

Article

Environmental Sustainability, Digitalisation, and the Entrepreneurial Perception of Distances as Drivers of SMEs' Internationalisation

Roland Z. Szabó ^{1,*} , Borbála Szedmák ², Anna Tajti ³  and Péter Bera ⁴ 

¹ Department of Leadership and Management, Kautz Gyula Faculty of Business and Economics, Széchenyi István University, 9026 Győr, Hungary

² Doctoral School of Business and Management, Institute of Entrepreneurship and Innovation, Corvinus University of Budapest, 1093 Budapest, Hungary

³ Montpellier Business School, Groupe Sup de Co, 34080 Montpellier, France

⁴ Doctoral School of Business and Management, Institute of Sustainable Development, Corvinus University of Budapest, 1093 Budapest, Hungary

* Correspondence: roland.szabo@sze.hu; Tel.: +36-3-0445-3744

Abstract: The complex relationship between sustainability, digitalization, entrepreneurship and internationalization has received less academic attention, although each of these topics is an important research area on its own. Thus, our research aims to understand the effect of environmental sustainability, the usage of digital systems, and the entrepreneurial perception of distances on the intention to export in the case of SMEs. The authors have developed a survey to examine three main hypotheses. Based on the answers of 315 SMEs, the article highlights that the communication of environmental sustainability, the usage of ERP systems, and the perception of cultural distance as opportunities to foster internationalisation.

Keywords: small and medium-sized enterprises; digital transformation; ERP; ISO 14001; sustainable development goals



Citation: Szabó, R.Z.; Szedmák, B.; Tajti, A.; Bera, P. Environmental Sustainability, Digitalisation, and the Entrepreneurial Perception of Distances as Drivers of SMEs' Internationalisation. *Sustainability* **2023**, *15*, 2487. <https://doi.org/10.3390/su15032487>

Academic Editor: Fabrizio D'Ascenzo

Received: 20 December 2022

Revised: 19 January 2023

Accepted: 22 January 2023

Published: 30 January 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The growth of organisations has long been at the centre of researchers' attention. There are many aspects to growth. Sustainability and digitalisation have been considered the most popular topics in recent years, while entrepreneurial perception and internationalisation are evergreen topics in this area. Many researchers have studied the internationalisation of companies, more specifically micro, small and medium-sized enterprises (hereinafter referred to as SMEs) [1–10], and the role of entrepreneurial perceptions in this process, and a large number of studies have been carried out on the use of digital business technologies and their benefits for SMEs [11–16]. The effect of sustainability has also been widely researched [17–22]—it has even been linked to digitalisation previously [23–26]. It is important to study the internationalisation of SMEs via a dual approach by focusing on the effect of both sustainable behaviour and digitalisation on exports. Traditionally, local production is considered to be environmentally, socially and economically sustainable [27–31], however, digitalisation can help local businesses to enlarge their market in a sustainable way [30] and overcome geographical barriers.

Sustainability, digitalisation, entrepreneurial perception and internationalisation are very important research areas, and are of growing importance today. However, the effort to identify the complex relationship between them is in its infancy [32] and misses the aspect of entrepreneurial perceptions as part of internationalisation. Besides, the dependent variable in most of the research on internationalisation was current export intensity (level of export), however, without export intentions the full picture is missing. Consequently, we suggest including the intentions for export in the future.

In light of this, our article fills the research gap by examining the relationship between sustainability, the use of digital systems and solutions, entrepreneurial perceptions and internationalisation in the case of SMEs. We aim to shed light on novel relationships between digital development, sustainable operation and the internationalisation of SMEs by analysing the interrelationship between the factors mentioned above. In line with previous literature (see, e.g., [17,32,33]) we focus on exports in terms of internationalisation and have not extended our empirical study to other areas that are also important for digitalisation, such as the digitalisation of companies embedded in international value chains, or the relationship between international acquisitions and mergers and digital development. By focusing on exportation as a market entry mode, we would like to contribute to research on international entrepreneurship [34] and create a model for the internationalisation of SMEs in the digital age. Over recent decades, digital technologies have become a priority in all economic sectors. However, they are found to be used mainly by large companies, and to a much lesser extent by SMEs [35].

Embracing new technologies as well as entering the international market can be challenging for all businesses, but since SMEs play a crucial role in GDP growth, external trade and job creation, and their competitiveness is the engine of the economy at both national and international levels [36], it is hence critical to shed light on how they cope with them.

Although the barriers to international business, which historically favoured large companies with adequate resources, have been significantly reduced because technological progress has created an environment in which internationalisation becomes more feasible and potentially more attractive for SMEs [37], the increasing digitalisation of the global economy provides opportunities for SMEs to internationalise and scale-up [38,39]. Nevertheless, many SMEs still lag behind in both competitiveness and internationalisation. It is therefore particularly important to understand the factors associated with the internationalisation of SMEs, and how SMEs in foreign markets differ from those in purely domestic markets. There is already a considerable amount of knowledge on the internationalisation of multinational enterprises, but the internationalisation of SMEs, despite their economic importance, is a less researched area.

Besides, sustainable operation also poses difficulties for SMEs. Although there is extensive literature focusing on its effect on companies (e.g., how it contributes to competitive advantage, profitability and company value), many SMEs have not yet realized its importance or do not have enough resources to follow sustainable practices [40]. However, the pressure to integrate sustainability is emerging [41] and hence there is a growing need to extend our current knowledge.

In the article, we first review the literature on internationalisation, sustainability, digital enterprise systems and the entrepreneurial perception of distances in the case of SMEs and formulate our research hypotheses. We then present the methodology and sample used in our research and introduce our results, which we interpret in the context of previous research in the literature.

The results contribute to the further development of theories, namely, the theories of the growth of the firm [42], the resource-based view [43,44] and international entrepreneurship theory [34] through the interconnection of phenomena with emphasis on the Sustainability aspects. Based on the results, managerial implications can also be formulated.

2. Literature Review and Formulating Hypotheses

2.1. Theoretical Foundations

2.1.1. The Growth of Firms and the Role of Managers

“The drive for growth and survival is in most firms’ DNA” [45] (p. 2), and for the successful growth of a firm, (productive) resources are needed [42]. According to the resource-based view, firms are a collection of resources and capabilities [43]. However, in order to create a competitive advantage, the existence of resources is not enough: the effective management of resources is crucial. The role of managers cannot be omitted

as they play an important role in allocating resources under uncertain conditions. The firm's productivity and possibilities depend on how the organisation is governed, how the organisation is structured, how much managerial knowledge it has, etc. These are variables affected by managers. Of course, every organisation strives to excel, but not every firm will be able to follow the best practices and be the market leader. The differences in performance can be traced back to the heterogeneity of managers and managerial capabilities [46]. The management team and the proper organisational processes can contribute to identifying latent customer needs, and technological opportunities and orchestrate resources for innovations [47,48].

The information processing capability of managers is usually a bottleneck which limits the growth of the firm. Digitalisation can provide a solution for this challenge as digital systems help companies operate more efficiently and effectively, generate various reports, optimize production, minimize errors, prevent the loss of data or information, and contribute to having transparent and standard business processes based on clear responsibilities. Organisations that successfully implement digital transformation can gain a significant competitive advantage and focus on higher value-added activities [49].

Penrose [42] and the resource-based view place great emphasis on firm competitiveness [44]. Competitive advantage has a dynamic nature [50]: technological changes are also changing the international competitive environment, creating new opportunities for SMEs as well. Nowadays, in order to grow permanently, it is important to incorporate sustainability into the everyday operation of a company as sustainability can contribute to gaining a competitive advantage [21,22].

2.1.2. International Entrepreneurship and the Role of Managerial Perceptions

International entrepreneurship can be defined as “the process of creatively discovering and exploiting opportunities that lie outside a firm's domestic markets in the pursuit of competitive advantage” [51] (p. 261). In this process, understanding the motives of entrepreneurs and the way they are thinking and making decisions is of key importance, however, research on entrepreneurial cognition in the case of international entrepreneurship is so far scarce, which is especially true for empirical research [52].

Understanding how and why people are willing to behave in a certain way has been widely researched from the 1960s until nowadays, starting with the theory of propositional control [53], through to the theory of reasoned action [54], the technology acceptance model [55] and its unified versions [56]. These models highlight that intentions depending on a person's beliefs and perceptions are antecedents of the behaviour. It means that the management's perception of opportunities and risks will act as a motivator or an inhibitor of the intention of exporting [57,58]. It is in line with the interpretative organisation theory, arguing that there is no objective truth: it is the managerial/entrepreneurial perceptions that determine the organisation [59]. It means that it is imperative in terms of export intentions whether the management perceives the characteristics of a given market as opportunities or threats.

Export intention can be defined as the “motivation, attitude, beliefs, and expectancy” about how exporting contributes to the growth of the firm [60] (p. 103). According to Jaffe [57], it can be determined by competitive advantages, organisational readiness, and perceived risks.

2.2. Internationalisation of SMEs

The literature on corporate internationalisation is extensive and has a long history since the 1950s. For many years, research has concentrated on multinational companies; however, over the last few decades, a new line of research studies has focused on the internationalisation of SMEs [52].

Entering an international market is a significant stage in the development of SMEs. However, in the internationalisation process, SMEs face much greater financial, informational and management resource constraints than MNEs. SMEs also face greater external

barriers to internationalisation (e.g., laws and regulations), which explains why SMEs internationalise at a lower rate than larger companies [1].

Direct or indirect exports are the most common means of entering international markets and, for most firms, this is the first step towards internationalisation [2,3]. Direct or indirect exports are also identified by Johanson & Vahlne [4] as the first stage of corporate internationalisation in the widely known and applied Uppsala model. SMEs often use exports as a way of entering foreign markets, as it is a relatively low-risk alternative that does not require large capital resources or investment, and exit is relatively easy [5].

A company's export activity can be driven by push and pull factors. For example, domestic market contraction, regulatory barriers, excess capacity or managerial proactivity can be push factors, while attractive opportunities in foreign markets, growth prospects, partnerships, and ICT and technological developments can be pull factors that help a company to enter international markets. In turn, Leonidou [6] grouped export constraints into internal (functional, informational, and marketing) and external (procedural, governmental, and environmental) constraints.

However, the motives and drivers of SME internationalisation may differ from those of multinationals. One of the main drivers of their internationalisation is the increased demand for their products from foreign markets: SMEs that initially trade only domestically are attracted to the international market by the demand from foreign markets. Another key driver for SMEs to internationalise is risk-sharing: when entering a new market, risks are spread as different markets often face economic downturns at different times [7]. Langseth & O'Dwyer [8] identified four forces that facilitate internationalisation for SMEs: technology, perception of entrepreneurial actors/global vision of owner-managers, knowledge of foreign markets, and strength of network connections. Albaum et al. [3] also find that SMEs often enter foreign markets when the domestic market becomes saturated, and they can no longer satisfy their strategic objectives at home. There is thus a close link between firms' export motives and their core business objectives.

2.3. Sustainability, Financial Performance and the Internationalisation of SMEs

Corporate sustainability has gained much importance in business over the last few decades [18] and has also been emphasized by United Nations, which has adopted the 2030 Agenda for Sustainable Development and defined 17 key sustainable development goals [18]. In order to achieve these goals, the collaboration of all kinds of actors is needed—including businesses and companies [19,61,62]. Trends show that it is not enough anymore to focus only on short-term profit maximisation; broader human and environmental aspects have also to be taken into consideration to stay competitive [20]. As a result, companies tend to realize how the integration of environmental and social aspects can contribute to financial performance. In the short-term, it might require some investment [63], but could result in a competitive advantage and profit in the long-term [22,63]. The attitude and implementation of a sustainable approach are largely shaped by the managerial interpretation and entrepreneurial perception of barriers and drivers [64–66].

According to a number of studies, local production contributes to environmentally, socially and economically sustainable development [27–31]. Industrialized production processes cause longer and less transparent—and as a result, less transparent—distribution chains [28]. In contrast, local, short supply chains can be a solution for fairer and more sustainable production systems that counteract the negative effects of globalized production [30]. Short supply chains can reduce greenhouse gas emissions, improve biodiversity, reduce carbon footprint [67,68], help local development and improve product quality. However, digitalisation and 4.0 technologies can help local businesses to sustainably enlarge their market share [30]. Technological advancement—by increasing productivity, reducing costs and improving supply chain coordination [69,70]—can help to overcome geographical barriers. As a result, the geographical span of sustainable production can be extended. Furthermore, the delivery of digital products is inherently more sustainable than the delivery of physical products. Digitalisation facilitates the development of sustainable business models.

Growth is more sustainable with digital technologies, and thus sustainable businesses are also more likely to grow in the digital age.

Despite the mentioned driving forces and benefits, in many cases, SMEs are not aware of their environmental impact or consider it negligible [71] and also encounter some internal barriers in terms of sustainability. These companies usually have fewer resources which do not let them hire, e.g., an environmental manager [40] and in many cases, they do not consider sustainable operation as a way for enhancing their relationship with stakeholders [72]. However, many recognise the importance of sustainability and the benefits it brings to their business, which they seek to enhance by placing greater emphasis on their sustainability efforts and sharing them with stakeholders as part of their CSR activities. In fact, effective communication of CSR values with stakeholders is essential in order to implement a sustainable business approach [73]. Today, the digital extension of our environment has become an indispensable part of our lives, and thus corporate websites play a key role in sustainability communication [74]. It is increasingly common for corporate websites to present sections devoted to CSR issues aiming to communicate their commitment to sustainability to stakeholders [75]. Companies focusing on developed markets are expected to operate sustainably and communicate this on their websites [74]. These companies—as their markets are in many cases saturated—are looking for new opportunities in developing markets, which entails implementing sustainable practices in these markets as well. As a result, central communication typically appears in less developed markets, too [76].

An important stream of literature focuses on quality certifications in connection with sustainability. ISO 14001 is the leading environmental management international standard [19] with more than 310,000 certificates worldwide [77]. ISO 14001 emphasizes that the way to better environmental performance is—besides compliant with laws—to systematically identify and manage environmental aspects, e.g., reduce waste, emissions, and resource consumption, and to pay attention to the expectations of stakeholders [78]. As can be seen, ISO 14001 matches the environmental dimension of sustainable development [19]. The adoption of the principles of ISO 14001 can lead to the development of more efficient processes which can contribute to cost reductions, increased organisational performance [79,80], better relationships with stakeholders [81], and—similarly to what we have emphasized in connection with sustainability in general—profitability and market benefits in the long-term [28].

In terms of internationalisation, it can be observed that international quality certifications can significantly contribute to a company's success in export markets [82,83] and can accelerate internationalisation [9]. The research underlines that it is true in the case of ISO 14001 as well: the certification can improve a company's competitiveness and market share in the international market and has a positive relationship with exports [33]. In sectors which are more internationalised, more companies adopt ISO 14001 [17].

There is extensive literature focusing on the impact of sustainability on company value, profitability, performance, the driving factors and barriers, however, little is known about its effect on international expansion, especially in the case of SMEs. Previous research suggests that the actions toward the practices of sustainability management have a positive effect on export performance [84,85] and companies primarily focus on environmental sustainability practices in order to be successful in export markets [83]. According to these findings, we hypothesize that:

H1: *Sustainability management practices are drivers of SME's internationalisation.*

- **H1a:** *SMEs that communicate environmental sustainability on their website are more likely to have a higher intention to export.*
- **H1b:** *SMEs that have a core activity related to environmental sustainability are more likely to have a higher intention to export.*
- **H1c:** *SMEs that have an ISO 14001 certification are more likely to have a higher intention to export.*

2.4. Digital Systems and Internationalisation of SMEs

The benefits of digitalisation on SMEs have been widely acknowledged by researchers (i.e., [11–16]). In general, digitalisation has an impact on the internationalisation processes of firms in terms of access to resources, acquisition of skills and competencies, and opportunities for learning and knowledge development in foreign markets [10]. The use of digital technologies offers new opportunities for SMEs to enter and succeed in foreign markets [86]. Some have also pointed out the interplay with entrepreneurial orientation, intention and perception (i.e., [87,88]).

Internationalisation causes many challenges for SMEs, however, digitalisation can help the process in a resource-efficient way [89]. Recently, several studies have highlighted the importance of digitalisation in terms of internationalisation [89–95].

For SMEs, the ability to deploy versatile and cost-effective digital systems that facilitate interactions with customers and partners and provide access to international market knowledge is of paramount importance due to general resource constraints. These digital systems thus have a positive impact on the internationalisation of SMEs by providing international market knowledge [96].

Specifically, digital systems facilitate knowledge of foreign markets, which facilitates the customisation of products according to the market, providing the opportunity to identify and assess local demand. They can also support international trade activities through international marketing and sales strategies. In addition, digital technologies can enhance information about competitors and not only support internal functions but also strengthen commercial relationships by forging closer links with customers, suppliers and distributors [97].

According to many authors, the potential benefits of digital systems for SMEs are most significant precisely because they reduce the barriers to internationalisation imposed by the size of the company. For example, the direct and indirect effects of various digital technologies (especially in the areas of marketing, communication, networking and resource planning) can improve the financial and operational performance of SMEs, thereby giving them an efficiency advantage [49]. Digital technologies are embedded in firms' organisational innovations, giving them a competitive advantage, which also helps to increase exports [98]. By providing new information, marketing and sales channels, and reducing distance and entry costs, digital systems can help SMEs overcome barriers to expand into foreign markets and weaken their physical presence vis à vis larger multinationals and so-called "born global firms" in foreign markets [99].

SMEs can enter international markets more quickly due to the impact of digitalisation [100]. The more the company digitizes its functions and favours entrepreneurial behaviour in foreign markets, the more its internationalization accelerates [101].

According to Westerlund [102], international SMEs are 87% more likely than their domestic counterparts to use ERP systems and 35% more likely to use CRM systems. ERP and CRM systems provide better relationships with customers and suppliers and enable better monitoring and management of both customer relationships and business processes. The ability to integrate these systems is therefore not only a reflection of a firm's digital maturity but also a key issue given the internationalisation of firms, as outlined by Neubert [103].

The essence of electronic document management systems for using, storing, and creating documents (such as emails and other formats, PDF, PowerPoint, Word documents, Excel spreadsheets, etc.) is centred around structuring, optimising and leveraging data [103]. These document management systems thus contribute significantly to reducing transaction costs and increasing the efficiency of information exchange between the company and its international customers, suppliers and partners, which can facilitate internationalisation [98].

The importance of workflow and process technologies is growing today, as a collaboration between geographically distant people and computer systems requires the convergence of communication and software tools, providing a framework for large-scale collabora-

tion [104]. In this way, digital tools such as workflow systems contribute to the vertical integration of firms' activities and thus to their internationalisation [105].

The use of software robots is an essential component of robotic process automation (RPA), but Suri et al. [106] find that the majority of companies have limited use of software robots in business process automation and have difficulties in quantifying tangible savings and determining the costs of implementation.

Overall, previous findings in the literature generally show that digital systems and solutions facilitate the internationalisation of SMEs. On this basis, the following hypothesis has been formulated:

H2: *SMEs that use digital systems are more likely to have a higher intention to export.*

- **H2a:** *Business Intelligence (BI).*
- **H2b:** *Enterprise Resource Planning (ERP).*
- **H2c:** *Customer Relationship Management (CRM).*
- **H2d:** *Workflow.*
- **H2e:** *Document management system.*
- **H2f:** *Software robots.*

2.5. Entrepreneurial Perception of Distances in the Internationalisation of SMEs

When talking about internationalisation, it is important to mention the CAGE framework, which has been used in the international business literature to measure differences between countries when designing international strategies, through cultural, administrative, geographical and economic distance [107]. According to a study by Antunes & Martins conducted on MNEs, the impact of CAGE distance dimensions between countries on the process of internationalisation can be answered by the perception of headquarter managers [108]. Entrepreneurial perception is even more emphasized in SMEs since top management plays a dominant role in forming strategy, and therefore their perceptions will determine internationalisation [37].

Managerial cognition and perception play a critical role in shaping organisational responses [109]. However, research is divided on the question of whether negative (i.e., perceived threat) or positive (i.e., perceived opportunity) interpretations of events and factors are more likely to motivate organisational responses and actions in a given situation. Proponents of the threat-rigidity theory argue that the perception of threats encourages managers to rely on existing routines, while the perception of opportunities encourages greater risk taking [110,111]. In contrast, the prospect theory suggests that managers are more motivated to take risky action when a threat is perceived than when conditions are favourable [112].

As can be seen, entrepreneurial perception determines the outcome of managerial decisions and thus organisational responses. It is thereby of key importance in facilitating internationalisation efforts, and its various dimensions have a significant influence on the internationalisation of SMEs [113]. External factors related to internationalisation influence SMEs through management perceptions: since the top management of SMEs plays a dominant role in determining corporate strategy, it is logical to assume that the perception of external conditions and circumstances by top management will be a determining factor in shaping the firm's internationalisation motive and influencing its internationalisation action [114,115].

Managers often have very different interpretations of opportunities and threats. Opportunities tend to be viewed positively, with the likelihood of significant gains if the right response is made, while threats are viewed negatively, with the potential for losses [116]. Some SME managers may see significant opportunities in the environment, while others may see the same conditions as significant threats, as can be seen in numerous examples in practice [117,118].

There is consensus in the international business literature that geographic distance continues to play a strong role in firms' internationalisation decisions [119,120]. Even

though the transaction costs of communication and transportation have declined significantly in recent decades due to technological advances, several empirical studies confirm that geographic distance remains a barrier to foreign expansion and trade and increases the perceived risk of foreign market entry due to information asymmetries [121–123]. In addition to geographic distance, economic distance and differences between countries are also of paramount importance in internationalisation decisions [124]. Economic distance induces risks in internationalisation due to misunderstandings and problems of access to foreign stakeholders [107].

The perceived distance between the home country and the destination country is defined as “[...] the set of factors that prevent or interfere with the flow of information between the firm and the market” [125] (p. 308). According to the Uppsala model, firms tend to prefer countries with a close, i.e., within a small distance when they start operating abroad and only then expand into markets in distant countries [125]. This reasoning is related to the assumption that in countries within a smaller distance, the economic, social and cultural conditions are easier to understand and thus business operations are easier to carry out.

Kraus et al. [120] examine the perception of risk by senior managers in internationalisation decisions and find that the dimensions of distance (geographical, cultural, economic and political distance) are the primary drivers of risk assessment in the internationalisation process. Their results confirmed the hypotheses that the distance between home and destination countries increases the perceived risk of managers in making internationalisation decisions.

In sum, the literature suggests that greater distance and its perception and interpretation by managers increases risk perception and thus hinders entry into international markets, while the perception of opportunities facilitates it. Accordingly, the following hypotheses have been formulated for domestic SMEs:

H3: *SMEs that perceive CAGE distances more as an opportunity than a threat are more likely to have a higher intention to export.*

- **H3a:** *Cultural distance.*
- **H3b:** *Administrative distance.*
- **H3c:** *Geographic distance.*
- **H3d:** *Economic distance.*

2.6. Research Gap and the Initial Research Model

The present research was designed as an interdisciplinary study where the conceptual model integrates different theoretical frameworks and, as such, it crosses the boundaries of internationalisation, digitalisation, entrepreneurial perception, and sustainability research. By reviewing previous literature on these disciplines, some research gaps can be noticed in their cross-sections: the complex relationships between internationalisation, sustainability and entrepreneurial perception (1), digitalisation, sustainability and entrepreneurial perception (2), internationalisation, digitalisation and entrepreneurial perception (3) and digitalisation, internationalisation, sustainability and entrepreneurial perception (4) have not been studied yet (Figure 1). This article addresses the latter gap (4).

In particular, our research is based on the assumption that the firm’s stand on sustainable production, its level of digitalisation, its cultural background, and ultimately its size all together determine whether the firm actively engages in internationalisation. Accordingly, our research model is presented in Figure 2. We have considered firm size measured by turnover and staff headcount as a control variable, following prior studies on the internationalisation of SMEs [84–87].

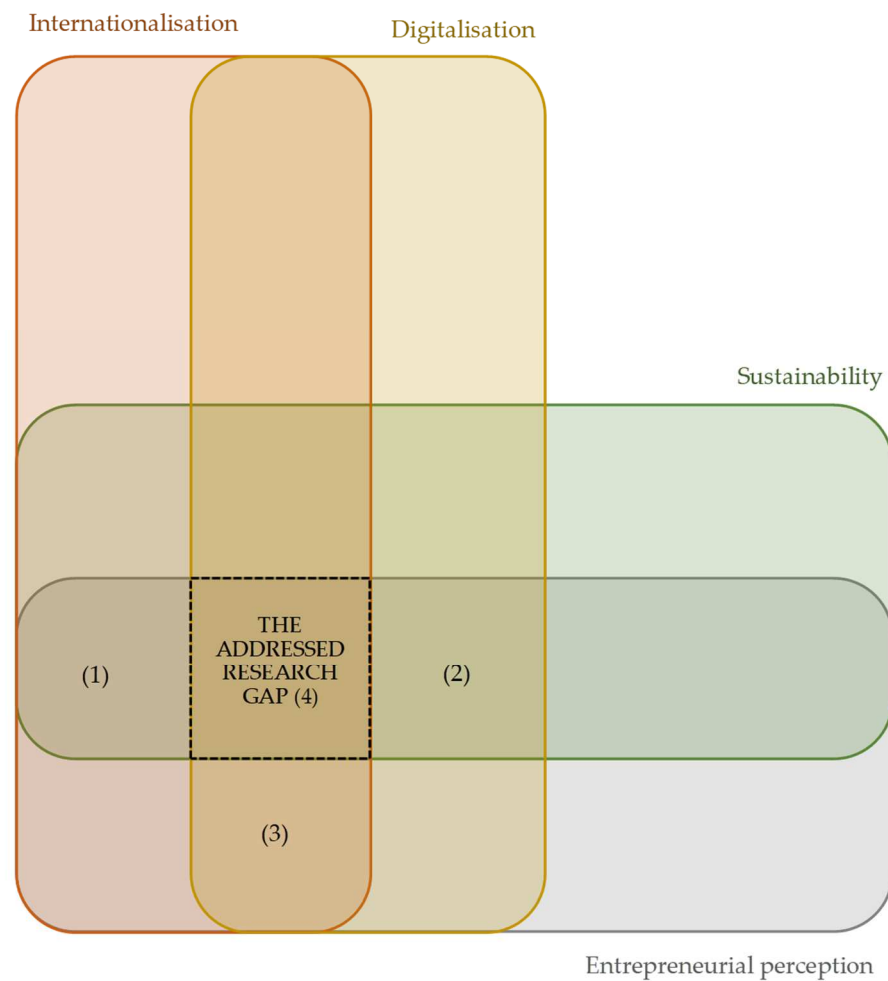


Figure 1. Research gaps in the literature.

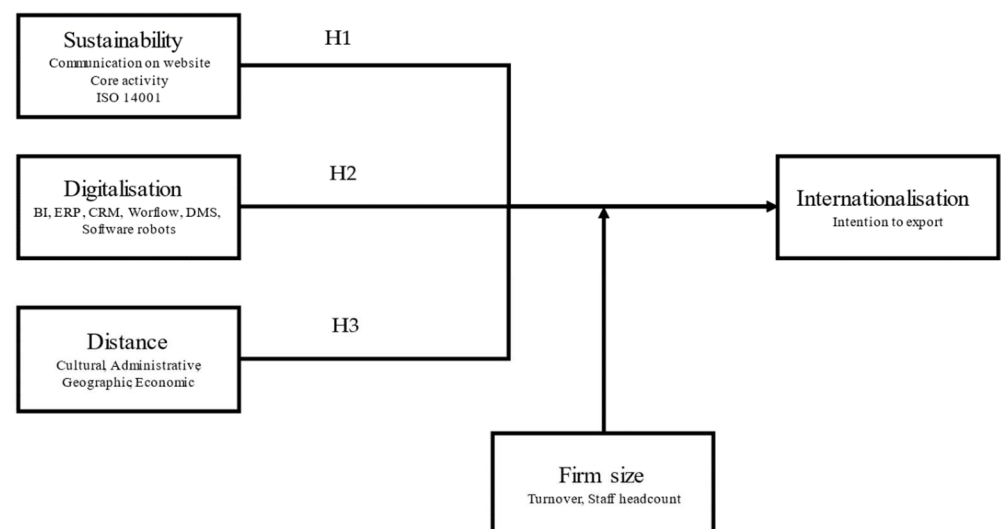


Figure 2. Initial research model.

3. Methodology

3.1. The Query and Sample Characteristics

Our aim was to test the hypotheses and explore the relationships between phenomena, and therefore we used a quantitative survey as an empirical research methodology [126]. Data were gathered between 18 May and 1 June 2021. The sample consists of companies in

Hungary; the selection criterion was a turnover of at least 1 million EUR, which was met by 20,500 companies in the Hungarian population. A questionnaire was sent by email to each of these companies, and in the end 335 valid responses were received, representing a response rate of 1.63%.

According to the definitions of the European Committee [127], 5.9% of the companies included in the survey are large enterprises, 19.1% are medium-sized enterprises, 60.3% are small enterprises and 14.6% are micro-enterprises. In line with the research topic, 315 SMEs were included in the study sample by excluding large enterprises (Table 1).

Table 1. Responding companies by size category.

Classification	Staff Headcount	And	Turnover (EUR)	Or	Balance Sheet Total (EUR)	N	%
Large enterprise	250≤	and	50,000,000<	or	43,000,000<	20	5.9
Medium-sized enterprise	<250	and	≤50,000,000	or	≤43,000,000	64	19.1
Small enterprise	<50	and	≤10,000,000	or	≤10,000,000	202	60.3
Microenterprise	<10	and	≤2,000,000	or	≤2,000,000	49	14.6

We also looked at the backgrounds of respondents representing companies by gender, area of operation, years of work experience, position, number of years in current job and number of years in current job in current position.

Some 79.7% of the respondents in the sample were male and 20.3% were female. As shown in Table 2, the majority hold a CEO/founder title, but there is also a relatively high proportion working in production, sales and marketing and finance. A smaller proportion of respondents worked in logistics operations and product development.

Table 2. Distribution of sample respondents by function of activity.

Function	Number of People	%
CEO/founder	172	54.6
Logistics	14	4.4
Finance	29	9.2
Sales and marketing	37	11.7
Product Development	6	1.9
Production	57	18.1
Total	315	100.0

The vast majority of respondents, 86.3%, are senior managers or owners, while 10.2% hold middle management positions, only 1.6% are lower-level managers and 1.9% do not hold any management position. Respondents have an average of 29 years of work experience, an average of 18 years in their current workplace and an average of 16 years in their current position. SMEs in the sample employ around 36 people on average, with an average turnover of 4002 thousand EUR and a balance sheet total of 2618 thousand EUR.

3.2. Measures and Analysis

Dependent variable: intention to export by relying on the work of Sommer [52] and Jaffe [57]. According to the definition of Reid [60], our research, by using the question of “How important are exports going to be for the company in 3 years’ time?”, focuses on the export dimensions of belief and expectancy. The variable was measured on a Likert scale, ranging from 1 (not important at all) to 5 (very important).

Independent variables:

Sustainability was measured by three binary variables, by following previous literature:

1. Does the company have the ISO 14001 certificate? [9,17,33,83];
2. Is environmental sustainability communicated on the website? [73–75];
3. Is the core activity of the company related to environmental sustainability? [83–85].

As the focus of our research is environmental sustainability, out of the 17 sustainable development goals [128], we have considered clean water and sanitation (6), affordable and clean energy (7), climate action (13), life below water (14) and life on land (15).

Digitalisation was measured by digital system usage (“Which of the following systems and solutions does your company use?”). As our research focuses on office digitalisation [11–16,49,98], we have included BI, ERP, CRM, workflow, document management systems and software robots. Participants could choose from three options (none/a domestically developed system/a system developed abroad). After creating descriptive statistics, we recoded the data by creating a binary variable (the respondent either uses the given digital system or not).

Entrepreneurial perception of distances was measured by the CAGE framework [107] (“Do you see the following factors as a threat or an opportunity when entering your first export market?”), by following the research of Antunes [108]. Participants were asked to rate the four factors related to entering the first export market (cultural, economic, geographic and administrative distance) on a Likert scale of 1 to 5, according to whether they perceived it as an opportunity or a threat (1: threat; 3: neutral; 5: opportunity).

Control variables: firm size, measured by turnover and staff headcount [84–87].

After the database was compiled and cleaned and the variables were coded, the database was filtered to keep the sample of relevant companies, i.e., SMEs. Following the methodology suggested by Jaffe and Pasternak [57], we then used linear regression analysis in order to test our hypotheses. The validity measures are in accordance with the usual standards found in business research. Data filtering and analysis were performed using IBM Statistical Package for Social Sciences (SPSS) 27.0 software.

4. Results

4.1. Internationalisation of SMEs: International Presence and the Importance of Exports

As it can be seen in Figure 3, 47% of the SMEs in the sample consider exports to be not at all important (category 1) at present, which is expected to decrease to 33% in 3 years, while only 19% of SMEs consider exports to be very important (category 5) at present, but 24% expect exports to be very important in 3 years. It can also be observed that the frequency of importance of exports in 3 years’ time is lower for categories 1 and 2, while the frequency of categories 3, 4 and 5 is higher compared to the current importance of exports. In general, therefore, it can be concluded that exports are likely to become more important for SMEs in 3 years’ time than they are today.

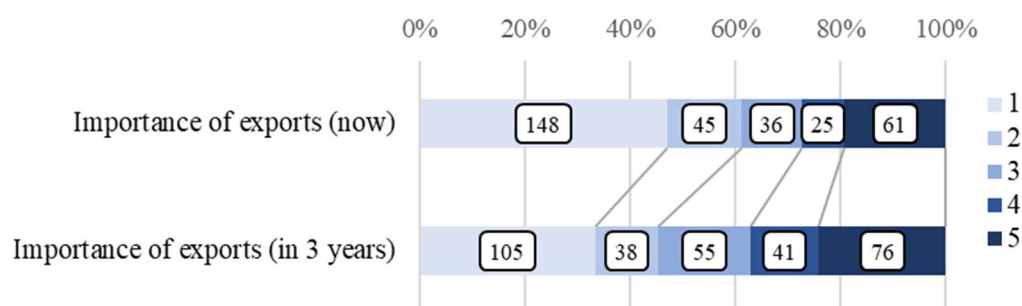


Figure 3. Importance of exports now and in 3 years for the SMEs in the sample.

4.2. Sustainability

According to the measures that our research has used, the majority of the sampled companies do not pay attention to environmental sustainability. Only 11% of the core activity of the sampled SMEs is related to environmental sustainability, however, 13% of the SMEs have an ISO 14001 certificate and 18% communicate environmental sustainability on corporate websites (Figure 4).

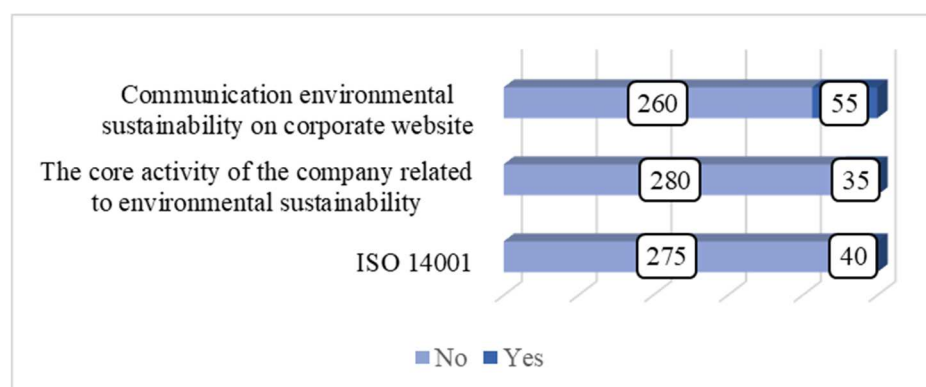


Figure 4. Sustainability management practices of the SMEs in the sample.

4.3. Digital Solutions

The variables in the block of questions on the use of digital solutions can take three forms: the firm does not use the system/solution in question, or it uses a domestically (or internally) developed or foreign-developed system/solution.

Among the SMEs in the sample, document management systems are the most used (64%), followed by ERP, then CRM systems, and software robots are the least used (11%). It can also be observed that for all systems, there are significantly more users of domestically developed solutions than of foreign ones (Figure 5).

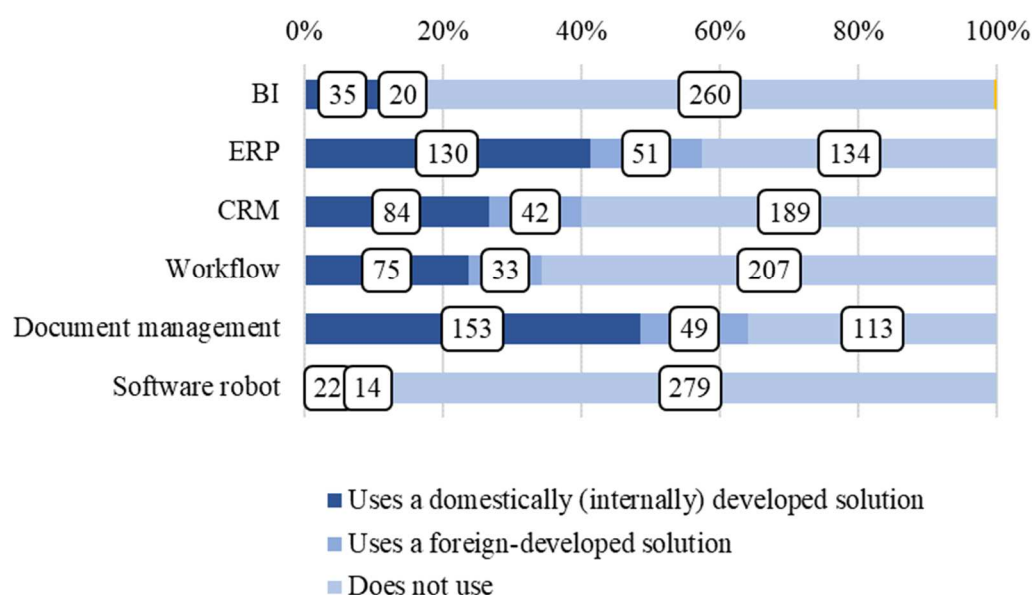


Figure 5. Use of digital systems by the SMEs in the sample.

4.4. Perception of Opportunities and Threats Related to Internationalisation

Figure 6 shows that the different culture and language of the destination country is the factor most often seen as an opportunity, followed by different economic circumstances, then geographical distance, and finally the different payment risk of customers (administrative distance) is the factor least often seen as an opportunity, and the latter is also the factor most often seen as a threat at the same time. However, all four factors have a mode and median of 3, indicating that the majority of respondents perceive them as neutral (Table A1 in Appendix A).

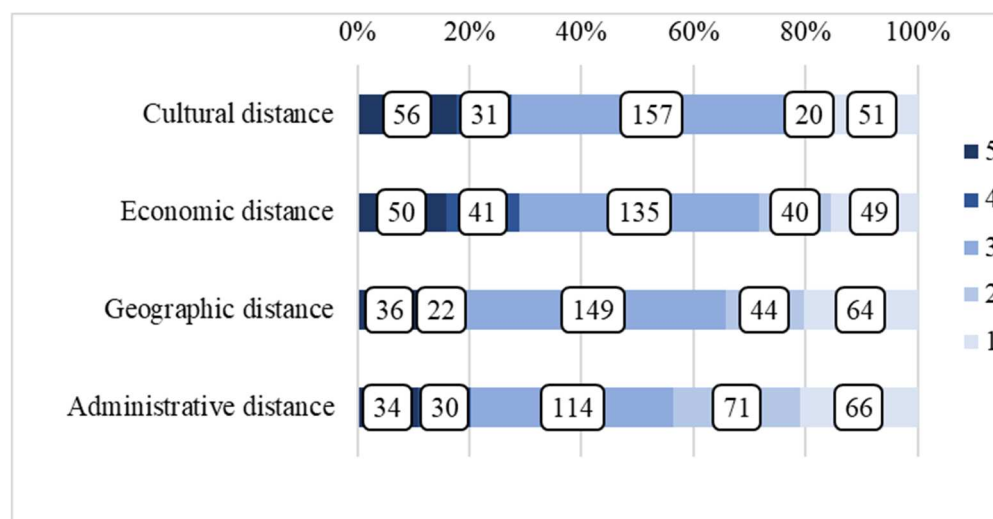


Figure 6. Perception of factors related to internationalisation (distances to the destination country) among SMEs in the sample.

4.5. The Relationship between Sustainability, Digitalisation, Entrepreneurial Perception and Internationalisation

After normalising the variables, linear regression analysis with the enter method was applied to examine which variables influence the intention to export of the company in 3 years' time. The general model is significant ($F = 3.864$, $p < 0.001$) with an R^2 of 0.162.

We have found that some aspects of sustainability and digitalisation and the perception of opportunity, in the case of some types of distances, foster the intention of internationalisation. As it can be seen in Table 3, neither the net revenue nor the number of employees (company size) will predict whether a company will find exports important in 3 years' time. The model suggests that communicating environmental sustainability on corporate website ($\beta = 0.171$, $p < 0.05$), using ERP system ($\beta = 0.162$, $p < 0.05$) and considering cultural distance as an opportunity ($\beta = 0.208$, $p < 0.01$) are significant predictors of the intention of a company to export in 3 years' time.

According to the results, we have accepted the following hypotheses:

H1a: SMEs that communicate environmental sustainability on their website are more likely to have a higher intention to export.

H2b: SMEs that use ERP systems are more likely to have a higher intention to export.

H3a: SMEs that perceive cultural distance more as an opportunity than a threat are more likely to have a higher intention to export.

According to the findings, our final research model is the following (Figure 7).

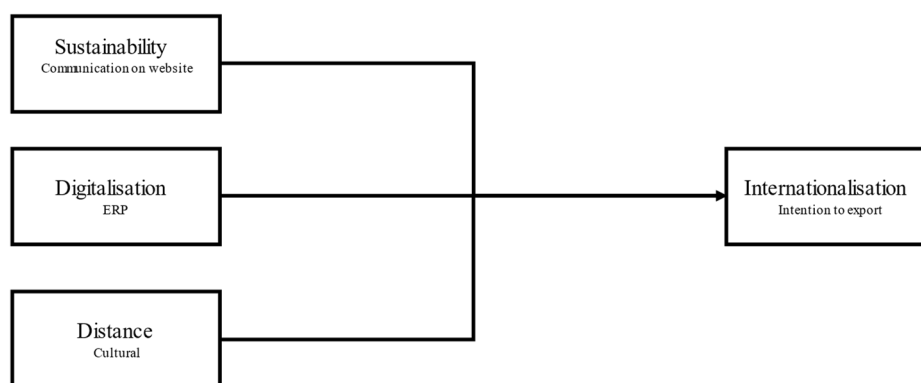


Figure 7. Final research model.

Table 3. The intention to export of the company in 3 years' time.

	Unstandardized B	S.E.	Hypothesis	Decision
Communicating environmental sustainability on corporate website	0.171 *	0.067	H1a	accept
The core activity of the company is related to environmental sustainability	−0.051	0.065	H1b	reject
ISO 14001 certificate	−0.028	0.058	H1c	reject
BI system	0.021	0.062	H2a	reject
ERP system	0.162 *	0.063	H2b	accept
CRM system	−0.151	0.068	H2c	reject
Workflow system	0.085	0.064	H2c	reject
Document management system	0.003	0.057	H2d	reject
Software robots	0.050	0.061	H2e	reject
Turnover (thousand EUR)	−0.012	0.061	control variable	
Staff headcount	0.048	0.062	control variable	
Cultural distance	0.208 **	0.068	H3a	accept
Administrative distance	−0.026	0.071	H3b	reject
Geographic distance	0.056	0.072	H3c	reject
Economic distance	0.132	0.076	H3d	reject

* The value is significant at the $p < 0.05$ level. ** The value is significant at the $p < 0.01$ level.

5. Discussion

Previous research pointed out that the intention to export is determined by competitive advantages, organisational readiness and perceived risks [57]. In line with that, our research found that the communication of environmental sustainability on the company's website (as sources of competitive advantages), the usage of ERP systems (as a degree of organisational readiness) and the entrepreneurial perception of cultural distance (as a perceived risk) determine the intention to export.

5.1. Sustainability

Our research has contributed to the yet scarce literature on the effect of sustainability on the internationalisation of SMEs and has highlighted, that in the case of addressing attracting international markets, environmental sustainability plays an important role. In line with the previous literature [80,81], our research also supports the positive relationship between focusing on sustainability and export. However, it has enhanced the literature by investigating the intention of export instead of present export performance.

In contrast to previous research (see, e.g., [9,17,33,83]), we have found that adopting quality certifications—in this case, ISO 14001—does not have an effect on the intention to export in 3 years' time. Instead, the communication of environmental sustainability on the corporate website resulted to be a significant predictor.

5.2. Digital Systems

The literature emphasises the (potential) benefits of digital solutions for the internationalisation of SMEs. These advantages may be even more important for SMEs than for large firms precisely because they play a major role in overcoming the constraints of firm size [49,96–98]. The results of our empirical research are partly consistent with and partly contradictory to this general assumption.

In many cases, SMEs are preparing in advance to enter international markets and expand international activities by installing and using digital systems [96,97]. This could

potentially explain why the usage of digital systems predicts the intention to export in 3 years' time. In the case of ERP systems, we found evidence that they are supporting SMEs' internationalisation efforts.

5.3. Threats and Opportunities—The Entrepreneurial Perception

According to the international business and economics literature, in addition to geographic distance, the cultural, economic and administrative distances between countries are also of paramount importance for internationalisation decisions [118,120]. However, managers often interpret opportunities and threats quite differently, with some seeing opportunities and others seeing threats in the same environment [116–118].

Accordingly, the results of our empirical research show that respondents are divided between the perception of opportunities and threats for the four factors, although all factors were rated as “neutral” by the majority.

The literature has shown that the risk-taking orientation of entrepreneurs is a key factor in their decisions and success, thus influencing the internationalisation of SMEs [113,129]. The results of the linear regression analysis confirm these findings: SMEs whose managers perceive the various factors related to foreign entry as an opportunity rather than a threat attach more importance to exporting in 3 years in the case of cultural distance. These results support the threat–rigidity theory [110,111] by showing that perceived opportunities motivate firm managers to take action, i.e., to launch internationalisation and exports. Accordingly, the results contradict the prospect theory [112].

Our findings indicate that perceiving cultural distance, as an opportunity, significantly increases the internationalisation intentions of SMEs. Antunes [108] found that, in addition to cultural component, economic distances also have a large impact on internationalisation. However, it is important to note that their study focused on the internationalisation of MNEs, which may be at the root of this difference: while multinationals tend to focus more on macroeconomic factors when making internationalisation decisions, for SMEs the culture of the target country is the decisive factor.

6. Conclusions

The fourth industrial revolution and the rise of modern digital technologies have brought significant changes in the whole economy and society, including businesses. New technologies are accelerating globalisation and internationalisation, but many SMEs are lagging behind in internationalisation. This is true for adopting sustainable development goals as well: although there is a growing pressure to pay attention to the environmental aspects of business as well as traditional components, many SMEs face barriers and do not recognize its importance. The aim of this article is to fill a research gap by exploring the links between four ‘hot topics’ of recent business literature: SMEs' digital development, environmental sustainability, entrepreneurial perception and internationalisation.

Numerous theories have emerged to describe the internationalisation of companies, and several have identified the drivers of and barriers to internationalisation, but the motives and drivers of internationalisation for SMEs may be different from those for large firms. Previous research has generally shown that the use of digital systems and solutions facilitates SME internationalisation, and that greater distance and its perception by managers hinders entry into international markets, while the perception of opportunities facilitates it. Although the research focusing on how sustainability contributes to internationalisation is yet scarce, some empirical results suggest that it positively affects the export performance.

The hypotheses were tested through quantitative, survey-based research among 315 Hungarian SMEs. The results suggest that the use of ERP systems and the communication of environmental sustainability are both drivers for internationalisation, although the decision to introduce them is made by the SMEs when they plan their international expansion. Those SMEs whose managers perceive cultural and economic distance related

to internationalisation as opportunities rather than threats consider international market entry via exporting as important for the company's future in 3 years' time.

An important theoretical contribution of our research is that the conventional thinking, that working with local partners is a sustainable way for production, no longer holds. Digitalisation can eliminate geographical boundaries and partnering with digitally advanced suppliers can help the firm to operate in a more sustainable way.

Based on implications from the results, we can draw conclusions regarding which SMEs will successfully enter the international market based on digital development, sustainability and entrepreneurial perception, and from a management perspective, suggestions can be made regarding which digital systems and which ways of "incorporating green" can be success factors for an SME wishing to internationalise.

7. Limitations and Future Research Directions

As a limitation, it is important to mention that our research does not pay attention to the effect of the type and the objective characteristics of the foreign market (e.g., a specific country or region) on internationalisation. Defining the possible export markets based on hard data for every SME included in the database can raise some questions and use available data to refer to the past, while the article focuses on future intentions. Furthermore, objective characteristics always appear through perception (meaning that what one firm considers a threat, another considers an opportunity), justifying our model. However, investigating the objective characteristics of the foreign market could be a further research direction.

This article analyses the intention to export but does not pay attention to the past and present export activity of companies. Comparing them would be also an interesting research direction.

Our dataset only consists of SMEs operating in Hungary (being a representative of the CEE region). A further research direction could be to gather international (e.g., regional) data and draw conclusions by comparing the findings of the present research and the findings based on a database containing international data as well.

As an important stream of research focuses on the determining factors of firm profitability, it would be worth investigating the effect of our independent variables on the indicators of profitability.

The article focuses on export in terms of internationalisation and does not include other areas that are also important in terms of digitalisation, such as the digitalisation of companies embedded in international value chains, or the relationship between international acquisitions and mergers and digital development. These limitations also show future research directions.

Finally, our research focuses on the dimensions of beliefs and the expectancy of export contributions to the firm's growth when defining intention. Further research could address the other two dimensions (motivation and attitude) of export intention as well.

Author Contributions: Conceptualisation, R.Z.S. and B.S.; design of questionnaire, R.Z.S. and B.S.; methodology, R.Z.S.; formal analysis, R.Z.S., B.S. and A.T.; writing—original draft preparation, B.S. and A.T.; writing—review and editing, R.Z.S. and B.S.; visualisation, A.T.; supervision, R.Z.S., modification after the review, B.S., R.Z.S., A.T. and P.B. All authors have read and agreed to the published version of the manuscript.

Funding: This research and the APC was supported by the Cooperative Doctoral Program, Doctoral Student Scholarship: KDP-2020 and KDP-2021, of the Ministry for Innovation and Technology from the source of the National Research, Development and Innovation Fund.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. Descriptive statistics on the perception of psychological distance factors among the SMEs in the sample.

	Mean	Median	Mode	SD	Skewness	Kurtosis
Cultural distance	3.07	3.00	3	1.233	−0.076	−0.556
Administrative distance	2.67	3.00	3	1.218	0.320	−0.630
Geographic distance	2.75	3.00	3	1.193	0.171	−0.478
Economic distance	3.01	3.00	3	1.232	−0.008	−0.687

References

- Hollenstein, H. Determinants of International Activities: Are SMEs different? *Small Bus. Econ.* **2005**, *24*, 431–450. [\[CrossRef\]](#)
- Hollensen, S. *Global Marketing: A Market-Responsive Approach*; Prentice Hall: Hoboken, NJ, USA, 1998.
- Albaum, G.; Strandkov, J.; Duerr, E. *International Marketing and Export Management*, 3rd ed.; Addison Wesley Longman Ltd.: Boston, MA, USA, 1998.
- Johanson, J.; Wiedersheim-Paul, F. The Internationalization of the Firm—Four Swedish Cases. *J. Manag. Stud.* **1975**, *12*, 305–322. [\[CrossRef\]](#)
- Deresky, H. *International Management*, 3rd ed.; Prentice Hall: Hoboken, NJ, USA, 2000.
- Leonidou, L. An Analysis of the Barriers Hindering Small Business Export Development. *J. Small Bus. Manag.* **2004**, *43*, 279–302. [\[CrossRef\]](#)
- Gustavsson, S.; Lundgren, E. *Internationalization of SMEs*; Luleå University of Technology: Luleå, Sweden, 2006.
- Langseth, H.; O'Dwyer, M. Forces influencing the speed of internationalisation. *J. Small Bus. Enterpr. Dev.* **2016**, *23*, 122–148. [\[CrossRef\]](#)
- Gil-Barragan, J.M.; Lopez-Sanchez, M.J. The Fast Lane of Internationalization of Latin American SMEs: A Location-Based Approach. *Sustainability* **2021**, *13*, 3162. [\[CrossRef\]](#)
- Coviello, N.; Kano, L.; Liesch, P.W. Adapting the Uppsala model to a modern world: Macro-context and microfoundations. *J. Int. Bus. Stud.* **2017**, *48*, 1151–1164. [\[CrossRef\]](#)
- Stoldt, J.; Trapp, T.U.; Toussaint, S.; Süße, M.; Schlegel, A.; Putz, M. Planning for Digitalisation in SMEs using Tools of the Digital Factory. *Procedia CIRP* **2018**, *72*, 179–184. [\[CrossRef\]](#)
- Becker, W.; Schmid, O. The right digital strategy for your business: An empirical analysis of the design and implementation of digital strategies in SMEs and LSEs. *Bus. Res.* **2020**, *13*, 985–1005. [\[CrossRef\]](#)
- Bharadwaj, A.; El Sawy, O.A.; Pavlou, P.A.; Venkatraman, N. Digital business strategy: Toward a next generation of insights. *MIS Q.* **2013**, *37*, 471–482. [\[CrossRef\]](#)
- Bouwman, H.; Nikou, S.; de Reuver, M. Digitalization, business models, and SMEs: How do business model innovation practices improve performance of digitalizing SMEs? *Telecommun. Policy* **2019**, *43*, 101828. [\[CrossRef\]](#)
- Galindo-Martín, M.-Á.; Castaño-Martínez, M.-S.; Méndez-Picazo, M.-T. Digital transformation, digital dividends and entrepreneurship: A quantitative analysis. *J. Bus. Res.* **2019**, *101*, 522–527. [\[CrossRef\]](#)
- Cenamor, J.; Parida, V.; Wincent, J. How entrepreneurial SMEs compete through digital platforms: The roles of digital platform capability, network capability and ambidexterity. *J. Bus. Res.* **2019**, *100*, 196–206. [\[CrossRef\]](#)
- García-Quvedo, J.; Kesidou, E.; Martínez-Ros, E. Driving sectoral sustainability via the diffusion of organizational eco-innovations. *Bus. Strategy Environ.* **2019**, *29*, 1437–1447. [\[CrossRef\]](#)
- Escher, I.; Brzustewicz, P. Inter-Organizational Collaboration on Projects Supporting Sustainable Development Goals: The Company Perspective. *Sustainability* **2020**, *12*, 4969. [\[CrossRef\]](#)
- Fonseca, L.; Silva, V.; Sá, J.C.; Lima, V.; Santos, G.; Silva, R. B Corp versus ISO 9001 and 14001 certifications: Aligned, or alternative paths, towards sustainable development? *Corp. Soc. Responsib. Environ. Manag.* **2021**, *29*, 496–508. [\[CrossRef\]](#)
- Eccles, R.; Perkins, K.M.; Serafeim, G. How to Become a Sustainable Company. *MIT Sloan Manag. Rev.* **2012**, *53*, 43–50.
- Pieroni, M.P.P.; McAloone, T.C.; Pigosso, D.C.A. Business model innovation for circular economy and sustainability: A review of approaches. *J. Clean. Prod.* **2019**, *215*, 198–216. [\[CrossRef\]](#)
- Saxena, K.; Balani, S.; Srivastava, P. The relationship among corporate social responsibility, sustainability and organizational performance in pharmaceutical sector: A literature review. *Int. J. Pharm. Healthc. Mark.* **2021**, *15*, 572–597. [\[CrossRef\]](#)
- Lichtenthaler, U. Digitainability: The Combined Effects of the Megatrends Digitalization and Sustainability. *J. Innov. Manag.* **2021**, *9*, 64–80. [\[CrossRef\]](#)
- Niehoff, S.; Beier, G. Industrie 4.0 and a sustainable development: A short study on the perception and expectations of experts in Germany. *Int. J. Innov. Sustain. Dev.* **2018**, *12*, 360–374. [\[CrossRef\]](#)
- Szabó, R.Z.; Herceg, I.V.; Hanák, R.; Hortoványi, L.; Romanová, A.; Mocan, M.; Djurić, D. Industry 4.0 Implementation in B2B Companies: Cross-Country Empirical Evidence on Digital Transformation in the CEE Region. *Sustainability* **2020**, *12*, 9538. [\[CrossRef\]](#)

26. Nagy, O.; Papp, I.; Szabó, R.Z. Construction 4.0 Organisational Level Challenges and Solutions. *Sustainability* **2021**, *3*, 12321. [\[CrossRef\]](#)
27. Bui, T.N.; Nguyen, A.H.; Le, T.T.H.; Nguyen, V.P.; Le, T.T.H.; Tran, T.T.H.; Nguyen, N.M.; Le, T.K.O.; Nguyen, T.K.O.; Nguyen, T.T.T.; et al. Can a Short Food Supply Chain Create Sustainable Benefits for Small Farmers in Developing Countries? An Exploratory Study of Vietnam. *Sustainability* **2021**, *13*, 2443. [\[CrossRef\]](#)
28. Vittersø, G.; Torjusen, H.; Laitala, K.; Tocco, B.; Biasini, B.; Csillag, P.; de Labarre, M.D.; Lecoeur, J.-L.; Maj, A.; Majewski, E.; et al. Short Food Supply Chains and Their Contributions to Sustainability: Participants' Views and Perceptions from 12 European Cases. *Sustainability* **2019**, *11*, 4800. [\[CrossRef\]](#)
29. Ruszkai, C.; Pajtók Tari, I.; Patkós, C. Possible Actors in Local Foodscapes? LEADER Action Groups as Short Supply Chain Agents—A European Perspective. *Sustainability* **2021**, *13*, 2080. [\[CrossRef\]](#)
30. Merlino, V.M.; Sciallo, A.; Pettenati, G.; Sottile, F.; Peano, C.; Massaglia, S. "Local Production": What Do Consumers Think? *Sustainability* **2022**, *14*, 3623. [\[CrossRef\]](#)
31. Young, C. Should You Buy Local? *J. Bus. Ethics* **2022**, *176*, 265–281. [\[CrossRef\]](#)
32. Denicolai, S.; Zucchella, A.; Magnani, G. Internationalization, digitalization, and sustainability: Are SMEs ready? A survey on synergies and substituting effects among growth paths. *Technol. Forecast. Soc. Change* **2021**, *166*, 120650. [\[CrossRef\]](#)
33. Wang, J.-X.; Zhao, M.-Z. Economic impacts of ISO 14001 certification in China and the moderating role of firm size and age. *J. Clean. Prod.* **2020**, *274*, 123059. [\[CrossRef\]](#)
34. McDougall, P.P.; Oviatt, B.M. International entrepreneurship: The intersection of two research paths. *Acad. Manag. J.* **2000**, *43*, 902–906. [\[CrossRef\]](#)
35. Tutunea, M.F.; Rus, R.V. Business Intelligence Solutions for SME's. *Procedia Econ. Financ.* **2012**, *3*, 865–870. [\[CrossRef\]](#)
36. Prasanthi, K.; Rao, M.B. Motives, Drivers, and Barriers for Internationalization: A Study of SMEs in Andhra Pradesh. In *Transnational, Ethnic and Returnee Entrepreneurship: Perspectives on SME Internationalization*; Manimala, M.J., Wasdani, K.P., Vijaygopal, A., Eds.; Springer: Berlin/Heidelberg, Germany, 2019; pp. 213–239. [\[CrossRef\]](#)
37. Pett, T.L.; Francis, J.D.; Wolff, J.A. Examining Sme Internationalization Motives as an Extension of Competitive Strategy. *J. Bus. Entrep.* **2004**, *16*, 46–65.
38. Stallkamp, M.; Schotter, A.P. Platforms without borders? The international strategies of digital platform firms. *Glob. Strategy J.* **2019**, *11*, 58–80. [\[CrossRef\]](#)
39. North, K.A.; Lorenzo, O.J. Promoting digitally enabled growth in SMEs: A framework proposal. *J. Enterp. Inf. Manag.* **2020**, *33*, 238–262. [\[CrossRef\]](#)
40. Schaper, M.; Raar, J. Not so easy being green? *Aust. CPA* **2001**, *71*, 40–42.
41. Cantele, S.; Zardini, A. What drives small and medium enterprises towards sustainability? Role of interactions between pressures, barriers, and benefits. *Corp. Soc. Respons. Environ. Manag.* **2020**, *27*, 126–136. [\[CrossRef\]](#)
42. Penrose, E.T. *The Theory of the Growth of the Firm*; John Wiley: New York, NY, USA, 1959.
43. Barney, J.B. Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *J. Manag.* **2001**, *27*, 643–650. [\[CrossRef\]](#)
44. Prahalad, C.K.; Hamel, G. The Core Competence of the Corporation. *Harv. Bus. Rev.* **1990**, *68*, 79–91. [\[CrossRef\]](#)
45. Korl, Y.Y.; Mahoney, J.T.; Siemsen, E.; Tan, D. Penrose's The Theory of the Growth of the Firm: An Exemplar of Engaged Scholarship. *Prod. Oper. Manag.* **2016**, *25*, 1727–1744. [\[CrossRef\]](#)
46. Teece, D.J. Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strat. Manag. J.* **2007**, *28*, 1319–1350. [\[CrossRef\]](#)
47. Teece, D.J. Dynamic capabilities: Routines versus entrepreneurial action. *J. Manag. Stud.* **2012**, *49*, 1395–1401. [\[CrossRef\]](#)
48. Teece, D.J. Dynamic capabilities and entrepreneurial management in large organizations: Toward a theory of the (entrepreneurial) firm. *Eur. Econ. Rev.* **2016**, *86*, 202–216. [\[CrossRef\]](#)
49. Tarutè, A.; Gatautis, R. ICT Impact on SMEs Performance. *Procedia Soc. Behav. Sci.* **2014**, *110*, 1218–1225. [\[CrossRef\]](#)
50. Hortoványi, L. The dynamic nature of competitive advantage of the firm. *Adv. Econ. Bus.* **2016**, *4*, 624–629. [\[CrossRef\]](#)
51. Zahra, S.A.; George, G. International entrepreneurship: The current satus of the field and future research agenda. In *Strategic Entrepreneurship: Creating a New Mindset*; Hitt, M.A., Ireland, R.D., Camp, S.M., Sexton, D.L., Eds.; Blackwell: Oxford, UK, 2002; pp. 255–288.
52. Sommer, L.; Haug, M. Intention as a cognitive antecedent to international entrepreneurship—Understanding the moderating roles of knowledge and experience. *Int. Entrep. Manag. J.* **2011**, *7*, 111–142. [\[CrossRef\]](#)
53. Dulany, D.E. Hypotheses and Habits in Verbal 'Operant Conditioning'. *J. Abnorm. Soc. Psychol.* **1961**, *63*, 251–263. [\[CrossRef\]](#) [\[PubMed\]](#)
54. Fishbein, M.; Ajzen, I. *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*; Addison-Wesley Pub. Co.: Boston, MA, USA, 1975.
55. Davis, F.D. Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Q.* **1989**, *13*, 319–340. [\[CrossRef\]](#)
56. Venkatesh, V.; Thong, J.; Xu, X. Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Q.* **2012**, *36*, 157–178. [\[CrossRef\]](#)

57. Jaffe, E.D.; Pasternak, H. An Attitudinal Model to Determine the Export Intention of Non-Exporting, Small Manufacturers. *Int. Mark. Rev.* **1994**, *11*, 17–32. [\[CrossRef\]](#)
58. Leonidou, L.C.; Katsikeas, C.S.; Paliawadana, D.; Spyropoulou, S. An analytical review of the factors stimulating smaller firms to export. *Int. Mark. Rev.* **2007**, *24*, 735–770. [\[CrossRef\]](#)
59. Hortoványi, L. *Corporate Entrepreneurship*; Lambert Academic Publishing (LAP): Beau Bassin, Mauritius, 2017.
60. Reid, S.D. The Decision-Maker and Export Entry and Expansion. *J. Int. Bus. Stud.* **1981**, *12*, 101–112. [\[CrossRef\]](#)
61. Enright, S.; Oger, C.; Pruzan-Jorgensen, P.M.; Farrag-Thibault, A. *Private-Sector Collaboration for Sustainable Development*; Report; BSR: San Francisco, CA, USA, 2018.
62. Wasdani, K.P.; Vijaygopal, A.; Manimala, M.J.; Verghese, A.K. Impact of Corporate Governance on Organisational Performance of Indian Firms. *Indian J. Corp. Gov.* **2021**, *14*, 180–208. [\[CrossRef\]](#)
63. Santos, F.; Pache, A.C.; Birkholz, C. Making hybrids work: Aligning business models and organizational design for social enterprises. *Calif. Manag. Rev.* **2015**, *57*, 36–58. [\[CrossRef\]](#)
64. Schlange, L.E. Stakeholder Perception in Sustainable Entrepreneurship: The Role of Managerial and Organizational Cognition. In Proceedings of the Corporate Responsibility Research Conference, University of Leeds, Leeds, UK, 15–27 July 2007; pp. 1–24.
65. Vuorio, A.M.; Puumalainen, K.; Fellnhöfer, K. Drivers of entrepreneurial intentions in sustainable entrepreneurship. *Int. J. Entrep. Behav. Res.* **2018**, *24*, 359–381. [\[CrossRef\]](#)
66. Hoogendoorn, B.; van der Zwan, P.; Thurik, R. Sustainable Entrepreneurship: The Role of Perceived Barriers and Risk. *J. Bus. Ethics* **2019**, *157*, 1133–1154. [\[CrossRef\]](#)
67. Pelletier, N.; Audsley, E.; Brodt, S.; Garnett, T.; Henricksson, P.; Kendall, A.; Kramer, K.J.; Murphy, D.; Nemecek, T.; Troell, M. Energy Intensity of Agriculture and Food Systems. *Annu. Rev. Environ. Resour.* **2011**, *36*, 223–246. [\[CrossRef\]](#)
68. Seyfang, G. Avoiding Asda? Exploring Consumer Motivations in Local Organic Food Networks. *Local Environ.* **2008**, *13*, 187–201. [\[CrossRef\]](#)
69. Bilali, H.E.; Allahyari, M.S. Transition towards sustainability in agriculture and food systems: Role of information and communication technologies. *Inf. Process. Agric.* **2018**, *5*, 456–464. [\[CrossRef\]](#)
70. Sebök, A.; Varsanyi, K.; Kujani, K.; Xhakollari, V.; Fricz, A.; Castellini, A.; Gioia, D.; Gaggia, F.; Canavari, M. Value Propositions for Improving the Competitiveness of Short Food Supply Chains Built on Technological and Non-Technological Innovations. *Int. J. Food Stud.* **2022**, *11*, SI161–SI181. [\[CrossRef\]](#)
71. Battisti, M.; Perry, M. Walking the talk? Environmental responsibility from the perspective of small-business owners. *Corp. Soc. Respons. Environ. Manag.* **2011**, *18*, 172–185. [\[CrossRef\]](#)
72. Revell, A.; Blackburn, R. The business case for sustainability? An examination of small firms in the UK's construction and restaurant sectors. *Bus. Strategy Environ.* **2007**, *16*, 404–420. [\[CrossRef\]](#)
73. Herrick, C.N.; Pratt, J.L. Communication and the Narrative Basis of Sustainability: Observations from the Municipal Water Sector. *Sustainability* **2013**, *5*, 4428–4443. [\[CrossRef\]](#)
74. Siano, A.; Conte, F.; Amabile, S.; Vollero, A.; Piciocchi, P. Communicating Sustainability: An Operational Model for Evaluating Corporate Websites. *Sustainability* **2016**, *8*, 950. [\[CrossRef\]](#)
75. Dade, A.; Hassenzahl, D.M. Communicating sustainability: A content analysis of website communications in the United States. *Int. J. Sustain. High. Educ.* **2013**, *14*, 254–263. [\[CrossRef\]](#)
76. Gomez-Trujillo, A.M.; Gonzalez-Perez, M.A. What do we know about organizational sustainability and international business? *Manag. Environ. Qual.* **2020**, *31*, 292–305. [\[CrossRef\]](#)
77. The ISO Survey. Available online: <https://isotc.iso.org/livelink/livelink?func=ll&objId=18808772&objAction=browse&viewType=1> (accessed on 12 July 2020).
78. Fonseca, L. ISO 14001:2015 an improved tool for sustainability. *J. Ind. Eng. Manag.* **2015**, *8*, 37–50. [\[CrossRef\]](#)
79. Fonseca, L. The EFQM 2020 model. A theoretical and critical review. *Total Qual. Manag. Bus. Excell.* **2021**, *33*, 1011–1038. [\[CrossRef\]](#)
80. Johnstone, L.; Hallberg, P. ISO 14001 adoption and environmental performance in small to medium sized enterprises. *J. Environ. Manag.* **2020**, *266*, 110592. [\[CrossRef\]](#)
81. Murmura, F.; Liberatore, L.; Bravi, L.; Casolani, N. Evaluation of Italian Companies' perception about ISO 14001 and eco management and audit scheme III: Motivations, benefits and barriers. *J. Clean. Prod.* **2018**, *174*, 691–700. [\[CrossRef\]](#)
82. Lee, S.M.; Noh, Y.; Choi, D.; Rha, J.S. Environmental policy performances for sustainable development: From the perspective of ISO 14001 certification. *Corp. Soc. Responsib. Environ. Manag.* **2017**, *24*, 108–120. [\[CrossRef\]](#)
83. Arora, P.; De, P. Environmental sustainability practices and exports: The interplay of strategy and institutions in Latin America. *J. World Bus.* **2020**, *55*, 101094. [\[CrossRef\]](#)
84. Martín-Tapia, I.; Aragón-Correa, J.A.; Manzanares, A. Environmental strategy and exports in medium, small and micro-enterprise. *J. World Bus.* **2010**, *45*, 266–275. [\[CrossRef\]](#)
85. Vencato, C.H.R.; Gomes, C.M.; Scherer, F.L.; Kneipp, J.M.; Bichueti, R.S. Strategic sustainability management and export performance. *Manag. Environ. Qual. Int. J.* **2014**, *25*, 431–445. [\[CrossRef\]](#)
86. Hervé, A.; Schmitt, C.; Baldegger, R. Internationalization and Digitalization: Applying digital technologies to the internationalization process of small and medium-sized enterprises. *Technol. Innov. Manag. Rev.* **2020**, *10*, 28–40. [\[CrossRef\]](#)

87. Niemand, T.; Rigtering, C.; Kallmünzer, A.; Kraus, S.; Matijas, S. Entrepreneurial orientation and digitalization in the financial service industry: A contingency approach. In Proceedings of the 25th European Conference on Information Systems (ECIS), Guimarães, Portugal, 5–10 June 2017; pp. 1081–1096.
88. Youssef, A.B.; Boubaker, S.; Dedaj, B.; Carabregu-Vokshic, M. Digitalization of the economy and entrepreneurship intention. *Technol. Forecast. Soc. Change* **2021**, *164*, 120043. [\[CrossRef\]](#)
89. Reim, W.; Yli-Viitala, P.; Arrasvuori, J.; Parida, V. Tackling business model challenges in SME internationalization through digitalization. *J. Innov. Knowl.* **2022**, *7*, 100199. [\[CrossRef\]](#)
90. Eriksson, T.; Heikkilä, M.; Nummela, N. Business model innovation for resilient international growth. *Small Enterpr. Res.* **2022**, *29*, 205–226. [\[CrossRef\]](#)
91. Schmitt, C.; Baldegger, R. Editorial: Digitalization and Internationalization. *Technol. Innov. Manag. Rev.* **2020**, *10*, 3–4. [\[CrossRef\]](#)
92. Lee, Y.Y.; Falahat, M.; Sia, B.K. Drivers of digital adoption: A multiple case analysis among low and high-tech industries in Malaysia. *Asia Pac. J. Bus. Adm.* **2021**, *13*, 80–97. [\[CrossRef\]](#)
93. Gawel, A.; Mroczek-Dąbrowska, K.; Pietrzykowski, M. Digitalization and Its Impact on the Internationalization Models of SMEs. FGF Studies in Small Business and Entrepreneurship. In *Artificiality and Sustainability in Entrepreneurship*; Adams, R., Grichnik, D., Pundziene, A., Volkmann, C., Eds.; Springer: Berlin/Heidelberg, Germany, 2023; pp. 19–40.
94. Gonçalves, M. Internationalization as an integrated process: Evidence from SMEs in Lusophone Africa. *J. Transnatl. Manag.* **2022**, *27*, 37–63. [\[CrossRef\]](#)
95. Kolagar, M.; Reim, W.; Parida, V.; Sjödin, D. Digital servitization strategies for SME internationalization: The interplay between digital service maturity and ecosystem involvement. *J. Serv. Manag.* **2022**, *33*, 143–162. [\[CrossRef\]](#)
96. Pergelova, A.; Manolova, T.; Simeonova-Ganeva, R.; Yordanova, D. SMEs, Democratizing Entrepreneurship? Digital Technologies and the Internationalization of Female-Led. *J. Small Bus. Manag.* **2018**, *57*, 14–39. [\[CrossRef\]](#)
97. Cassetta, E.; Monarca, U.; Dileo, I.; Di Berardino, C.; Pini, M. The relationship between digital technologies and internationalisation. Evidence from Italian SMEs. *Ind. Innov.* **2020**, *27*, 311–339. [\[CrossRef\]](#)
98. Pini, M.; Dileo, I.; Cassetta, E. Digital Reorganization as a Driver of the Export Growth of Italian Manufacturing Small and Medium Sized Enterprises. *J. Appl. Econ. Sci. J.* **2018**, *13*, 1373–1385.
99. Reuber, A.R.; Fischer, E. International entrepreneurship in internet-enabled markets. *J. Bus. Ventur.* **2011**, *26*, 660–679. [\[CrossRef\]](#)
100. Lee, Y.-Y.; Falahat, M.; Sia, B.-K. Impact of Digitalization on the Speed of Internationalization. *Int. Bus. Res.* **2019**, *12*, 1–11. [\[CrossRef\]](#)
101. Hervé, A.; Schmitt, C.; Baldeger, R. Digitalization, Entrepreneurial Orientation and Internationalization of Micro-, Small- and Medium-Sized Enterprises. *Technol. Innov. Manag. Rev.* **2020**, *4*, 5–17. [\[CrossRef\]](#)
102. Westerlund, M. Digitalization, Internationalization and Scaling of Online SMEs. *Technol. Innov. Manag. Rev.* **2020**, *10*, 48–57. [\[CrossRef\]](#)
103. Neubert, M. The Impact of Digitalization on the Speed of Internationalization of Lean Global Startups. *Technol. Innov. Manag. Rev.* **2018**, *8*, 44–54. [\[CrossRef\]](#)
104. Cichocki, A.; Ansari, H.A.; Rusinkiewicz, M.; Woelk, D. *Workflow and Process Automation: Concepts and Technology*; Springer Science & Business Media: New York, NY, USA, 2012.
105. Rao, P.M. The ICT revolution, internationalization of technological activity, and the emerging economies: Implications for global marketing. *Int. Bus. Rev.* **2001**, *10*, 571–596. [\[CrossRef\]](#)
106. Suri, V.K.; Elia, M.; van Hillegersberg, J. *Software Bots—The Next Frontier for Shared Services and Functional Excellence*; Springer: Cham, Switzerland, 2017; Volume 306, pp. 81–94. [\[CrossRef\]](#)
107. Ghemawat, P. Distance still matters: The hard reality of global expansion. *Harv. Bus. Rev.* **2001**, *79*, 137–167. [\[PubMed\]](#)
108. Antunes, I.C.M.; Barandas, H.G.; Martins, F.V. Subsidiary strategy and managers' perceptions of distance to foreign markets. *Rev. Int. Bus. Strategy* **2019**, *29*, 347–364. [\[CrossRef\]](#)
109. Saebi, T.; Lien, L.; Foss, N.J. What Drives Business Model Adaptation? The Impact of Opportunities, Threats and Strategic Orientation. *Long Range Plan.* **2017**, *50*, 567–581. [\[CrossRef\]](#)
110. Staw, B.M.; Sandelands, L.; Dutton, J.E. Threat Rigidity Effects in Organizational Behavior: A Multilevel Analysis. *Adm. Sci. Q.* **1981**, *26*, 501–524. [\[CrossRef\]](#)
111. Dutton, J.E.; Jackson, S.E. Categorizing strategic issues: Links to organizational action. *Acad. Manag. Rev.* **1987**, *12*, 76–90. [\[CrossRef\]](#)
112. Tversky, A.; Kahneman, D. Prospect Theory: An Analysis of Decision under Risk. *Econometrica* **1979**, *47*, 263–292. [\[CrossRef\]](#)
113. Zhang, X.; Ma, X.; Wang, Y. Entrepreneurial orientation, social capital, and the internationalization of SMES: Evidence from China. *Thunderbird Int. Bus. Rev.* **2012**, *54*, 195–210. [\[CrossRef\]](#)
114. Shaver, K.G.; Scott, L.R. Person, Process, Choice: The Psychology of New Venture Creation. *Entrep. Theory Pract.* **1992**, *16*, 23–46. [\[CrossRef\]](#)
115. Reuber, A.R.; Fischer, E. The Influence of the Management Team's International Experience on the Internationalization Behaviors of SMES. *J. Int. Bus. Stud.* **1997**, *28*, 807–825. [\[CrossRef\]](#)
116. Jackson, S.E.; Dutton, J.E. Discerning threats and opportunities. *Adm. Sci. Q.* **1988**, *33*, 370–387. [\[CrossRef\]](#)
117. Falbe, C.M.; Welsh, D.H. NAFTA and franchising: A comparison of franchisor perceptions of characteristics associated with franchisee success and failure in Canada, Mexico, and the United States. *J. Bus. Ventur.* **1998**, *13*, 151–171. [\[CrossRef\]](#)

118. Gould, D.M. Has NAFTA changed North American trade? *Econ. Review. Fed. Reserve Bank Dallas* **1998**, *240*, 12–23.
119. Nachum, L.; Srilata, Z. The persistence of distance? The impact of technology on MNE investment motivations. *Strateg. Manag. J.* **2005**, *26*, 747–767. [[CrossRef](#)]
120. Kraus, S.; Meier, F.; Eggers, F.; Bounckenall, R.B.; Schuessler, F. Standardisation vs. Adaption: A Conjoint Experiment on the Influence of Cultural and Geographical Distance on International Marketing Mix Decisions. *Eur. J. Int. Manag.* **2015**, *10*, 127–156. [[CrossRef](#)]
121. Cairncross, F. *The Death of Distance: How the Communications Revolution Will Change*; Harvard Business School Press: Boston, MA, USA, 2001.
122. Gripsrud, G.; Benito, G.R. Internationalization in retailing: Modeling the pattern of foreign market entry. *J. Bus. Res.* **2005**, *58*, 1672–1680. [[CrossRef](#)]
123. Ghosh, S. Book Review. The Gravity Model in International Trade. Advances and Applications. *Rev. Int. Econ.* **2011**, *19*, 979–981. [[CrossRef](#)]
124. Bouncken, R.B.; Cesinger, B.; Kraus, S. The role of entrepreneurial risks in the intercultural context: A study of MBA students in four nations. *Eur. J. Int. Manag.* **2014**, *8*, 20–54. [[CrossRef](#)]
125. Johanson, J.; Vahlne, J.-E. The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *J. Int. Bus. Stud.* **1977**, *8*, 23–32. [[CrossRef](#)]
126. Sukamolson, S. *Fundamentals of Quantitative Research*; Chulalongkorn University: Bangkok, Thailand, 2010.
127. Internal Market, Industry, Entrepreneurship and SMEs. Available online: https://ec.europa.eu/growth/smes/sme-definition_en (accessed on 12 December 2021).
128. United Nations: The 17 goals. Available online: <https://sdgs.un.org/goals> (accessed on 12 December 2021).
129. United Nations. *Transforming our World: The 2030 Agenda for Sustainable Development*; United Nations: New York, NY, USA, 2015. Available online: <https://sustainabledevelopment.un.org/post2015/transformingourworld/publication> (accessed on 12 December 2021).

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.