

Strategies for overcoming the challenges facing SME leaders in the transition to the circular economy

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Abstract: This article presents summarized results of a survey of SMEs in Germany on the adoption of circular economy principles. The study focuses on three main sectors: financial advisory services, real estate management and crafts. Strategies are developed to overcome the identified problems and challenges facing leaders in the transition to a circular economy. A model for sustainable management of human and natural capital in SMEs when applying ESG in their activities is proposed.

Keywords: circular economy, SMEs, sustainable management, HRM.

JEL: M1, Q01

I. INTRODUCTION

This article is dedicated to a problem caused by the limited number of scientific works and the limited practical application of integrated models for HRM in SMEs in the conditions of a circular economy. In most of the research, the circular economy is considered primarily through the prism of technologies, material flows and business models. In the scientific literature, the relationship between HRM and ESG principles is considered primarily in the context of large enterprises, while the specific conditions and constraints of SMEs remain poorly studied. The problem demonstrates itself in several main directions. On the one hand, there is a mismatch between traditional HRM practices and new requirements related to sustainability, ESG regulations, circular business models, the development of new competencies, digitalization and the need for better organizational adaptation. On the other hand, a significant part of SMEs implement individual sustainable practices, but without linking them into a comprehensive management system linking leadership and organizational development.

This hinders the integration between strategic goals, organizational culture, competency development and daily activities in enterprises.

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Human and natural capital cannot be considered separately. Natural capital sets the resource limits of economic activity, and human capital determines the ability to understand, accept and manage sustainably these limits (Schreiber et.al, 2012). Skills, knowledge, motivation, health, well-being, organizational culture and employee participation stand out as conditions through which the circular economy can be transformed from a general concept into a real management practice.

The research design is an online survey with a mixed analytical approach that combines quantitative and qualitative questions in a unified methodological logic. The survey is structured to track the transition from the general profile of the respondent and the enterprise to specific management practices related to HRM in the context of the circular economy, ESG, leadership, barriers in contemporary management practices and organizational challenges in German SMEs.

The study included SMEs from three sectors: financial advisory services, real estate management and crafts. Each sector presents a different logic of implementing the link between human capital, natural resources and the circular economy.

The purpose of this article is to present strategies for overcoming the problems and challenges identified for SME leaders as a result of research when implementing the principles of the circular economy.

II. PROBLEMS AND CHALLENGES FOR SME IN INTEGRATION OF ESG

The circular transition does not depend only on external regulations, market pressures or technological solutions, but on the internal organizational capacity of the enterprise. In this article, the authors present some of the results of a survey in German SMEs in three sectors on the adoption of circular economy principles and HRM. The financial advisory services sector is of particular importance not only due to the high representativeness of the respondents, but also due to its direct connection with the ESG orientation towards sustainable investing, sustainable financing, client trust and long-term advisory services. In

this sector, the circular economy is not manifested primarily through material flows, but through many years of investment experience, knowledge formation, consulting regulatory competencies, built trust and orientation towards sustainable, state-regulated financial products. Therefore, human capital is of particular importance. Here, managers and financial advisors must be informed and understand ESG criteria, offer sustainable investment solutions and meet client expectations.

Real estate management represents the direct link between buildings, energy, materials, resources, repairs, maintenance and the long-term value of assets. In this sector, the circular economy is associated with energy efficiency, sustainable materials, repairs, maintenance, coordination and working with external contractors and partners with sustainable practices. This creates a more complex management environment in which leadership, communication, partnerships and service are essential.

The craft sector is most directly related to circular practices because it includes repair, reuse, material efficiency, waste reduction, shared travel and practical professional knowledge. In this sector, employee skills, qualifications, work discipline, ethical attitude towards resources and the environment, as well as practical competence are directly related to the possibility of sustainable practices and successful leadership models.

The analysis of survey and interviews with managers and employees in German SMEs shows that the transition to a circular economy is taking place in conditions of several simultaneously acting deficits. These are limited knowledge about circular models, financial difficulties, organizational and cultural barriers, lack of partners and inconsistent use of digital solutions. Although SMEs are partially exempted from the full application of CSRD through the simplified VSME standard, increasing regulatory pressure and value chain requirements make ESG reporting increasingly relevant for SMEs. In this sense, it is found that knowledge related to sustainable management is mainly applied in the form of individual initiatives that are not integrated into a comprehensive management system. Although individual enterprises are already implementing measures such as: repair and extension of product life cycles, recycling, energy efficiency, and paperless work processes, these practices are rarely tied to a targeted strategy guided by leaders and HR specialists. 97.1% of respondents point to a lack of indicators for assessing leaders in relation to ESG; a culture that does not take into account the synergy of natural and human capital, 47% - insufficient training and weak motivation and incentives for implementing sustainable practices in daily work. Integrated information systems, i.e. interconnected digital solutions (Stoyanov&Anguelov, 2025) that unite different functional areas and allow for systematic collection, processing and use of data related to sustainable management, are rarely implemented. The

study can be summarized as follows: individual sustainable initiatives are observed, rarely supported by all employees in the organization. There is a lack of systematic and integrated management of human and natural capital.

From the standpoint of this study, it can be argued that overcoming these challenges requires the development of a complex of mutually complementary strategies, which the authors propose in the next section.

III. STRATEGIES FOR OVERCOMING THE IDENTIFIED CHALLENGES FACING SME LEADERS

Based on the results of the survey of SMEs in three different sectors: financial, crafts and real estate, the authors have developed the following strategies to overcome the problems and challenges of implementing the principles of a circular economy:

3.1. Strategy for financial ensuring the transition to a circular economy and the development of HRM

With a significant share of SMEs highlighting financial constraints and lack of resources as key barriers to the implementation of circular business models, it can be assumed that sustainable transformation is confronted with short-term liquidity and long-term benefits from investments in human and natural capital. The new European ESG reporting rules (CSRD) will gradually cover more companies, and the possibility for SMEs to voluntarily apply the simplified VSME standard means that they must invest in ESG systems and training, which increases the financial pressure on them. Although some enterprises are already implementing measures with saving potential, such as digitalization and energy efficiency, these initiatives are rarely planned within a targeted financial strategy for a green transition, but rather appear as reactive solutions at the operational level. As a result of this study, it is proposed that the first strategic direction for overcoming the identified challenges should be the development of internal financial frameworks that perceive the costs of training, digitalization, green technologies and process restructuring as investments in the value of human and natural capital, rather than as secondary costs. A specific strategy to address the challenges of leaders in this context is the creation of targeted budgets for the development of competencies in the field of circular economy, ESG, digital knowledge and skills, as well as for the implementation of technical solutions that lead to more efficient use of resources. In the financial services sector, this also includes the active use of ESG sustainable financial instruments as a means of supporting clients to invest in green assets, which positions SMEs not only as participants but also as facilitators of the transition to a circular economy. In this way, financial provision becomes a structural prerequisite for the systematic development of

knowledge and practices needed for sustainable management of human and natural capital.

3.2 Strategy for cultural transformation and changing employee attitudes

The survey results show the presence of pronounced cultural inertia, which manifests itself both through the preservation of established work habits and through skepticism towards sustainable concepts, including in the form of the perception of green policies as “Greenwashing”. In the context of increasing ESG requirements and preparation for compliance with ESRS, cultural resistance can become a serious obstacle to adaptation to the new regulatory environment. This research shows that strategies to overcome cultural barriers should combine information and communication tools with consistent leadership vision and ethical values. This includes explaining the importance of CSRD and ESRS requirements not only as regulatory compliance, but also as an opportunity for strategic positioning and competitive advantage.

3.3. Strategy for internal and external employee motivation

The identified challenges related to employee resistance show that sustainable transformation cannot be seen solely as a technological or financial issue, but to a significant extent as a process of mobilizing human capital. Preparing for ESG reporting and the eventual implementation of the VSME standard requires active employee engagement in the collection and validation of sustainability data. Although some SMEs already carry out training and awareness-raising as a measure to overcome barriers, the study shows that there is no systematic distinction between intrinsic motivation (meaning, values) and extrinsic motivation (incentives, recognition, well-being), which limits the effect of the initiatives undertaken.

From the perspective of this study, it can be argued that effective strategies for overcoming motivational problems should combine the creation of a meaningful context with structured incentives. Intrinsic motivation can be supported by actively involving employees in identifying and educating them about the importance of ESG reporting, their role in the process of collecting data necessary for ESRS compliance. Extrinsic motivation implies the introduction of specific incentives by including sustainable behavior in performance evaluation systems, offering intangible and tangible bonuses for participation in green initiatives, creating a work-life balance, caring for mental health, transparency and feedback. In this way, motivation is seen as a management tool for overcoming resistance and activating the potential of human capital in the transition process.

3.4 Strategy for digitalization, artificial intelligence and green transition

The survey results show that a significant proportion of SMEs have already taken concrete steps to digitalize internal processes. In the context of CSRD requirements, these existing digital capabilities can be adapted for automated collection, processing and analysis of ESG data required for ESRS reporting. This includes developing systems for monitoring energy consumption, materials used and waste generated, which are key elements of the ESRS standards. As a result of this study, it is concluded that strategies to overcome the identified challenges should build on existing digitalization through targeted use of AI and analytical tools to manage the transition to sustainability. Based on the collected data, management decisions can be made according to the sector, regarding the optimization of processes in the enterprise, the introduction of new technologies and the prioritization of investments. For HR, this implies the strategic development of digital and analytical competencies that allow the personnel responsible for human capital to work effectively with ESG data and transform it into decisions for training and coaching, motivation and team structure. In this way, digitalization and AI become key tools to support sustainable resource management and prepare for ESG reporting.

3.5 Strategy for partnerships and networks with a sustainable profile

One of the problems identified in the survey is related to the lack of partners. This problem manifests itself not only as a quantitative lack of collaborations, but also as a qualitative mismatch between the sustainability vision of SMEs and the practices along the value chain. This leads to a situation where individual companies implement circular economy and ESG measures but remain isolated within networks that operate according to the logic of the linear model, which limits the possibility of effectively closing material and information loops. In the context of the CSRD, large companies falling under the scope of the Directive will increasingly require ESG emissions data from their suppliers and partners, making partnerships with an ESG focus critical for SMEs.

From the perspective of this study, it can be argued that overcoming this deficit implies the implementation of strategies for purposeful partnership building with organizations that share a similar vision, management logic and approach to sustainable development. This includes active participation in industry and regional networks, within which the exchange of good practices takes place and conditions are created for the implementation of joint initiatives. In addition, the need to introduce ESG criteria in the selection of partners, suppliers and customers is highlighted, which allows for better coordination of actions between individual participants. In this context, the

financial services sector has a particularly high potential for developing good partnership interactions, as enterprises can combine an advisory function with the provision of financial solutions aimed at supporting green investments in other enterprises. In this way, SMEs preparing for VSME or partial ESRS compliance will have a competitive advantage as reliable partners in sustainable chains.

3.6 Strategy to reduce consumption and manage the social impacts of sustainable behaviour

While some respondents perceive the circular economy primarily through the lens of waste management and energy efficiency, this analysis shows that behind operational measures lie deeper social patterns of consumption that determine both organizational and individual behaviour. These behavioural aspects are linked to the social criteria in the ESRS standards, making their management relevant for the future of ESG reporting. The problem of resource consumption and waste, both in households and in organizational contexts, manifests itself as a systemic deficit that cannot be solved solely through technological interventions. Based on the research conducted, strategies are proposed to overcome this type of challenge, which should emphasize the social effects of sustainable behavior and connect organizational practices such as shared use of resources, reuse, repair, optimization of material flows, etc., with values and socially significant goals. This implies promoting initiatives such as shared travel, shared use of office equipment, internal systems for donating or reusing materials and products, as well as actively involving employees in local community projects related to the sustainability of the green transition.

3.7 HRM Transformation Strategy in the Context of the Circular Economy

This study found that in a significant proportion of the surveyed SMEs in Germany, HRM is implemented in an informal manner. In view of the CSRD requirements and the need for ESG data, the role of HRM as a coordinator of sustainability information becomes essential. Most often in practice, it is managed by the owner or a limited management circle, without a clear and systematic connection to the objectives of the circular economy and ESG. This leads to an initial situation in which organizational culture, selection, training, motivation and remuneration develop unevenly and remain outside the strategic focus of the enterprise, which limits their role as a tool for sustainable transition.

Based on the results obtained, it can be argued that overcoming this problem requires changing company values, systematic training and talent management in the field of sustainability, including preparation for ESRS requirements and possible VSME implementation, as well as integrating goals into the processes of selection, assessment and development of personnel potential.

In summary, it is argued that HRM has the potential to become a key mediator between the strategic intentions of management and the daily behavior of employees, thus contributing to the effective and targeted development of knowledge for sustainable management of human and natural capital (Fig. 1.)

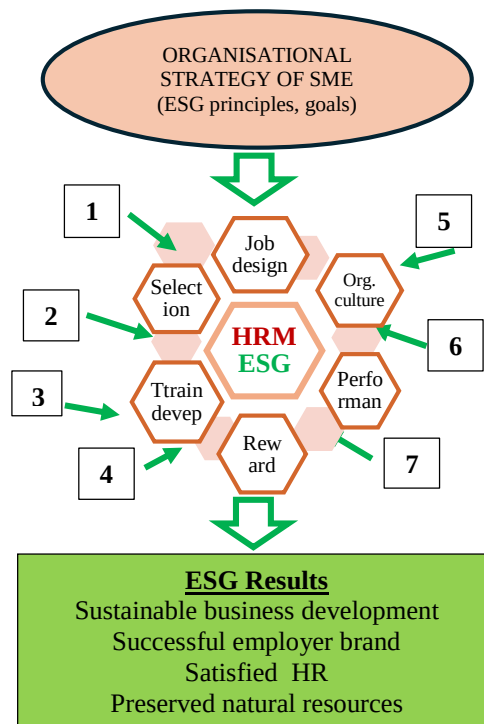


Fig.1 Model for sustainable management of human and natural capital in SMEs in the transition to a circular economy.

Where:

- 1- Strategy for financial provision of the transition to a circular economy and the development of HRM;
- 2- Strategy for digitalization, AI and green transition economy and the development of HRM;
- 3- Strategy for cultural transformation and changing the attitudes of employees towards a circular economy and the development of HRM;
- 4- Strategy for partnerships and networks with sustainable profiles;
- 5- Strategy for internal and external motivation of employees towards a circular economy and the development of HRM;
- 6- Strategy for reducing consumption and managing the social effects of sustainable behavior;
- 7- Strategy for transformation of HRM in the context of the circular economy.

IV.CONCLUSION

The challenges facing SME leaders in integrating circular economy principles are not limited to external regulatory, economic or technological factors. They are largely determined by the internal organizational capacity of enterprises to develop knowledge, ESG culture, sustainable leadership and effective practices for attracting, motivating and developing human capital. Effective transition management requires a new management capacity that brings together leadership vision, strategic HRM, digitalization, business partnerships, and employee well-being in an integrated environment for sustainable organizational transformation.

The study shows the need to develop a set of complementary strategies that include financial support for the circular transition, changing cultural attitudes and employee motivation, digitalization, use of artificial intelligence (AI), building partnerships along the value chain, managing the social effects of consumption, and transforming HRM into a strategic driver of sustainability.

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