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The Impact of Digitalization and Sustainable Development Goals in SMEs' Strategy: A Multi-Country European Study

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2.1 Introduction

The linkage of business, Industry 4.0 and sustainable development is a subject of great interest nowadays, as society strives to achieve sustainability (Kardos, 2012). Various studies suggest that a key factor in achieving sustainable development is by implementing corporate social responsibility and sustainability in the private sector. Most of the research in this area is based on large businesses studies. However, there is a separate pool of scientific research that takes up the special issues of change processes in SMEs in general, and the particular topic of transforming

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the business model of SMEs towards social, environmental and economic sustainability (Hörisch et al., 2015; Jansson et al., 2017; Revell et al., 2010). Nevertheless, the current research stream does not specify the nature and drivers of sustainable development at small and medium business levels (Lopatkova and Belyaeva, 2019). It remains unclear how the private sector can operate and achieve the sustainable goals through the changing business model including using digital technology.

The chapter focuses on SMEs, as they are the largest group of market entities (EU Commission, 2019; Masroor and Asim, 2019). The strategic importance of SMEs is to enhance sustainable development by ensuring employment, reducing income inequality, and fostering innovation (Belyaeva, 2018; Elhalek, 2019). SMEs have to be aware of the consequences of market changes and adapt emerging trends including sustainability and digitization processes (Belyaeva et al., 2020; Lopatkova and Belyaeva, 2019). The latest literature posits that the integration of sustainable goals by changing the business model can help businesses achieve the following benefits: competitive advantage, company value, good image and reputation (Adams et al., 2012; Evans et al., 2017). On the other hand, there are some concerns for SMEs: cost of sustainable changes and returns on investment, lack of resources, knowledge and time (Johnson and Schaltegger 2016; Morioka et al. 2018).

At the same time, existing studies argue that digitization has a twofold impact on sustainable development. From one point of view it can provide the necessary tools to ensure the development and integration of economic, social and environmental aspects as well as to ensure and improve performance, transparency of operations and efficiency of systems worldwide (Kardos, 2012; Pucihar et al., 2019). Moreover, information and communication technologies (ICT) provide new challenges for traditional businesses of any size. Digital technologies appear to pose potential threats such as cybercrime, financial crime, and loss of individual and organization privacy (Seele and Lock, 2017).

This chapter thus seeks to contribute to the knowledge within this novel growing sphere of the impact and necessity of digitalization and sustainable development goals (SDGs) allocation in SMEs. For this purpose, the following research questions have been identified: (1) to review relevant research literature to identify the conceptual constraints in implementing digitalization and utilizing a sustainable development

framework for SMEs; (2) to examine SMEs in the food and beverages industry in selected European countries to empirically identify the linkage of digitalization and sustainable development in SMEs using qualitative and quantitative; (3) to provide implications for SMEs facing constraints related to changing the business model due to such externalities based on empirical results; and finally (4) to summarize, in line with the chapter objectives, the current state of the art in the field of sustainability and digitalization linkage in SMEs.

2.2 Milestones of Sustainable Development

The globalization of socio-economic processes, the creation of a single information space, technological pressure on the environment and the depletion of the planet's natural resources lead to the concept of sustainable development. In the development of this concept, representatives of the academic government and business agreed that sustainable development is focused on three interdependent pillars: economic growth, social development and environmental protection. The authors consider the stages of sustainable development in order to reveal its essence and its relationship with business processes. According to the ecocentric approach of human development, maximum population and economic growth could lead to catastrophic consequences such as irreversible climate change (Meadows et al., 1972). Thus, during the 1950s–1980s, environmental pollution, limited natural resources and overpopulation (Michael and Claas, 1995) generated a gap between economic development and environmental degradation; multinational corporations were pushed to cover this gap institutionally. The concept of a contemporary approach to sustainable development received a global Brundtland Report release by the World Commission on Environment and Development in 1987. Sustainable development was defined as development that meets the needs of the present without compromising the ability of future generations to satisfy their needs (Eustachio et al., 2019).

In the 1990s the emphasis shifted to social and market orientation. A formal institutional approach was reflected in the economically advanced countries which, along with environmental regulations, stimulated a social market orientation campaign at the end of the 1990s. A sustainable

economy includes sustainable businesses; therefore, understanding the drivers and measurement of the success in a firm's transition to sustainability is necessary (Delmas et al. 2019). There is a constant symbiosis between the three elements of people (social aspect), planet (environmental aspect) and money (economic aspect), so these must be included in the core business process and corporate report of the company (Elkington, 1998). One of the important stages in the formation of business sustainability is standardization. Standards serve to unify non-financial reporting and to assess the contribution of companies to the sustainable aspects (ISO, GRI, etc.) (Ransburg and Vágási, 2007). On the other hand, the wave of the economic fraud of giant companies that occurred during this period brought about an understanding of the changing infrastructure of the global economy. United Nations Conference on Sustainable Development "Rio+20" (2012) came as an important milestone that generated the agenda of reaffirming the commitment to the Millennium Development Goals, which were the precursors to the SDGs formed in September 2015 (Eustachio et al., 2019). Thus, the UN formalized the indicators (17 goals and 169 targets) of global sustainability (UN, 2015). It is important to note that the evolution of sustainable development shifts from the traditional scientific view inherited from moral and ethical principles of the ancient world towards an integrated perspective that facilitates the understanding of the complexity of the modern status (Eustachio et al., 2019).

The role of SMEs in stimulating the integration of social, environmental and economic aspects at the state, government, business and society levels was underestimated in the course of the Millennium (Sustainable) Development Goals statement. Alongside the introduction of the SDG agenda 2030 in 2015, the world bank research shows that SMEs account for an overwhelming majority of private sector business and economic activity in both developed and developing countries (Kamal-Chaoui, 2017). According to the World Bank and the OECD, there are multiple reasons why SME development is critical for achieving the sustainable goals: (1) SMEs play an important role in most national economies; and (2) SMEs contribute up to 45% of total employment and up to 33% of gross domestic product (GDP) in emerging market economies (Lessidrenska, 2019). Despite their increased global commitment to

growth, SMEs still face challenges, including limited access to finance, a lack of capacity and knowledge, especially regarding business development, and insufficient marketing and strategic management skills (Belyaeva et al., 2020). So the holistic period would need to see the transformation of SMEs during the SDGs era of decision making in an institutionally adjusted economic climate. The review of research in the field of sustainable development revealed that in the last decade there has been a shift from big corporations' impact towards new SMEs' outcomes for sustainable development. Hence four dimensions—economic, environmental, social and holistic sustainability development patterns—are to be explored to produce a transformational strategy for SMEs. The authors seek to explore whether sustainable development actually brings about any difference to small companies in Western and Eastern Europe.

2.3 SMEs Allocation in Sustainable Development Map

From the 1990s to the present aspects of sustainable development, including enablers and barriers of implementation, tools, practices and strategies for SMEs, have been increasingly addressed in academic literature and business forums (Thompson and Smith, 1991; Prashar and Sunder, 2020). Small and medium businesses have a crucial role to play in building a sustainable future and there is a proven business case to do so (Kromjong et al. 2016); thus SMEs have to adapt their business model considering heightened stakeholder scrutiny (Hong Ia., 2018, Leonidou et al., 2018), growing importance of intangible business assets, increase in the level of competition, development of information and communication technologies, changing regulations on environmental protection and labour rights (Belyaeva et al., 2020). The SMEs' sustainable strategies and tools are not the same as those for large firms and are not viable because SMEs have fewer resources and different profiles than large companies (Loucks et al., 2010). Johnson and Schaltegger (2016) reveal that different business models between SMEs and large companies may be derived from internal shortcomings, which include disposed resources,

the level of awareness and knowledge on sustainability issues compared to large organizations. A sustainable business model includes proactive multi-stakeholder management, creating long-term monetary and non-monetary value (Geissdoerfer et al., 2016). A sustainable approach should be embedded into core business, its processes and culture (Bocken et al. 2014; Jorgensen and Pedersen, 2018).

SMEs' representatives can raise awareness on social and environmental issues among the local population and educate employees on the sustainable and responsible principles and actions by implementing a sustainable business model. The SMEs may cooperate with partners or other firms that act positively to obtain sustainability. SMEs may improve their image and promote the development of responsible practices on events, meetings and special conferences. Furthermore, the principles and actions related to sustainable and responsible values have to be considered when writing the firm's mission, vision and strategy (Tonis, 2015). A sustainable mission statement should be translated into specific sustainable goals that the company will strive to achieve. The environmental and social goals are considered as an integral part of the economic logic of the business. Frameworks such as the SDG targets help SMEs to understand the scope of the global sustainability issues while providing practical fulcrum that help companies improve their economic, social and ecologic performance (Kromjong et al., 2016). Because of SMEs' role and place in national and global economies, these companies are taking a lead in helping to meet most of the economy-related SDGs, including promoting inclusive and sustainable economic growth, increasing employment opportunities and decent work, especially for the poor, advancing sustainable industrialization and innovation, and creating a positive push for a higher quality of life, better education and good health for all. According to an International Trade Centre report "SME Competitiveness Outlook" (2019), SMEs can contribute to improving the SDGs through four channels: employee impacts (Goals 1, 2, 3, 8), business practice impacts (Goals 5, 8, 9, 10, 12, 13, 14, 15, 16), sectoral impacts (Goals 2, 3, 4, 5, 7, 9, 11) and national economy impacts (Goals 1, 8, 9, 10, 17). Moreover, this report shows that SMEs can contribute towards 60% of the sustainable development targets (ITC, 2019). Experts reveal that SMEs play a

key role in achieving the economic SDGs: for instance, promoting inclusive and sustainable economic growth, employment and decent work for all (Goal 8), as well as promoting sustainable industrialization and fostering innovation (Goal 9) (Kamal-Chaoui, 2017; Karlstorm, 2018). In addition, SMEs can improve the health and well-being level (Goal 3) and reduce income inequalities at the local level (Goal 10) by providing good-quality jobs and working conditions.

SMEs are extremely important for poverty reduction, especially in rural areas and amongst women and other socially disadvantaged groups. Also, small businesses are represented by an increasing number of women entrepreneurs (Leadem, 2016), so SMEs inequalities can contribute to the level of gender inequality (Goal 5). Furthermore, SMEs can promote sustainable thinking among consumers and green production patterns (Goal 12) by conducting a simple audit, using alternative sources of energy, recyclable packaging, producing environmental-friendly goods and developing a waste reduction plan (Kamal-Chaoui, 2017; Lessidrenska, 2019; Tonis, 2015). Thus, the first step for SMEs' sustainability is identifying the two or three main SDGs that are close to the business industry and also via which channels SMEs can contribute to SDG targets to create long-term value (ITC, 2019). Sustainability strategies can create many synergistic effects for SMEs as well as systemic benefits for multiple stakeholders. Moore and Manring (2009) outline that there are different incentives for SMEs to optimize sustainability: (1) Become valuable investment targets for larger firms. Large firms wishing to venture into new sustainable business segments will find it less expensive to enter new sustainable markets and/or to venture into sustainable business segments through investment or acquisition of SMEs. Multinational enterprises can more quickly evolve technologies and markets can adopt new sustainable strategies, through SMEs. This strategy can move larger firms towards a new paradigm that addresses and strengthens an open-system approach to global sustainability. (2) Create highly competitive networks of sustainable SMEs. SMEs networking should help in generating progress and providing financial and organizational efficiency towards sustainable development, if stable business communities are formed. (3) Become highly efficient suppliers in global supply chains by implementing sustainable practices. Networks will

remain essential for dealing with the systemic issues that underlie industrial ecology, enterprise resilience and global sustainability.

The changes can only be achieved through coordinated global efforts and collaborative participation from public, private and non-governmental organizations (Moore and Manring, 2009). On the other hand, SMEs face multiple challenges, including limited access to finance, a lack of capacity and knowledge, particularly regarding business development, and insufficient marketing and strategic management skills (Lessidrenska, 2019). The UN Global Compact asks companies to first do business responsibly and then pursue opportunities to solve societal challenges through business innovation and collaboration. The Compact recommends that businesses utilize an SDG compass to measure the progress and alignment of your business operations with the SDGs. The SDG compass guide is developed with a focus on large multinational enterprises. SMEs and other organizations are also encouraged to use it as "a source of inspiration and adapt as necessary." SMEs can use the goals and targets to assess their current operations by identifying, assessing and measuring how they contribute to each goal. Given the overwhelming influx of information available and the general lack of expertise compared to larger companies, it's easy to see why SMEs would struggle to identify how they should contribute. The classification of sustainable dimensions and SMEs business model directions and their choice is justified by literature reviews (Edwards, 2018; Kamal-Chaoui, 2017; Karlstorm, 2018) (Table 2.1).

According to the Organization for Economic Cooperation and Development (OECD), SMEs account for the majority of private sector business and economic activity in both developed and developing countries. The classification in the table provides a simple understanding of possible SDG mapping to verify SME allocation; the empirical results obtained from 750 SMEs in Western and Eastern European countries are projected considering the digitalization effects. Digital model transformation might be useful to carefully develop a strategy to overcome the constraints. However, the digital transformation also seems to be "terra incognito" for many SMEs.

Table 2.1 SDGs and SMEs nexus

Sustainable dimensions	SDGs	SMEs business model directions
Social	No poverty	Set and enforce strict non-discriminatory policies Recruit and train, employ local community members and integrate them in your value chain
Social	Zero hunger	Support and encourage small-scale farming, practise sourcing from local entities Demonstrate transparency in the agricultural supply chain
Social	Good health and well-being	Offer employees healthy and safe working conditions Make investments in health a priority in business operations Work Life Balance
Social	Quality education	Create programmes (e.g., internships) that give students earlier access to the corporate environment Provide employees with opportunities to improve job skills Provide employee training in social and environmental activities
Social	Gender equality	Pay equal remuneration, including benefits, for work of equal value Establish a zero-tolerance policy towards all forms of violence and physical abuse
Environmental	Clean water and sanitation	Prioritize water efficiency by installing technologies for water conservation Prohibit the use of chemicals that can be detrimental to water quality if improperly disposed
Social	Affordable and clean energy	Pursue the certifications Light, heating, and cooling preservation
Economic	Decent work and economic growth	Ensure the work of local people Foster entrepreneurial culture Install a firm policy against unfair recruitment practices

(*continued*)

Table 2.1 (continued)

Sustainable dimensions	SDGs	SMEs business model directions
Economic	Industry, innovations, infrastructure	Establish standards that ensure company projects are sustainably managed Promote innovation by giving all stakeholders the opportunity to offer creative solutions to sustainability challenges
Economic	Reduced inequalities	Invest in business-driven poverty activities Create networks with society to provide education and entrepreneurial skills training
Social	Sustainable cities and communities	Jointly participate in a sustainable community that brings together relevant stakeholders to act on urban sustainable development Optimize logistic processes
Economic	Responsible consumption and production	Reduce negative manufacturing impacts by implementing lean production (saving energy, water, raw materials, etc.) and reducing waste Disclose information on material usage within products packaging
Environmental	Climate action	Understand climate risk and build resilience into the company's assets and supply chain
Environmental	Life below water	Track the life cycle of products and materials to understand how they are disposed and which products could likely find their way into marine environments
Environmental	Life on land	Measure, manage and mitigate impacts on ecosystems and natural resources Scale up best practices for land-use planning and management
Social	Peace, justice and strong institutions	Comply with laws, write down ethical principles, and seek to meet international standards; require and support business partners to do the same
Holistic	Partnerships for the goals	Take part in SDG-related partnerships and locally based sustainability initiatives

2.4 Digital Influence on SMEs Model in Sustainable Targets

Generally contemporary business models' innovation fails to cover the sustainability goals. At the same time, sustainability can be reached by innovative and/or circular business models with transparent multidimensional indicators (França et al., 2017; Rossi et al., 2020). Ulas (2019) outlines that the classic business models are disappearing and are substituted by flexible business models using tools of Industry 4.0. Business digital transformation is the functional use of the Internet in business operations (manufacturing, marketing, selling, etc.) SMEs should change the organizational structures and business-making process to achieve productive digital transformation. Many SMEs face challenges, for example, a limited number of (qualified) employees, lack of knowledge, skills and tools for business model innovations (Pucihar et al., 2019). Ulas (2019) distinguishes the key elements for SMEs in order to carry out successful business transformation. Digital transformation must be initiated and led by a company's owner or manager. Also the owner or manager should detect the gaps in digital knowledge and raise digital awareness among employees. Moreover, decision makers need to define a roadmap of business goals in the framework of digital transformation. The mission statement serves to give a sense of identity to an organization's members, enhance the stability of the social system and direct the managers' attention to important activities (Rudawska and Belyaeva, 2018). It is necessary to share the idea of business model transformation with employees to help them understand how each of them individually contributes to the success of a company. Motivation and ability of employees to participate in the innovation process is also extremely important for achieving results (Saunila and Mäkimattila, 2018).

SMEs need external support due to unpredictable behaviour in terms of ICT investments. For SMEs it is important to collaborate with SME helpers, innovation labs or research institutions for being guiding through current trends and to see demonstrations of best-practice and real-life cases. On the other hand, SMEs' digital transformation should be highly supported by governments. Government interventions include provision

of the legal and regulatory framework, which enhances digital transformation. In addition, the government may provide incentives to SMEs through government agencies that are already established to assist SMEs (Ulas, 2019).

The innovativeness of SMEs has a positive impact on overall business performance and market competitiveness (Pucihar et al., 2019); moreover, innovative SMEs are part of the support system for sustainable development (Kardos, 2012). The emergence and growth of innovative firms is crucial for structural change towards sustainable development (Kardos, 2012). Bringing digitalization and sustainable practices together should be strategic thinking for any size of business as a way to gain long-term viability (Naujok et al., 2018). Saunila et al. (2019) discover that for SMEs smart technologies do not have a direct influence on environmental or social sustainability, but corporate sustainability strategy fully mediates the relationship between smart technologies and corporate sustainability in the case of environmental sustainability and social sustainability. Malaquias et al. (2016) found positive and significant relationship between IT use and the four categories of CSR: economic, legal, ethical and discretionary responsibilities in SMEs in Brazil. Moreover, IT affects people who work in these enterprises. IT resources create unique capabilities for small firms (Lopatkova and Belyaeva, 2019; Malaquias et al., 2016); thus, CSR obligations and IT investments should be combined to improve competitive advantage through the interaction of technology and people.

The paper by Niehoff and Beier (2018) shows that digitalization can have a positive impact on the environmental dimension of sustainable development. On the other hand, the authors highlight a possible rebound effect regarding material and energy efficiency. The connection between the overall sustainability and digitalized private sector (SMEs) has to receive more attention from both researchers and companies, in order to understand and quantify this potential and avoid the rebound effects (Niehoff and Beier, 2018).

Cornel and Dolf (2012) present the implications of the use of ICT for CSR activities in tourism businesses in emerging markets and of the relationship between e-sustainability and competitiveness. ICT-based services can improve the efficiency of processes and systems for multiple

stakeholders (Santoro, et al., 2018). Lakatos et al. (2015) outline the strategic (improved customer relation), tactical (improved contract administration) and operational (improved data management) sustainable benefits that SMEs can gain by using ICT tools. Thus, ICT can help to make CSR information more easily available to stakeholders and create new possibilities of linking information on company impacts with other sources, providing easier access to information through the Internet which can be used to develop sustainable awareness (Cornel and Dolf, 2012; Cortado and Chalmeta, 2016). Although Industry 4.0 presents opportunities to address the sustainable challenges, it also has the capability to accelerate the environment's degradation. People must ensure that ICT aligns with humanity's and the environment's values. Moreover, businesses should ensure that their digital strategies will optimize the ICT effect on new business opportunities as well as sustainable goals (Naujok et al., 2018). According to the literature analysis presented earlier the authors seek to explore whether Industry 4.0 in SMEs actually affect sustainable development.

2.5 Methodology Overview and Results

The empirical basis is a survey of 750 European SMEs in the food and beverage industry which operate in Western European countries (Great Britain, Germany and Spain) and in Central and Eastern Europe (Poland, Croatia and Russia). The study includes the following methodology: (1) online questioning among representatives of SMEs; (2) statistical analysis and econometric analysis; and (3) comparative analysis of results in Western and Eastern European countries. The questionnaire consists of four parts: the place of socially responsible strategies in the overall business strategy; level of manager's awareness in CSR (understanding of terminology, difficulties and benefits of introducing a socially responsible strategy); using the tools of a socially responsible strategy based on SDGs; and descriptive statistics of companies: firm size, turnover from sales, period of operation, using ITC and so on (Lopatkova and Belyaeva, 2019). The participation of SMEs from different countries makes it possible to conduct broad analyses for obtaining empirical research results

regarding the degree of the enterprises' orientation towards sustainability when implementing business models. The study implies descriptive research and probit regression.

In order to evaluate the influence of externalities affecting the change of business model, the authors chose factors currently relevant in the business environment. Among the analysed externalities, the surveyed SMEs attribute the greatest importance to three factors: (1) increased importance of intangible business assets, such as image or long-term relationships with customers; (2) increased level of competition; and (3) development of ICT. Such factors as regulations on environmental protection and labour rights, growing bargaining power and pressure from the company's stakeholders also influence the business strategy and process generally. The main obstruction to the implementation of the sustainable strategy in SMEs is additional costs ($\overline{X}$ = 3.59). The biggest concern for SMEs is return on investment; therefore, it is very important to recognise that interventions that reduce a business's negative impact can create long-term value as well as save cost (Karlstorm, 2018). Another factor that may impede the application of sustainable strategy is lack of time ($\overline{X}$ = 3.38). Moreover, the big challenge for SMEs is lack of skills and knowledge on this subject ($\overline{X}$ = 3.23). Despite these obstacles both Western and Eastern SMEs can distinguish the benefits of implementing sustainable tools and CRS strategy. The surveyed SMEs allocated such benefits to increase stakeholder loyalty and brand strength ($\overline{X}$ = 4.1), improvement in staff motivation ($\overline{X}$ = 3.98) and enhancement of financial indicators and sales ($\overline{X}$ = 3.93). There are some differences in the perceived benefits between Western and Eastern European SMEs. Western European companies experienced an increase in loyalty of internal stakeholders, while representatives of Western European companies noted improved relations with the local community and increased investor perceptions (external stakeholders). In addition, for Eastern European SMEs the financial indicators are more essential compared to Western European businesses (Belyaeva et al., 2020). The classification of SMEs business model directions and their choice is justified by scientific research and the SDGs framework (Table 2.2).

An approach for sustainable strategies in Western and Eastern European countries is structured around the social and economic SDGs. Both

Table 2.2 SDGs and SMEs business model directions in Western and Eastern European SMEs

SMEs business model directions	SDG	European SMEs, Average rating ($\bar{X}$) (1–5)		U Mann–Whitney	
		Eastern	Western	Z	P
High-quality products with minimal impact on the environment	12	3.8	3.92	2.496	0.0126
Full information about the origin of the product components on the packaging	12	3.85	3,94	2.330	0.0198
Lean production (saving energy, water, raw materials, etc.)	12	3.77	3.96	4.060	0.0000
Obtained certificates and management standards	16	3.22	3.38	2.662	0.0078
Written down the principles and cooperation with business partners based on ethical principles	17	3.91	3.30	−6.571	0.0000
Communicate about SMEs' commitment to the socioecological activities to stakeholders	11	3.59	3.41	−1.871	0.0492
Employee training in social and environmental activities	4	3.56	3.35	−2.203	0.0276
Healthy and safe working conditions	3.8	4.27	4.48	3.594	0.0003
Ensuring the work of local people	1.8	4.02	4.12	2.312	0.0208
Work Life Balance	3	3.22	2.93	−2.897	0.0038

Western and Eastern European SMEs contribute to good health and well-being (Goal 3) by providing healthy and safe working conditions (Western SMEs) and encouraging Work Life Balance (Eastern SMEs). The research reveals that SMEs from Western Europe are more active in responsible consumption and production (Goal 12) compared with Eastern countries. Western European companies implement lean production to save resources, produce high-quality products with minimal impact on the environment and provide full information about the origin of the product components on the packaging. Moreover, Western European SMEs strive to reach peace, justice and strong institutions (Goal 16) by seeking to meet international standards and obtaining certificates on management standards. At the same time, Western European SMEs attach greater importance to recruit and train local community

members (Goals 1, 8). Eastern European SMEs set the written-down principles based on ethical principles on cooperation with business partners. Eastern European SMEs train their employees and customers in social and environmental activities and encourage them to participate in sustainable activities (Goal 4). Eastern SMEs also communicate about their commitment to the socioecological activities to stakeholders and try to engage them (Goal 11).

The probit regression (Formula 2.1) was used to measure the impact of digital factors on sustainable development. The independent factors (presence of a mission; knowledge and awareness; number of persons, turnover; origin of SME; ICT; GDP per capita) and their choice is justified by theoretical research. The dependent variable takes one of two values 0 (no) or 1 (yes) ("Does the company use a sustainable strategy?").

Formula 2.1

$$P(\text{practice}) = F(\beta 0 + \beta 1 \times \text{mission} + \beta 2 \times \text{term} + \beta 3 \times \text{staff} + \beta 4 \times \text{turnover} + \beta 5 \times \text{origin} + \beta 6 \times \text{ict} + \beta 7 \times \text{gdppc})$$

The probability of using sustainable strategies by SMEs increases if the following conditions are fulfilled: (1) presence of a mission (coef. 0.678***); (2) knowledge of CSR and SDG terminology (coef. 0.849***); (3) origin (coef. 0.241***). It is more likely that older companies apply to sustainable practices; (4) use ITC and provide sales through the Internet (coef. 0.235***); (5) increase countries' GDP (coef. 0.013**). The findings indicate the positive relationship between the social responsibility strategy and ICT used by SMEs in six countries of Western and Eastern Europe. Thus, if the concept of digitalization can be an effective factor of sustainable development, it should be embedded into the SMEs. The descriptive and econometric analysis indicates that the redefinition and rethinking of the fundamentals of SME principles, in terms of mission, sustainable development awareness, strategy and ITC application, affect the socioeconomic scale and environmental achievements.

2.6 Conclusion and Discussion

SMEs are the biggest group of enterprises all over the world and they originate and operate within Industry 4.0, which is recognized as a driving force for achieving sustainable development. The empirical research confirmed that a diverse mix of emerging externalities (e.g., constantly changing and increasing needs of stakeholders, ICT development and global sustainable orientation) forms a special environment for the development of sustainable business models in the food and drink industry of SMEs in Western and Eastern Europe. There are many possibilities including tools of Industry 4.0 for companies to update and innovate strategies that will open new opportunities for business development as well as impact social and environmental performance. Thus, it is essential to understand and monitor the transformations and rethinking of the fundamentals of SME principles towards sustainability. The representatives of SMEs need to change their way of doing business if they are going to tackle the environmental and social challenges. Engaging with the SDGs can provide a road map to business improvement and offer a way to stand out in the global arena. The sustainability perspective of SMEs is to identify the two or three main SDGs that are close to the business industry. The empirical research reveals that the sustainable approach in Western and Eastern European countries is structured around the social and economic SDGs (1, 3, 4, 8, 11, 12, 16. 17) excluding environmental goals. The main differences were found in implementing lean production technologies (Goal 12) and obtaining certificates on management standards (Goal 16) by Western European SMEs and in communicating and engaging stakeholders in the socioecological activities (Goal 4, 11) by Eastern European SMEs.

The literature review and empirical research disclose that the concept of digitalization can be an effective factor of the sustainable development in SMEs. ICT-based services can improve the efficiency of business processes. SMEs can provide easier access to information about CSR and sustainability through the Internet, which can be used to develop sustainable awareness among locals. The connection between the overall sustainability and digitalized SMEs has to receive more

attention because SMEs face multiple challenges, including limited access to finance, a lack of capacity and knowledge, particularly regarding business development, and insufficient strategic management skills (Lessidrenska, 2019). In addition, it should be noted that nowadays representatives of academia, business and politics recognize that there are significant gaps in achieving the SDGs by 2030 (Filonenko 2019; Milovantseva et al., 2018; UN, 2019). Achieving the SDGs requires a much more responsible policy and a much stronger public consensus (Sheng and Geng, 2017); thus, collaboration and dialogue with all stakeholders (including government, business and civil society) is essential (Filonenko, 2019). The authors of this chapter consider engaging SMEs to tackle sustainable issues at the local level can increase global sustainability. SMEs can contribute about 60% of the sustainable development targets (ITC, 2019).

The study has several limitations, which provide opportunities for further research streams. The first limitation is cross-sectional data and for that reason it is impossible to observe changes relating to the implementation of the sustainable and digital concepts among SMEs. Thus, future research could focus on longitudinal studies. Another limitation refers to the fact that the present research focused of the food and beverage industry in six Western and Eastern European countries, and therefore the results obtained cannot be transmitted to all SMEs. Further research could appeal to specifications of implementation of sustainability in business models in different segments to develop integrative theories and practical recommendations of sustainability management that can effectively contribute to sustainability. Moreover, it seems interesting to conduct further detailed research on the components of business models for sustainability related to the implementation of specific digital tools, identification of sustainable development directions within the framework of the SDGs, disclosure of a new revenue stream and structure of the costs associated with implementation of these business models.

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