

Managing Knowledge for Social Impact: How Academic Research Advances Sustainable Business Practices

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Abstract: This paper investigates how academic research contributes to the advancement of sustainable business practices through knowledge management, and especially knowledge valorisation processes. Focusing on the social impact generated by research institutions within the field of business studies, the paper examines how scientific knowledge is translated into practical solutions that support sustainability-oriented change in organisations. The empirical analysis is based on a qualitative content analysis of impact-related documentation reported by Polish research institutions for the purposes of national research evaluation covering the 2017-2021 and 2022-2025 assessment periods. These materials capture a wide range of impact activities demonstrating how research findings are mobilised beyond academia and embedded in practice. The results show that academic research supports sustainability-oriented transformation primarily through organisational implementation, capacity building, and the development of management tools and frameworks, with an increasing emphasis on governance- and policy-oriented solutions. Particular attention is given to activities addressing contemporary sustainability challenges, such as ESG reporting, sustainability performance measurement, and responsible governance practices. At the same time, sustainability-related impacts are increasingly embedded in multi-domain configurations, reflecting the interconnected nature of economic, environmental and public governance challenges. The findings highlight the critical role of universities as knowledge intermediaries that actively facilitate the flow, adaptation, and contextualisation of sustainability-related knowledge between academia and enterprises. Rather than acting solely as knowledge producers, research institutions emerge as coordinators of multi-actor knowledge ecosystems in which research-based insights are co-created, refined, and applied in real organisational contexts. At the same time, the analysis reveals persistent challenges related to demonstrating and assessing social impact, especially where outcomes are qualitative, long-term, and embedded in organisational learning processes. By conceptualising social impact as a knowledge management outcome, the paper contributes to ongoing debates on the societal role of academic research and offers insights into how universities can more effectively support sustainable business practices beyond traditional commercialisation models. By conceptualising societal impact as an outcome of knowledge management and knowledge valorisation processes, this paper provides a clearer understanding of how academic research contributes to sustainability-oriented transformation and ESG-related practices in organisations.

Keywords: Societal impact, Research impact, Knowledge valorisation, ESG reporting, University

1. Introduction

In contemporary knowledge-based economies, universities are increasingly expected to contribute to solving complex societal challenges and to generate value that extends beyond academia (Etzkowitz and Leydesdorff, 2000; Kempton et al, 2021). This shift reflects a broader transformation in which universities operate as embedded actors within innovation and knowledge ecosystems, engaging with external stakeholders and supporting socio-economic development.

In this context, the concept of societal impact has gained prominence as a way of capturing the broader effects of academic research, including its influence on organisational practices, policy-making and social outcomes (Bornmann, 2013; Findler et al, 2019; Feor et al, 2023). At the same time, the growing importance of sustainability has introduced new expectations towards both organisations and research institutions. In particular, the development of environmental, social and governance (ESG) frameworks has intensified the demand for knowledge supporting sustainable decision-making, performance measurement and transparent reporting (Friede et al, 2015; Gillan et al, 2021; Christensen et al, 2021).

These developments highlight the importance of understanding how academic knowledge is translated into practical applications in the area of sustainable business practices. This process can be examined through the lens of knowledge management, with particular emphasis on knowledge valorisation as a mechanism enabling the use of research results in real-world contexts. Rather than a simple transfer, valorisation involves the adaptation and co-creation of knowledge between academia and stakeholders, leading to its implementation in organisational practices (Perkmann et al, 2013; van de Burgwal et al, 2019). From this perspective, societal impact may be seen as an outcome of such processes.

Despite the growing interest in both societal impact and sustainable businesses practises such ESG reporting, the link between these areas remains underexplored. In particular, limited attention has been paid to how

knowledge valorisation processes support the adoption of sustainability practices and ESG reporting within organisations, especially in the context of business studies.

Therefore, this study aims to examine how academic research contributes to sustainable business practices through knowledge management and valorisation processes, with a particular focus on ESG-related transformations. The analysis is based on impact case studies submitted by Polish higher education institutions within the area of business studies (called management and quality studies in Polish nomenclature) as part of the national research evaluation system for the periods 2017-2021 and 2022-2025. To achieve this objective, the following research questions were formulated:

RQ1: What types of sustainability-oriented business practices are supported by academic research, as reflected in impact case studies within the discipline of Management and Quality Studies?

RQ2: How have these sustainability-oriented practices, including ESG-related solutions, evolved across the two evaluation cycles?

By integrating perspectives from knowledge management, research impact and sustainability, the paper contributes to a better understanding of how academic knowledge supports organisational change and generates societal value in the context of ESG. This perspective makes it possible to analyse societal impact not only as an evaluation outcome, but also as a knowledge-based process through which academic research supports sustainability-oriented organisational change.

2. Theoretical Background

2.1 Knowledge Valorisation as an Element of Knowledge Management

Within the domain of knowledge management, knowledge valorisation plays a central role as a mechanism through which research outputs are transformed into societal and economic value. Knowledge valorisation refers to the processes that enable the practical use of research results, data and expertise in ways that generate benefits beyond academia (European Commission, 2022; van de Burgwal et al, 2019). While knowledge commercialisation focuses primarily on financial returns, knowledge valorisation encompasses a wider spectrum of outcomes, including social and environmental value. As such, it aligns closely with contemporary sustainability challenges and the increasing expectations placed on universities to contribute to sustainable development. Knowledge valorisation is not a linear process of transferring knowledge from academia to external users. The processes of knowledge valorisation often take place through long-term interactions between researchers and stakeholders, including joint projects, advisory activities, development of tools and frameworks, and participation in policy processes (Perkmann et al, 2013; Jacobsson and Perez Vico, 2010). In this sense, knowledge valorisation represents a particularly important dimension of knowledge management.

In recent years, discussions around knowledge valorisation have increasingly been linked to the broader concept of research impact, and more specifically societal impact. Universities are now expected not only to generate knowledge, but also to demonstrate how this knowledge contributes to real changes beyond academia, including improvements in organisational practices, public policy or social well-being (Bornmann, 2013; Dotti and Walczyk, 2022). This has led to the growing importance of societal impact as a key element of research evaluation systems in many countries, where higher education institutions are required to provide evidence of the wider benefits of their research activities (Wróblewska, 2025). Societal impact remains a complex and multidimensional concept, encompassing not only direct and measurable outcomes, but also more diffuse and long-term effects, such as changes in organisational practices, increased awareness or shifts in social norms (Findler et al., 2019). In this context, societal impact can also be understood as a key mechanism through which academic research supports sustainability transitions, as it contributes to the development and diffusion of ESG-related practices within organisations.

2.2 Societal Impact and ESG-oriented Transformation of Business Practices

Growing climate-related risks, environmental degradation and resource scarcity have intensified global efforts to promote more sustainable patterns of development in both public and private sectors. In response, sustainable development goals and related regulatory frameworks have become an important point of reference for organisations seeking to align their strategies and operations with environmental and social expectations (United Nations, 2023; European Commission, 2023; Mirón et al, 2023). Organisations are expected to respond to complex environmental, social and governance challenges in a more informed and coordinated manner (UI-Durar et al, 2023). The implementation of sustainable development principles

requires not only strategic commitment, but also the ability to acquire, interpret, share and apply knowledge relevant to responsible organisational action. In many sectors, these efforts are shaped by broader international and regulatory agendas, including the United Nations Sustainable Development Goals and the European Green Deal, as well as reinforced by growing stakeholder pressure (United Nations, 2023; European Commission, 2023). As a result, firms increasingly implement sustainability-oriented practices, tools and management systems aimed at improving ecological performance, organisational responsibility and long-term resilience, including through ESG-related practices and reporting (Barros et al, 2024; Hermundsdottir and Aspelund, 2021). ESG reporting has become an important component of contemporary corporate sustainability strategies, as it enables organisations to communicate their performance in environmental, social and governance dimensions in a structured and transparent way (Giese et al, 2019; Huarng and Yu, 2024; Lokuwaduge and Heenetigala, 2017).

In the context of sustainability, knowledge valorisation refers to translating research into practical tools, frameworks and solutions that support organisations in developing more responsible practices. Higher education institutions are therefore not only knowledge producers, but also important intermediaries that help adapt and apply sustainability-related knowledge in real organisational settings (Broccardo et al., 2025; Lozano et al., 2015; Cottafava et al., 2022; Tafese and Kopp, 2025). Through these processes, academic research can shape how organisations implement and refine sustainability practices, including those related to ESG reporting, performance measurement and governance. In this sense, societal impact emerges not only from direct outputs, but from the way knowledge is used in practice, often in collaboration with external stakeholders. Impact case studies provide a useful lens for capturing these processes, as they document how research-based knowledge is translated into organisational change.

3. Research Methodology

This study employs a qualitative content analysis of impact case studies submitted by Polish higher education and research institutions within the area of business studies (in the Polish system, referred to as the discipline of Management and Quality Studies) as part of the national research evaluation for the periods 2017-2021 and 2022-2025 in the POL-on system. These documents provide a structured and comparable source of evidence on how academic research generates societal impact beyond academia and how academic research advances sustainable business practices.

The dataset includes all publicly available case studies from the analysed periods. Content analysis was applied to identify and categorise dominant areas of impact, combining qualitative interpretation of narratives with quantitative identification of recurring patterns. To ensure analytical rigor, the study applied a structured multi-stage content analysis procedure combining both deductive and inductive coding approaches.

In the first stage, all case studies were reviewed at the level of titles and summaries to identify their dominant thematic orientation. Each case was assigned to one primary thematic category using a predefined typology of six dominant areas of societal impact, developed in previous research and applied consistently across both evaluation periods.

In the second stage, a focused sub-sample of case studies classified under the category “sustainable development, environment and ESG/CSR” (10 cases in 2017-2021 and 12 cases in 2022-2025) was selected for in-depth qualitative analysis. This step allowed for a more detailed examination of sustainability-related impact pathways while maintaining consistency with the overall thematic structure of the dataset. The coding of sustainability-related cases was conducted using a hybrid approach. Deductive coding was based on the ESG framework, distinguishing between environmental (E), social (S) and governance (G) dimensions. At the same time, inductive coding was applied to identify recurring sub-themes emerging from the data, such as circular economy, environmental management, ESG governance, public-sector sustainability policy, and energy transition. Each case was assigned one dominant sustainability sub-theme based on its primary focus, while allowing for the identification of additional overlapping elements where relevant.

The results are presented at two complementary levels:

- descriptive statistics concerning institutions and case characteristics (e.g. number of cases, reporting patterns, declared interdisciplinarity and formal impact domains),
- thematic coding of textual content (titles and summaries) into a unified typology of dominant areas of impact.

4. Research Results

4.1 Key General Characteristics of Impact Case Studies

Across both evaluation cycles, the overall scale of reporting remains highly consistent. In the 2017-2021 period, 57 institutions submitted 129 impact case studies, while in the subsequent cycle (2022-2025), 61 institutions reported 132 cases. In both periods, most institutions submitted a number of case studies corresponding closely to the minimum threshold.

A clear trend emerging from the analysis is the growing importance of interdisciplinarity. Already in the 2017-2021 cycle, interdisciplinary collaboration was reported in nearly four out of five case studies (79.8%). In the subsequent period, this share increased further to 91.7%, indicating that interdisciplinarity has become a near-universal feature of impact generation within the discipline. This pattern is also visible at the institutional level. While in the earlier cycle approximately 84% of institutions reported at least one interdisciplinary case, in the later period this figure rose to over 93%. These results suggest that impactful research in management and quality studies is increasingly embedded in cross-disciplinary knowledge flows and collaborative settings.

The most substantial structural shift between the two periods concerns the way impact is represented across domains. In the 2017-2021 cycle, case studies were typically linked to a single dominant domain, most often the economy. In contrast, the 2022-2025 cycle shows a marked transition towards multi-domain impact, with 62.9% of case studies referring to at least two areas of influence. Despite structural changes, the economic domain remains the most frequently reported area of impact in both periods (Table 1).

Table 1: Key structural features of reported impact

Indicator	2017-2021	2022-2025
Number of institutions	57	61
Number of impact case studies	129	132
% of interdisciplinary impact case studies	79.8%	91.7%
% of multi-domain impact case studies	0%	62.9%

Regarding formal areas of impact, the period 2017-2021 shows a clear concentration on the economic domain with approximately two-thirds of all cases (65.9%), followed by public administration (14.7%), while other domains appeared only sporadically. In contrast, the 2022-2025 period shows a significant expansion of non-economic domains. Public administration nearly triples in frequency, while environmental and health-related impacts become substantially more visible. Importantly, these domains increasingly co-occur, with the most common configurations combining economic impact with public administration or other societal areas (Figure 1). This pattern suggests a growing recognition of the interconnected nature of organisational, social and environmental challenges.

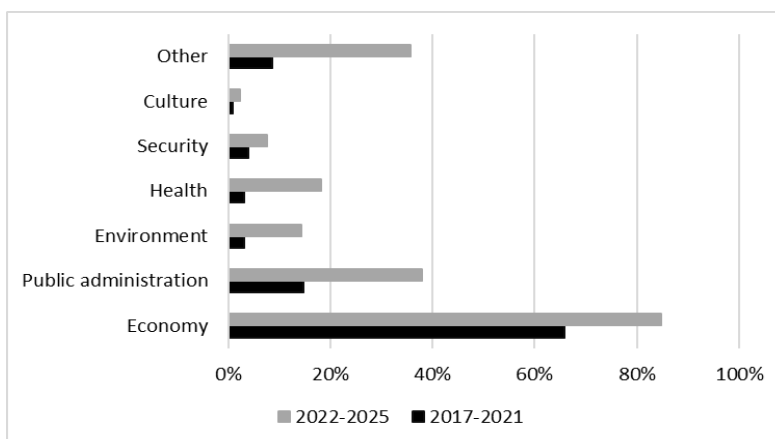


Figure 1: Evolution of formal impact domains (%)

4.2 Key Areas and Evolution of Sustainability-oriented Impact

The analysis of impact case studies classified within the thematic area of sustainable development, environment and ESG/CSR reveals a relatively modest but clearly increasing role of this domain. In the 2017-

2021 evaluation cycle, this category accounted for 7.8% of all case studies (10 out of 129), while in the 2022-2025 cycle its share increased to 9.1% (12 out of 132). Although still not among the dominant areas of societal impact, the results indicate a gradual strengthening of sustainability-oriented research applications.

The results indicate a clear structural shift in how sustainability-related impact is represented across evaluation cycles. While in the 2017-2021 period sustainability cases were predominantly associated with a single domain - most often economic or environmental - in the 2022-2025 cycle they are increasingly embedded in multi-domain configurations. In particular, sustainability-oriented impacts are more frequently positioned at the intersection of economic, environmental and public administration domains, suggesting a transition from isolated environmental contributions towards more integrated and systemic approaches to sustainability.

The qualitative analysis shows that sustainability-related impact is not homogeneous, but organised around several distinct sub-themes, with a clear shift in emphasis between the two periods. In 2017-2021, sustainability is most often framed through environmental management and circular-economy practices, typically linked to behavioural change, resource efficiency and operational improvements. In contrast, in 2022-2025 the dominant narrative moves towards governance-oriented approaches, including ESG-related capabilities, public-sector sustainability policies and emerging themes such as energy transition and decarbonisation.

This shift suggests a change in how research-based knowledge is mobilised in practice. Earlier cases tend to reflect more linear applications of knowledge, where research informs specific organisational practices or solutions. In the later period, impact is more frequently embedded in broader organisational and policy contexts, indicating more complex processes of knowledge valorisation, where knowledge is adapted, combined and applied across multiple domains. This is also visible in the growing importance of multi-domain impact, linking economic, environmental and governance dimensions.

Across both cycles, circular economy cases illustrate how knowledge is translated into practice either through business model redesign or product innovation, while environmental management cases highlight the role of research in shaping organisational behaviour and sector-level guidance. However, in the later period these themes are increasingly reframed through competencies, policy instruments or system-level solutions, rather than standalone interventions.

A particularly visible change concerns the transition from CSR-oriented approaches towards ESG as a more structured management capability. While earlier cases focus on awareness-building and the diffusion of tools, the later period emphasises the development of frameworks, maturity models and reporting systems that support organisational decision-making. This reflects a move from knowledge dissemination towards more advanced forms of knowledge application and capability building.

Public-sector cases further reinforce this pattern, showing that research impact increasingly operates at the interface of organisations and policy. In 2022-2025, sustainability-related knowledge is more often embedded in policy instruments, regulatory frameworks and decision-support systems, suggesting that knowledge valorisation extends beyond individual organisations to broader governance structures.

Finally, the emergence of energy transition as a distinct theme in the later period indicates that sustainability-related impact is becoming more closely aligned with current policy priorities and systemic challenges.

5. Discussion and Conclusions

In recent years, the growing importance of sustainability and responsible business practices has significantly influenced the nature of societal impact generated by academic research. In particular, increasing regulatory and stakeholder pressures related to environmental, social and governance (ESG) issues have created new demands for evidence-based knowledge supporting organisational transformation. Academic research in business studies plays an important role in this context by providing conceptual frameworks, measurement tools and practical guidelines that support the implementation of ESG-related practices, as stated by, among others, Cottařava et al (2022), Lozano et al (2015), or Tafese and Kopp (2025). These may include, among others, sustainability reporting systems, ESG performance indicators, responsible governance models, and tools for integrating environmental and social considerations into business strategies.

The study shows the following three key trends identified in the impact case studies submitted by Polish higher education and research institutions within the area of business studies:

- a strengthening of interdisciplinarity as a core mechanism of impact generation,
- a shift towards multi-domain representations of impact,
- and a broader diversification of impact areas beyond the economic domain.

These changes indicate that the understanding of societal impact within the discipline is becoming more complex, systemic and aligned with contemporary challenges, including sustainability and cross-sectoral transformation. From a knowledge management perspective, these trends also suggest a shift from linear knowledge transfer towards more interactive and distributed processes of knowledge creation and application, in which value is generated through knowledge valorisation across multiple domains. At the same time, the findings confirm that universities play an important role in supporting regional economic development and driving organisational change, which is also emphasised in previous studies (e.g. Kempton et al, 2021; Lilles and Rõigas, 2017; Morawska-Jancelewicz, 2022). This role can be interpreted as increasingly dependent on the ability of higher education institutions to effectively manage and valorise knowledge, facilitating its adaptation and use in organisational and regional contexts.

There is a quantitative increase in the number and share of sustainability-related case studies, although the growth remains moderate. More importantly, however, the change is visible at the qualitative level. The results suggest that sustainability-oriented impact is gradually gaining importance within the discipline, although it still remains a relatively niche area compared to more traditional domains. What changes more clearly than the scale itself is the way this impact is conceptualised and articulated. In the earlier period, sustainability tends to appear as a set of rather discrete, often environmentally focused initiatives, whereas in the later cycle it is increasingly embedded in broader organisational and policy contexts.

In particular, the shift towards ESG-related capabilities and stronger links with public governance indicates that sustainability is no longer treated as a peripheral or technical issue, but is becoming part of more systemic organisational transformation. Sustainability-related impact increasingly appears in combination with other domains of impact, particularly economic development and public governance. This reflects the growing recognition that sustainability challenges are interconnected and require integrated approaches, as it was underlined by Christensen et al (2021). This is also reflected in the growing role of multi-domain impact, where economic, environmental and governance aspects are addressed jointly rather than separately.

At the same time, the findings show that sustainability-related impact is still primarily realised through practical implementation and capacity building, suggesting that the contribution of academic research lies less in isolated outputs and more in shaping how organisations think about and operationalise sustainability in practice.

Despite its growing importance, sustainable development and ESG/CSR remain a secondary but emerging domain of societal impact within the discipline. The dominance of organizational and economic impact areas suggests that sustainability is still often embedded within broader management and business contexts rather than treated as a standalone impact domain. At the same time, the observed trends indicate that sustainability is becoming a visible direction of impact development, particularly in the context of global challenges and increasing policy and regulatory pressures. The growing visibility of ESG-related themes suggests that management research is gradually aligning with broader societal expectations regarding responsible and sustainable development.

The results highlight the role of universities as knowledge intermediaries that enable the translation of research into organisational practices and public policy instruments. Rather than acting solely as knowledge producers, higher education institutions contribute to the co-creation and application of sustainability-related solutions in collaboration with enterprises and public stakeholders, as stated by Perkman et al (2013), Kempton et al (2021), or Lilles and Rõigas (2017). From a knowledge management perspective, this role reflects the growing importance of interactive processes of knowledge exchange, where knowledge is not simply transferred but jointly developed, adapted and embedded in organisational contexts. At the same time, the analysis points to ongoing challenges in capturing and demonstrating societal impact, particularly when it takes the form of gradual organisational change, learning processes and long-term sustainability transformations.

Unlike previous studies focusing primarily on the thematic structure of research impact, this paper adopts a knowledge management perspective and conceptualises societal impact as an outcome of knowledge valorisation processes, with particular attention to sustainability and ESG-related transformations. In this sense, societal impact is interpreted not as a single outcome, but as a dynamic process through which

research-based knowledge is mobilised, translated and applied across different organisational settings. Societal impact generated by HEI's can be understood as a key enabler of sustainability-oriented transformation, supporting the development of practices, systems and decision-making processes that reduce environmental impact, improve social responsibility and strengthen governance mechanisms. This perspective highlights the central role of knowledge valorisation in bridging the gap between academic research and practical implementation, particularly in the context of complex sustainability challenges.

These findings have also managerial implications for higher education institutions, highlighting the need to move beyond knowledge production towards more structured and strategic engagement in knowledge valorisation processes. In particular, universities should develop mechanisms that facilitate the transfer and co-creation of sustainability-related knowledge with external stakeholders, thereby supporting the development of ESG-oriented organisational practices and capabilities.

This study is limited to the Polish context and relies on impact case studies reported within the national research evaluation system, which reflect only those activities that institutions chose to document. Future research could extend the analysis to other countries and conduct comparative studies to better understand cross-national differences in how academic research contributes to sustainability and ESG-related practices.

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Declaration of AI use: Artificial intelligence tools were used exclusively for language editing, with no influence on the conceptualisation, analysis or interpretation.

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