

Fostering Employee Sustainability: Competencies Formation for a Resilient Business Environment

Vasilii Ostin *, Kateřina Maršíková

Technical University of Liberec, Faculty of Economics, Department of Business Administration and Management, Liberec, Czech Republic,

* vasilii.ostin@tul.cz

Abstract

One of the foremost challenges companies face is a cultivation of a sustainable mindset among the organization itself and its employees. This research paper aims to address this challenge by proposing a sustainability competency model that organizations can implement to bridge the existing sustainability gap in the development of their employees. The paper explores the concept of sustainable competencies within the business environment. By conducting a comprehensive literature review and synthesizing findings from multiple surveys, this study seeks to identify the critical competencies prevalent in diverse industries. The primary objective is to gain insights into the competencies that can be fostered through organizational training and development programs. The research draws on three primary surveys: the "Future of Jobs Report" by the World Economic Forum, the "Global Green Skills Report" by LinkedIn, and the "Global Workforce Hopes and Fears Survey" by PricewaterhouseCoopers (PwC). The proposed sustainability competency model offers a systematic approach to integrate sustainability principles and practices. The research findings and competency model will be further used for subsequent primary research. The model will be tested through semi-structured interviews within automotive companies to assess its effectiveness in fostering sustainability competencies among employees. These insights will contribute to validating and refining the model for driving sustainable practices in the industry. By incorporating these competencies into employee development plans, organizations can effectively evaluate the acquisition and application of sustainability skills. This research contributes to the knowledge on sustainable competencies and their significance in driving organizational success in a rapidly changing world.

Key Words

sustainable behaviour, skills, workforce development, model, industry

JEL Classification: M12, M53

INTRODUCTION

The challenges stemming from global circumstances, such as the escalating threat of global warming, the escalation of greenhouse gas emissions, evolving customer expectations, and other related factors, exert a significant impact on the imperative to cultivate and apply these competencies across diverse sectors (Kacprzak et al., 2017; Skarbale et al., 2021). This paper aims to underscore the significance of sustainable competencies within the backdrop of these global conditions and elucidate their pivotal role in attaining long-term success and sustainable development of employees nowadays. The primary goal of this paper is to ascertain the sustainable competencies exhibited by employees within the business environment. Currently, most environmentally friendly initiatives, such as sustainable supply chain, carbon business offsetting and sustainable employee engagement, primarily originate from external sources rather than businesses (Frey et al., 2023). Consequently, the adoption of sustainable initiatives appears to be

forced and unnatural. Many companies are incorporating sustainability into their overall strategies at a macro level (Keay and Iqbal, 2019). However, only a fraction of these organizations is effectively integrating a sustainable mindset from an internal perspective, encompassing employee behaviour, activities, and attitudes. The research identifies a significant research gap in the formation of a sustainable competencies structure within the business environment. Previous studies have primarily focused on specific competences of employees, without considering the broader context of the issue (Eberz et al. 2023; Moreno et al. 2021). The proposed sustainable competency model aims to address this gap by providing a comprehensive understanding of the role of sustainability across various proficiency standards. By doing so, the model seeks to offer a more holistic approach to developing sustainable competencies among employees, taking into account the multifaceted aspects of sustainability within organizations.

1. METHODS OF RESEARCH

Drawing upon a comprehensive review of relevant studies and prior research endeavours, this investigation will offer a systematic overview of the critical competencies in diverse industries. Deeper analysis will be conducted to identify the primary competencies that can be nurtured through organizational training and development programs. By examining and synthesizing existing literature, this study aims to provide valuable insights into cultivating sustainable competencies, thereby contributing to the body of knowledge in this field. This approach will facilitate a deeper exploration of the skills and knowledge required to address the challenges and capitalize on the opportunities in nowadays rapidly evolving business landscape. This study will rely on findings from three primary surveys to accomplish the aforementioned objective and establish a foundation for the subsequent competency analysis. The first survey, titled "Future of Jobs Report," was conducted by representatives of the World Economic Forum between 2022 and 2023. This report provides a comprehensive overview of job trends and projections from 2023 to 2027. The survey encompassed a diverse sample of 803 organizations operating in 45 markets, representing 27 different industries. The survey covered more than 11.3 million workers across the regions mentioned above. By leveraging the insights gleaned from this report, this study aims to gain a deeper understanding of the contextual factors and dynamics that predominantly shape the development of sustainable competencies among employees within the industries under examination (Battista et al., 2023). Another significant study, the "Global Green Skills Report," was conducted by LinkedIn in 2022. This study aimed to examine the transition towards a circular economy and the evolving attitudes of employees towards developing green competencies and skills. It covered a wide range of developed and transition economies, spanning over 25 countries. The third survey under analysis is the "Global Workforce Hopes and Fears Survey," conducted by PricewaterhouseCoopers (PwC) in 2022. This study delved into employees' perspectives on personal fulfilment, their meaning from their work, and the importance of environmental, social, and governance (ESG) factors within their respective organizations. The survey encompassed responses from 52,000 workers across 44 countries, providing valuable insights into the expectations and aspirations of the global workforce (PwC, 2022). The combined insights from analyzed studies will be a robust basis for the subsequent comparative analysis of competencies within different business contexts.

2. RESULTS OF THE RESEARCH

As companies today face tremendous pressure to adopt sustainable practices within their business environments, the role of current employees as catalysts for accepting these practices becomes increasingly crucial. The "Future of Jobs" report highlights the significance of macro trends and their influence on the current business landscape. Over the decades, the involvement of macro trends and their impact on employee competence formation has become indispensable (World Economic Forum, 2016; World Economic Forum, 2018; World Economic Forum, 2020). Job creation and changes in employee roles are significantly influenced and driven by the green transition of businesses and the implementation of ESG standards (Battista et al., 2023). According to the "Future of Jobs" report findings, more than 80.6% of surveyed organizations consider ESG standards as still developing, exerting a strong influence on the future description of employee roles. Furthermore, 67.5% of organizations surveyed reported that consumers are becoming increasingly vocal about environmental issues, while 65.1% affirmed the necessity for climate-change-induced investments to adapt company operations. According to the report, these macro trends will positively impact the creation of new job opportunities, accounting for 35.2% of the influence. Among the macro trends, investments to facilitate the green transition of businesses were identified as the most influential, resulting in 52.2%. Furthermore, the report also investigated the significance of environmental stewardship skills within the surveyed organizations. The findings revealed that there has been a notable increase in the importance of this role at work, with a 43% increase compared to previously observed periods. It indicates that companies are emphasizing environmental stewardship skills as essential attributes for employees. These findings emphasize the growing recognition of the importance of sustainable practices and the need for employees to possess the necessary competencies to address these challenges. According to Cozzi and Motherway (2021), the process of green job transition shall create 30 million job roles in accordance to environmental standards. The findings mentioned above align with another survey conducted by LinkedIn in 2022. According to this report, current workers need to acquire upskilling to facilitate the green transition within their job activities. It is crucial for organizations today to support these workers and bridge the gap in sustainable skills to ensure the inclusion of such skills in the skillset of future generations. Consequently, it is visible to identify additional significant factors that influence the development of sustainable competencies across companies. The Global Green Skills Report further reveals that sustainable employee competencies are increasing annually. However, it highlights a concerning trend where the demand for green skills is expected to surpass the available supply. The report indicates that job postings requiring sustainable skills grew by 8%, whereas the proportion of potential employees with a green and sustainable attitude increased by only 6% during the same period. These findings underline the urgency for organizations to address the skills gap and invest in upskilling, reskilling, and training programs to meet the growing demand for sustainable competencies. This assertion is supported by a study conducted by PricewaterhouseCoopers, which reveals that environmental issues and climate goals are more considered to company strategy than to be part of individual performance goals and development path (PwC, 2022). Based on researched factors which are mainly influencing sustainable development of employees it is possible to explore in detail studies which analyzed sustainable competencies across different researches. Many scholars made an effort to identify a 4 scope of sustainable competencies. The table 1 demonstrates competence frameworks that were published between 2014 and 2023, corresponding the comparison of results in different countries (see Tab. 1).

Tab. 1: Competencies framework based on previous researches

Author and Year	Study Title	Observed Competencies	Methodology
Menoyo and Novo (2014)	Sustainability competence training: a strategy for improving employability in sustainable societies	System and critical thinking with regards to socio-economic area; Understanding of the financial / economic systems and its connection with a sustainability; Anticipatory thinking with regards to nature sources consumption and associated problems; Social commitment and alternative attitude to sustainable lifestyle; Ethical commitment and identification of nature value, lifestyle, socioenvironmental consequences and individual contribution to global changes	Literature review and analysis of secondary data
Sokulski et. al (2018)	Competencies for sustainability: A proposed method for the analysis of their interrelationships	Development and application of technologies that promote carbon neutrality; Development of sewage treatment technology; Developing and applying lifecycle assessment methodologies; Extraction of natural resources in a sustainable way; Innovation and maintaining growth and profitability; Business development with regards to sustainability	Literature review with adjusted case study
Eizaguirre et. al (2019)	Defining Sustainability Core Competencies in Business and Management Studies	Commitment to the local sociocultural environment; Commitment to preserving the environment; Social responsibility and citizenship; Regard and respect for diversity and multiculturalism; Ethical commitment	Questionnaire and data analysis
Moreno et. al (2021)	Study of the Presence of Sustainability Competencies in Teacher Training in Mathematics Education	Critical, contextualization of knowledge through interrelating social, economic and environmental issues at local and global level; Sustainable use of resources and in the prevention of negative impacts on the nature and social environment; Participation in community process that promote sustainability Apply ethical principles related to sustainability values in behaviour	Primary data analysis
Eberz et. al (2023)	Taking the Lead into Sustainability: Decision Makers' Competencies for a Greener Future	Ability to analyze complex systems across primary domains (society, environment, economy); Ability to analyze and evaluate imagination about the future related to sustainability problem solving framework; Ability to design, apply, reconcile and negotiate sustainability values, principles and goals; Action and oriented ability towards sustainable strategies; Interpersonal ability to motivate and facilitate sustainability problem solving	Secondary data analysis and interviews
Bianchi et al. (2022)	GreenComp – The European sustainability competence framework	Valuing sustainability; Supporting fairness; Promoting nature; Systems thinking; Critical thinking; Problem framing; Future literacy; Adaptability; Exploratory thinking; Political agency; Collective action; Individual initiative	Mixed method research process
Silvius and Schipper (2014)	Sustainability in Project Management Competencies: Analyzing the Competence Gap of Project Managers	System thinking to analyze and understand the problem complexity; Anticipatory and ability to develop visions of possible future with regards to sustainability issues; Normative understanding of justice, equity, social and ecological integrity; Strategic ability to design and implement interventions of sustainability	Comparison analysis and literature review

Source: authors' own elaboration

According to the "Future of Jobs" report, the role of environmental stewardship has shown the most significant increase in importance among business development professionals, with a net growth of 21% compared to previous research periods. This finding highlights the growing recognition of the need for sustainability considerations in the field of business development. Many companies are actively hiring new employees for business development positions to drive innovation in technologies and processes and professionals' attitudes towards current trends. Considering the above reasons, there has

been developed in the paper a competency model for business development roles and positions (see Tab.2). However, due to the complexity of the competencies involved, it is evident that this competency model can also be applied to other related business areas. This competency model was developed based on a comprehensive literature review and secondary data analysis from the previously mentioned research studies. The primary input and foundation for creating the model was Table 1, which provided an overview of sustainability competencies identified in various educational and business domains. By utilizing this competency model, organizations can effectively identify and cultivate the necessary skills and attributes required for business professionals and related roles. The model serves as a valuable framework for aligning recruitment, training, and performance evaluation processes with the sustainability goals and requirements of the organization. It enables businesses to nurture a workforce that is equipped to navigate the challenges and opportunities of sustainable development in today's rapidly evolving global landscape. The competency model for business positions comprises four primary components. The initial section entails a compilation of employee sustainability competencies specifically designed for the business environment. By leveraging these competencies, contemporary companies can extend the integration of sustainable concepts beyond their organizational strategies and delve deeper into employee activities. The second part of the model elucidates the meaning and essence of each competency, aiming to enhance comprehension of the associated activities and future objectives. The third part delineates the utilization of each competency across three distinct levels: junior, senior, and executive. This division of competencies based on proficiency standards serves to determine the corresponding responsibilities of each involved employee, irrespective of their hierarchical position. The final component of the model pertains to the evidence type. Its principal objective is to verify and reflect each competency within the employee development path plans and standards. By employing the suggested methods, modern organizations can effectively monitor the acquisition and application of each competency. Simultaneously, before implementing the competency model, existing companies need to assist their employees in acquiring specific knowledge and skills that can bridge the sustainability gap within their development paths. Therefore, the successful integration of sustainability competencies relies heavily on training activities. Organizations that intend to leverage a competency model must proactively develop supportive sustainability courses and activities for their employees. These training initiatives should primarily be aligned with the proposed proficiency standards. Organizations can enhance their employees' capacity to effectively apply sustainability competencies within their roles and responsibilities by providing such training. Equipping employees with sustainability knowledge and skills enables them to actively contribute to eco-friendly practices, innovative solutions, and responsible decision-making. This results in reduced resource consumption, improved waste management, and the adoption of greener technologies and processes.

Tab. 2: Sustainability competency model for Business Positions

Sustainability Competencies	Description	Proficiency Standard			Evidence Type
		Junior	Senior	Executive	
Comprehensive Socio-Economic Understanding and Environmental Consciousness	<ul style="list-style-type: none"> * Knowledge of financial and economic systems and their interplay with sustainability * Anticipatory mindset regarding the consumption of natural resources and the associated challenges * Socially committed and alternative approach towards embracing sustainable lifestyle 	<ul style="list-style-type: none"> * Demonstrates basic knowledge about financial and economic systems, including sustainability consequences * Demonstrates basic understanding of sustainability challenges * Participate in discussions and contribute inputs to sustainable practices 	<ul style="list-style-type: none"> * Demonstrates solid understanding of financial and economic systems with regards to sustainability concepts * Seeks out innovative solutions and strategies to address sustainability issues * Educate others about sustainability principles 	<ul style="list-style-type: none"> * Demonstrates extensive knowledge about financial and economic systems with regards to sustainability concepts * Exhibits vision and proactive mindset in addressing sustainability issues * Collaboration with stakeholders to achieve sustainable outcomes 	Reflection of individuals
Advancement of Sustainable Technologies	<ul style="list-style-type: none"> * Developing and / or implementing technologies that foster carbon neutrality and designing innovative solutions for sewage treatment * Applying robust sustainability methodologies for lifecycle assessments * Skillful extraction of natural resources in an environmentally sustainable manner 	<ul style="list-style-type: none"> * Supports the development and implementation of sustainable technologies under supervision * Demonstrates a basic understanding of lifecycle assessment and connection to sustainable methods 	<ul style="list-style-type: none"> * Assess the environmental impact of projects * Collaborate with cross-functional teams to integrate sustainability into technology and trends development 	<ul style="list-style-type: none"> * Leads innovative solutions of implementation sustainable technologies and trends * Lead and develop resources management strategies at industry level * Influences industry standards and policies to achieve sustainable goals 	Portfolios of individuals
Social and Ethical Responsibility	<ul style="list-style-type: none"> * Unwavering social commitment and embraces alternative attitudes towards sustainable lifestyles * Exemplifies social responsibility and active citizenship * Respectful regard for diversity and multiculturalism 	<ul style="list-style-type: none"> * Understanding of social responsibility and its importance in personal and professional contexts * Actively engages in initiatives that promote sustainable and inclusive practices 	<ul style="list-style-type: none"> * Advocates for sustainable practices and encourages others to embrace alternative attitudes towards sustainability * Collaborates with diverse stakeholders to develop and implement CSR initiatives 	<ul style="list-style-type: none"> * Embeds social responsibility and sustainable practices into the organization's culture and strategic vision 	Reflection of individuals and interviews
Interdisciplinary Problem-Solving	<ul style="list-style-type: none"> * Proficiency in critically contextualizing knowledge by interconnecting social, economic, and environmental issues at local and global levels * Skillful management of resources to ensure sustainable utilization and prevent negative impacts on nature and the social environment 	<ul style="list-style-type: none"> * Begins to apply basic strategies for resource utilization in a sustainable manner, under supervision * Demonstrates awareness of the importance of sustainable resource management 	<ul style="list-style-type: none"> * Effectively manages resources to ensure sustainable utilization and minimize negative impacts on nature and the social environment * Applies advanced strategies and methodologies for sustainable resource management 	<ul style="list-style-type: none"> * Advocates for sustainable practices at local, national, and global levels, driving systemic change * Demonstrates exceptional ability to critically contextualize knowledge 	Portfolios of individuals and performance review
Holistic Sustainable Thinking and Action	<ul style="list-style-type: none"> * Demonstrates systems thinking to analyze and comprehend the complexity of sustainability problems * Comprehensive understanding of justice, equity, social integrity, and ecological balance 	<ul style="list-style-type: none"> * Demonstrates the ability to apply systems thinking to analyze and comprehend the complexity of sustainability problems 	<ul style="list-style-type: none"> * Applies systems thinking effectively to analyze and address complex sustainability problems 	<ul style="list-style-type: none"> * Demonstrates exceptional systems thinking skills to analyze and address complex sustainability problems at a strategic level 	Case Studies and Examinations
Strategic Sustainability Leadership	<ul style="list-style-type: none"> * Forward-thinking approach to envisioning possible futures in relation to sustainability issues * Strategic acumen in designing and implementing interventions to drive sustainable practices 	<ul style="list-style-type: none"> * Shows an awareness of emerging trends and challenges in sustainability and their potential impacts * Contributes ideas and insights to support sustainable practices within their scope of work 	<ul style="list-style-type: none"> * Proactively identifies emerging trends and challenges, and assesses their implications for sustainability strategies * Collaborates with cross-functional teams to develop and execute sustainable initiatives 	<ul style="list-style-type: none"> * Anticipates and responds to emerging trends, risks, and opportunities to drive sustainable practices at an organizational and industry level * Influences and engages stakeholders in sustainable practices 	Performance assessments

Source: authors' own elaboration

Based on the literature review and secondary data analysis, the table 2 shows identified key sustainable competencies in the context of the competency-based model in context of the proficiency standard.

3. DISCUSSION

In the present day, the importance of competencies of sustainability in the business environment is increasing significantly. However, this shift's driving force is not primarily from the companies themselves. Employees within organizations and the direct customers are playing a crucial role in shaping the adoption of sustainable practices. Given these circumstances, the development and conceptualization of sustainability competencies among employees are of utmost importance for fostering a sustainable mindset within organizations. The proposed competency model allows industries to embrace sustainability trends at different proficiency levels. Additionally, it enables all employees to play a critical role in ensuring that industry processes align with sustainability goals and strategies. By incorporating sustainability competencies, businesses can deepen their environmental consciousness and perception integration. While many organizations have already incorporated sustainable goals into their strategies, it is essential to integrate sustainability into employees' day-to-day work activities fully. Results presented in the paper are limited to the secondary data only. It uses a sample, although an extensive survey of secondary data is used, the authors do not confirm their propositions with primary data. This limits the interpretation of the results but gives the authors room for further investigation. The analysis of secondary data and observations from foreign researchers reveal a notable and ongoing growth in the development of sustainability topics. The research papers examined confirm that both current company employees and their subsequent customers are exerting pressure on contemporary businesses to integrate sustainability into their day-to-day operations within society. This trend underscores the increasing significance of sustainability as a crucial aspect of aligning business practices with the values and expectations of their employees and customers alike.

CONCLUSION

The proposed competency model offers numerous advantages to current businesses in meeting the demands of both employees and customers. Hence, organisations must include a sustainable perspective when determining employee competencies. This can be followed by organizing of specialized training courses that introduce employees to sustainable concepts and help them better understand the operational details of sustainability. Even individuals, who may not actively prioritize sustainability goals, are still impacted by their environment, relationships, work, and market dynamics, which are influenced by sustainability-related attitudes and practices. For these reasons, companies must go beyond superficial sustainability strategies and fully engage their employees in sustainability performance. By integrating sustainability into employee development programs, companies can actively empower their workforce to contribute to sustainable practices within and outside the organization. This holistic approach benefits the organisation and contributes to a broader societal shift towards a more sustainable and responsible approach to business and life. The proposed competency model will be tested through semi-structured interviews within the industry. Indeed, the insights gained from the research and the semi-structured interviews with automotive companies will play a vital role in validating and refining the model.

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