

Report on the 5th International Conference “Digital Transformation and Sustainability in Global Financial Economics”*

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On 25 September 2025, the 5th edition of the conference “Digital Transformation and Sustainability in Global Financial Economics” was held at Andrásy University Budapest, marking this institution’s 5th anniversary. The conference also received financial support from Bosch Hungary for the first time. About 50 experts (mainly from Austria, Germany, Hungary, and Switzerland) presented and discussed the latest findings on digitalisation and sustainability in finance. A total of 19 research projects were presented, organised into six sessions. Each presentation was followed by a discussion, which kept the conference lively and open to constructive feedback from the audience. Two keynote speeches were also highlights of the conference.

1. Initial situation

The rapid advance of digitalisation poses profound strategic, operational and organisational challenges for a company’s finance, management accounting, and financial accounting functions. Digital transformation requires organisations to shift from traditional, often linear, and document-centric processes to integrated data-driven architectures supported by automation, analytics, and platform technologies. In the finance domain, automation through robotic process automation (RPA), artificial intelligence (AI), cloud-based enterprise systems, and platform economies are reshaping core transactional activities such as bookkeeping, financial reporting and compliance monitoring. While these technologies create significant efficiency gains, reduce transaction costs and minimise manual errors, they also increase dependencies on high-quality data, interoperable IT infrastructure, and robust governance mechanisms (Davenport – Ronanki 2018). Digital transformation is associated with a shift from retrospective variance analysis to forward-looking strategic decision support. Advanced analytics and machine learning enable

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predictive forecasting, scenario modelling, and continuous performance monitoring. This transition redefines the management accountant's role from report producers to proactive business partners, requiring analytical literacy, data governance expertise, and strong cross-functional collaboration skills (Moll – Yigitbasioglu 2019). However, the integration of algorithmic decision tools raises challenges related to model transparency, bias mitigation, and the appropriate division of tasks between human judgment and automated insights. Ensuring explainability and accountability is essential for managerial trust and the effective use of digital tools. Accounting functions face their own set of transformation pressures. The rise of real-time data processing, digital invoices, distributed ledger technologies such as blockchain, and globally connected cloud platforms have opened up new opportunities for the transparency, traceability, and auditability of financial information. However, these developments also heighten exposure to cybersecurity threats, increase the complexity of compliance with international reporting standards, and require continuous updates to internal control systems (Yermack 2017). Additionally, auditors and accountants must adapt to new forms of digital evidence and automated audit trails, challenging traditional assurance procedures, and professional skill profiles.

Across all three areas – finance, management accounting, and financial accounting – digitalisation is not solely a technological challenge, but also a cultural and organisational one. Successful transformation requires substantial investments in digital capabilities, workforce reskilling, and change management. Employees must be prepared to interact with data-driven systems, interpret analytical outputs, and contribute to the iterative process redesign. Leadership commitment and a clearly articulated digital strategy are critical for aligning systems, competencies, and governance structures (Brynjolfsson – McAfee 2014). Moreover, organisations must balance innovation with risk management to ensure that the adoption of emerging technologies does not undermine data integrity, ethical standards, or regulatory compliance.

Market requirements, including the expectations of market players and regulations, place similarly complex and challenging demands on the triad of finance, management accounting, and financial accounting in terms of companies' sustainability efforts and their communication. Regulatory pressure, stakeholder expectations, and global frameworks – such as the EU Corporate Sustainability Reporting Directive (CSRD) and Task Force on Climate-related Financial Disclosures (TCFD) – compel firms to integrate environmental, social, and governance (ESG) considerations into core decision-making. However, this integration brings substantial methodological, organisational, and strategic challenges. In finance, sustainability activities require the alignment of capital allocation and investment decisions with long-term ESG risks and opportunities. Traditional financial models

often struggle to incorporate non-financial externalities, uncertain climate scenarios, and long-term societal impacts (Sullivan – Mackenzie 2006). Financial managers must redesign valuation methodologies, adjust risk models, and justify investments whose returns may be less immediate but strategically essential. Additionally, sustainable finance instruments, such as green bonds, demand rigorous verification and risk assessments to avoid “greenwashing” concerns (Flammer 2021). The shift towards integrated performance management presents significant challenges for management accounting. Management accountants must establish systems capable of measuring and monitoring ESG performance indicators that are heterogeneous, partly qualitative, and lack global standardisation. Integration of sustainability metrics into planning, budgeting, and incentive systems requires new data governance structures, interdisciplinary collaboration, and the ability to reconcile potential conflicts between short-term financial targets and long-term sustainability goals. This makes management accounting more complex and increases reliance on cross-functional expertise. Accounting, perhaps, faces the most profound transformation. Sustainability reporting has evolved from voluntary disclosure to regulated assurance-relevant reporting. However, ESG data often suffer from limited reliability, inconsistent measurement methodologies, and fragmented reporting frameworks (Kotsantonis – Serafeim 2019). Accountants must address challenges related to data quality, internal control systems for non-financial information, and the need for assurance of sustainability statements. The incorporation of climate-related risks, such as impairment testing or provisioning, into financial statements adds additional technical complexity.

Similar to the previous four conferences on Digital Transformation and Sustainability in Global Financial Economics (Ender et al. 2025; Herberger – Kuttner 2024; Herberger 2023; Herberger 2022), many participants from research, teaching, and business practice gathered at the fifth anniversary conference at Andrassy University Budapest to exchange ideas on these challenges and critically discuss possible solutions to specific problems in the finance, management accounting, and financial accounting industry.

2. Summary of the presentations of the conference

The first keynote, delivered by industry expert *Galina Biel*, Director Operations Accounting and Controlling GS Hungary, Serbia, Slovenia, and Croatia at Robert Bosch Kft, offered a comprehensive look at the digital transformation journey of a global industrial company. Biel highlighted key technologies, including process automation through RPA, machine learning-based forecasting tools, cloud platforms for real-time reporting, and intelligent workflow systems. A core theme of her presentation was the need to standardise global financial processes. In a group with numerous national subsidiaries, one of the biggest challenges was harmonising

different data structures, system landscapes, and compliance requirements. Biel illustrated how Bosch had established uniform process models and eliminated redundant workflows through digital initiatives – an essential step in realising economies of scale and increasing transparency. Another focus is on personnel and skill change. Biel emphasised that digital transformation went far beyond technological renewal. What was needed was the cultural realignment of the entire finance organisation: management accountants had to increasingly develop analytical, technological, and communication skills. The roles were changing from number-oriented “scorers” to data-driven business partners who supported strategic decision-making. Biel’s reflection on change management was particularly valuable: Digital transformation could only succeed if employees were actively involved, trained, and supported in their willingness to learn. Several contributions throughout the remainder of the conference scientifically substantiated this human factor.

The first scientific session examined digital innovations and their diffusion in finance and management accounting departments. *Felix Fischer* and *Michael Kuttner* (Salzburg University of Applied Sciences) analysed factors that promoted and inhibited the spread of digital concepts in finance functions. Their systematic approach showed that technological possibilities alone were not enough: organisational commitment, data quality, and internal champions were crucial. *Faris Getzin* (HTW Berlin), *Thomas Henschel* (HTW Berlin), *Michael Kuttner*, and *Earl McKinney* (Bowling Green State University, USA) discussed the role of institutional constraints on AI adoption in SMEs and derived the reform needs for management accounting. *Luca Hüvel* and *Alexander Bull* (IU International University) presented an AI-supported management accounting system that realised efficiency gains in a shared service centre. Their paper discussed concrete use cases for algorithmic decision support. *Maximilian Gill* (University Witten/Herdecke) examined the monetary mechanisms of Ethereum. His analysis illustrated how blockchain protocols created incentive systems with economic and regulatory implications.

In a parallel session that focused on sustainability reporting and regulatory challenges, *Ute Laun*, *Melanie Fürch*, and *Manuel Gesslein* (HSLU Lucerne) provided an overview of the developments in ESG reporting. *Julius Jensen* (Andrássy University Budapest) examined the influence of tax transparency through country-by-country reporting on profit shifting in multinational companies. *Manuela Ender* (IU International University) discussed the tension between circular economy and Solvency II risk reports in the insurance sector. *Jens Müller-Merbach* (Frankfurt University of Applied Sciences) critically analysed the usefulness of ESG indices against the backdrop of methodological challenges and potential distortions. This session demonstrated how complex sustainability reporting remained due to regulatory fragmentation and a lack of standardisation.

The banking sector was caught between regulation, sustainability, and changing customer expectations. This development was discussed in the first afternoon session by *Yanik Bröhl* and *Arnd Wiedemann* (University of Siegen). *Lukas Bauer* and *Florian Follert* (Private University Schloss Seeburg) analysed the “decoupling” of Austrian banks between the aspirations and reality of European environmental regulation. *Tatiana Nikitina* and *Maria Skalaban* (St. Petersburg State University of Economics) showed how savings behaviour could contribute to stability and sustainable capital allocation in households. *Florian Perst* (IU International University) examined the gaps between the digital customer journey and customer expectations in the German banking industry. The session highlighted that banks had to simultaneously navigate digital, regulatory, and environmental transformation paths.

In another afternoon session on the topic of “Shaping Competitiveness” the focus broadened to include economic resilience and business model innovation: *Maximilian Gill* and *Marcel Tyrell* (Witten/Herdecke University) analysed the financial effects of collective reputation in German quality winegrowing. *Andreas Höhn* and *Tim Herberger* (Andrássy University) examined urban vulnerabilities and business model transformations in city centres. Finally, *Karl Hanke* (Andrássy University) shed light on tenders in civil engineering involving digital Building Information Modeling (BIM) models.

In the early evening sessions, new financing methods and digital approaches to talent acquisition were presented and discussed in depth. *Jona Stinner*, *Marcel Tyrell*, and *Victor Wolff* (Witten/Herdecke University) examined private equity as a catalyst for corporate change and potential for value creation. *Moritz Baum*, *Jona Stinner*, and *Marcel Tyrell* analysed crowd investing signals in the context of subsequent venture capital financing and provided valuable insights into pricing mechanisms in venture capital markets. *Lisa Göpfert* (Andrássy University) presented a systematic literature review on digital and hybrid HR integration and the related developments and derived recommendations for different stakeholder groups. *Anke Reuter* (Andrássy University) provided an analysis of digital recruiting in SMEs and its potential to attract value-creating human capital activities. The last two presentations showed how critical digitalisation had become in dealing with the shortage of skilled workers.

The conference concluded with a second keynote speech that placed strong emphasis on theory and interdisciplinarity. *Christine Vallaster* (PLUS, Paris Lodron University Salzburg) analysed the dynamics of multi-sided digital platforms, for example, in the food industry, and showed how they were reconfiguring the institutional structures of all industries. Platforms included changing roles, power relations, information flows, and value creation logic. This had far-reaching implications. For finance: financial flows were recorded on a platform basis, in

a more granular manner and in real time; new valuation logics were emerging. Digital platforms generated new types of transaction data that challenged traditional accounting models; questions of data sovereignty, fair value measurement and automated documentation are coming to the fore. For management accounting: platforms enabled data-intensive AI-supported control mechanisms that rendered classic planning cycles obsolete. Vallaster showed that institutional change rarely occurred linearly. Platforms were rewiring entire industries, giving rise to new norms, roles, and governance structures. Her keynote speech combined technology economics theory, sustainability issues, and financial control mechanisms, opening up a transformative outlook for the future of finance.

The conference concluded with final remarks by *Tim Herberger* (Andrássy University Budapest), who summarised the day's key insights and emphasised the importance of continued dialogue and innovation at the intersection of digital transformation and sustainability in the finance sector, as well as across other disciplines in business administration and economics. The 5th Conference provided a valuable platform for discussing critical issues, from ESG performance to technological innovation in finance, management accounting, and financial accounting, inspiring participants to continue their research projects.

3. Concluding remarks and outlook

The following four lessons learned were identified from the keynote speeches and individual research papers in various sessions after intensive discussions:

The importance of digitalisation, digital transformation and sustainability in creating corporate value and developing competitive advantages is largely undisputed. However, their specific definition and mode of action remain a highly dynamic field of research, with research findings that sometimes differ considerably.

Finance, management accounting, and financial accounting, and their connection to digital transformation and corporate sustainability efforts, also have significant spillover effects on other areas of business management, such as marketing, compliance, HR, and corporate communications.

The practical transfer and implementation of research results should be optimised and further harmonised through more intensive exchanges between theory and practice to increase effectiveness and efficiency gains in relation to digitisation and sustainability efforts in companies.

There are initial indications that efforts to digitalise and automate business processes and achieve a consolidated level of sustainability activities and efforts are increasingly being viewed by the market and its participants as hygiene factors in

the valuation of companies, and that it is becoming increasingly complex to realise concrete valuation advantages by pursuing sustainability goals and digitalisation objectives.

Finally, we would like to thank all the participants, especially the speakers, discussants, and administrative team behind the curtain. All of them contributed significantly to the success of the conference. We are particularly pleased that many young academics were represented at the conference. A conference anthology (Ender et al. 2025) for the 2024 conference was published in German in the fourth quarter of 2025 by Nomos Publishing and contains many of the papers presented at IU – Internationale Hochschule in Munich in 2024. A corresponding anthology is also planned for the 2025 conference, which will probably be published in the late summer of 2026 and will include many of the papers presented. The future of the conference is also secured: it is expected to take place on 21–22 September 2026, in Puch/Salzburg at Salzburg University of Applied Sciences. A call for papers will be published in early 2026.

References

- Brynjolfsson, E. – McAfee, A. (2014): *The Second Machine Age*. New York: W. W. Norton.
- Davenport, T.H. – Ronanki, R. (2018): *Artificial Intelligence for the Real World*. Harvard Business Review, 96(1): 108–116.
- Ender, M. – Herberger, T. – Kuttner, M. (eds.) (2025): *Finance, Accounting, Controlling im Kontext von Digitaler Transformation und Nachhaltigkeit*. Nomos Verlag, Baden-Baden. <https://doi.org/10.5771/9783748962748>
- Flammer, C. (2021): *Corporate green bonds*. Journal of Financial Economics, 142(2): 499–516. <https://doi.org/10.1016/j.jfineco.2021.01.010>
- Herberger, T. (ed.) (2022): *Digitale Transformation und Nachhaltigkeit in der globalen Finanzwirtschaft*. Nomos Verlag, Baden-Baden. <https://doi.org/10.5771/9783748928812>
- Herberger, T. (ed.) (2023): *Digitale Transformation und Nachhaltigkeit in der Finanzwelt. Aktuelle Fragestellungen und Perspektiven im Kontext des finanzwirtschaftlichen Risikomanagements*. Nomos Verlag, Baden-Baden. <https://doi.org/10.5771/9783748939245>
- Herberger, T. – Kuttner, M. (eds.) (2024): *Chancen und Herausforderungen für eine digitale und nachhaltige Zukunft im finanzwirtschaftlichen Kontext*. Nomos Verlag, Baden-Baden. <https://doi.org/10.5771/9783748920229>

- Kotsantonis, S. – Serafeim, G. (2019): *Four things no one will tell you about ESG data*. Journal of Applied Corporate Finance, 31(2): 50–58. <https://doi.org/10.1111/jacf.12346>
- Moll, J. – Yigitbasioglu, O. (2019): *The role of internet-related technologies in shaping the work of accountants: New directions for accounting research*. British Accounting Review, 51(6), 100833. <https://doi.org/10.1016/j.bar.2019.04.002>
- Sullivan, R. – Mackenzie, C. (eds.) (2006): *Responsible Investment* (1st ed.). Routledge. London, <https://doi.org/10.4324/9781351283441>
- Yermack, D. (2017): *Corporate Governance and Blockchains*. Review of Finance, 21(1): 7–31. <https://doi.org/10.1093/rof/rfw074>