories, methods, and approaches that contribute to a better understanding of the ethical implications of AI and how to frame it with legal, governing, and managerial principles. The issue invited submissions from all disciplines of management and related areas to explore questions such as which areas of business can AI replace human judgment, how ethical behavior and decision-making can be implemented in AI, and the role governing bodies should play to ensure ethical use of AI.

The issue focuses on the intersection of artificial intelligence (AI) and accounting and finance. The four articles share a common theme of exploring the use and implementation of AI, with each article approaching the topic from a different angle. The first article emphasizes the need for interpretable machine learning techniques to detect accounting fraud, while the second article examines the value of AI implementation from an investor's perspective. The third article proposes a governance framework for AI to address ethical concerns in organizations, and the fourth article explores the relationship between trust and acceptance of AI-based investment recommendations in the context of robo-advisory services. While each article provides unique insights, the common thread is the potential benefits and challenges of AI in the accounting and finance domain.

Leonhard J. Lösse and *Barbara E. Weißenberger* discuss the importance of detecting accounting fraud using machine learning models but points out that most models focus on accuracy, which leads to a high number of false-positive predictions that hinder practical application. Therefore, the article argues for the need for interpretable machine learning techniques that provide additional explanations, enabling plausibility checks and investigations. The paper analyzes the legal and organizational conditions that drive the need for interpretability from the perspective of primary user groups, including audit firms, enforcement authorities, and investors. The analysis suggests that machine learning models for detecting accounting fraud without additional transparency are reasonable only under narrow assumptions, and requirements for interpretable fraud predictions are derived for each user group. The article also discusses the importance of effective human-machine interaction for successful machine learning-based accounting fraud detection in highly regulated settings. The study is limited to accounting and information systems literature and encourages future research to cover multiple perspectives, broaden research on enforcement, and evaluate models' explanations locally for individual predictions.

Tawei Wang and *Ju-Chun Yen* discuss a study that explores whether the implementation of artificial intelligence (AI) brings value to organizations from an investor's perspective. The study uses AI-related disclosures and risk factors in 10-K filings as a proxy for a

firm's AI implementation. The results suggest that investors positively value firms with AI disclosures compared to those without. Additionally, AI-related risk factors are value relevant, particularly those related to regulation and security. The study also finds that IT governance plays a role in enhancing investor confidence regarding how firms address AI-related risks. The study has limitations, including the use of a single keyword to search for AI disclosure and a focus on board- and executive-level IT governance. Future research may consider exploring AI disclosures from less regulated channels and a wider range of emerging technologies.

Richard Sentinella, *Maël Schnegg*, and *Klaus Möller* discuss the challenges of implementing artificial intelligence (AI) in organizations due to ethical concerns such as transparency, fairness, and human well-being. To address these challenges, the authors propose a St. Gallen Governance Framework for Artificial Intelligence that focuses on identifying stakeholder concerns, building a management control system, assigning roles and responsibilities, and incorporating dynamism into the system of governance. The framework is developed based on insights from literature review and case studies of four large Swiss organizations. The authors argue that a well-conceived governance framework can help organizations mitigate ethical concerns and ensure successful adoption of AI. The article also discusses the importance of stakeholder involvement and strategic goals in the governance of AI systems, and the roles and responsibilities in AI governance frameworks. The quick pace of development of AI-based systems and novel AI methods requires organizations to have interaction and dynamism within their governance framework. Finally, the article highlights the importance of organizations keeping in mind their strategic goals when developing their AI governance frameworks.

Tobias Schütz, *Cindy Schröder*, and *Carsten Rennhak* discuss a study on the relationship between trust and acceptance of AI-based investment recommendations in the context of robo-advisory services. The study focuses on the three dimensions of trust, i.e., ability, benevolence, and integrity, and examines their impact on the acceptance of investment recommendations. The results suggest that trust in robo-advisory services increases the tendency to follow its recommendations, with ability and integrity yielding significance. The study provides insights into the importance of perceived trustworthiness in technology-based recommendations and contributes to research on technology acceptance and trust. The study was conducted through an online experiment in the form of an investment game, with 91 participants. Limitations of the study include a need for further research to evaluate the validity of perceived trustworthiness and the absence of a significant effect of trust after a negative experience with the recommendation. The research suggests that providers of robo-advisors should invest in measures that increase the perceived ability of the technology and actively communicate integrity-enhancing features to their customers.

This issue also features an additional contribution from Andreas R. Schmid, Heidi E. Bodenmann and Fabio Arena that investigates the employment turnover of family firms, in post-mergers situations.

The editorial that you read so far was (almost fully) generated using Artificial Intelligence and, more specifically, ChatGPT from OpenAI.

In our first naïve attempt, we aimed at gradually constructing a discussion with the robot. We first asked it whether it knew *The Swiss Journal of Business Research and*

Practice and if it could help us with preparing an editorial. We then submitted the call for paper and gradually asked to read some previous editorials to learn the structure of an editorial. Unfortunately, the limit of the machine was quickly reached as the robot would forget what it was previously told and produced an editorial on a totally disconnected topic. In a second attempt, we provided it with very detailed guidance, followed by the content of the material potentially useful to the writing of the editorial (the papers, the call, and previous editorials). There again, we forfeited. The prompt was too long to be processed at once. The third attempt consisted of us asking the robot to first generate summaries of the papers, before bringing them together to investigate their commonalities and divergences. It is the one that you could read here.

If at first some capabilities appear to be fascinating, the limits of the technology are still very detrimental. The robot managed to extract some main points of a paper but could not propose a critical perspective on each paper. The selection of key aspects appears to be at worst random and, at best, based on the length during which the arguments were developed in the paper. The short exercise highlights the difficult balance between the too-open prompt, leading to general content, and the too-specific prompts, leading to scarce or off-topic answers. The reader will also question the relevance of using an artificial intelligence engine that will have required several attempts and the development of a high number of prompts for an average result. This exercise was "just" about rewriting existing content, so to say a conformist predictable task. Fed with the right prompts an AI will probably be able to execute these tasks in the future very efficiently, as it can be done 24/7 highly automated at minimal cost. But this is not a contribution to solve the grand challenges of mankind: creative, breakthrough innovations will not be created this way. In our setup, we controlled the inputs very clearly, which is typically not the case. So, it is highly unclear which texts and other inputs are used by AI. Next to the definitely impressive abilities, which can and will be exploited by business and society in the future, we are facing severe problems with truth, sources, risk, control – the whole purpose of designing the right governance. It is not the first time over the last century that mankind faced a great technology leap bearing severe risks for society: nuclear power, cloning, and space exploration, just to name a few. In all these cases parallel to the technology, a sound and restricting global governance was established, in order to control – as much as possible – the new possibilities.

It seems necessary for a responsible discipline like business research to point to the potentials as well as risks of AI, which we do in this issue. The market is eager to support the deployment of such technologies and it is in line with the results of Wang et al. In well-defined use cases, in which machines can be pre-disposed and setup for a specific task, trust can be enhanced for the users, as shown by Schütz et al. Yet, practical applications of AI also showed that the field is populated with risk and limitations. The use of AI should be governed by robust controls ensuring its safe used as showed by Sentinella et al. The use of technology can also lead to increased layers of security by helping at detecting fraud as indicated by the paper of Lösse et al.

We benefited greatly from the interdisciplinary discussions of the different projects and would like to thank the Swiss National Science Foundation National Research Program 77 "Digital Transformation" for support, especially the module on the interplay between digitalization and ethics, trustworthiness, and governance.

We hope you enjoy reading this issue of the Swiss Journal of Business Research and Practice!

Klaus Möller & Maël Schnegg