

## Hungarian University of Agriculture and Life Sciences Szent István Campus Supply Chain Management

## An ISM-MICMAC approach to identify the factors of sustainable business performance: Evidence from Iranian SMEs

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#### Introduction

#### Introduction

The significance of sustainable development practices has been extensively acknowledged globally. It has become a vital and emerging issue for businesses. Sustainability should be considered to make business processes more efficient (Ng and Rezaee, 2020). The sustainable performance of companies depends on providing lasting value to their stakeholders while keeping pace with environmental requirements. Thus, businesses with economic, environmental, and social sustainability ensure the satisfaction of shareholders, senior managers, suppliers, customers, employees, and society (Zhao & Huang, 2022). The sustainability concept is based on three crucial components. They include environmental, economic, and social components. These components of sustainability are also known as triple bottom lines. However, this concept has been identified in several fields, such as environmental sciences, engineering, and management sciences (Gil-Gomez et al., 2020). Performance sustainability is nowadays considered a fundamental issue for many companies and industries. This factor contrasts with the variable and dynamic nature of today's competitive environments. However, organizations need development, despite ongoing changes and constant competition, and turbulence (Zulkiffli et al., 2022).

This level of development is achieved in light of sustainable performance in the company since sustainability requires growth, mobility, and ongoing dynamism. Hence, in recent years, much attention has been paid to the performance sustainability concept as an effective solution for the growth and development of industry and business (Afzal & Lim, 2022). Several studies indicate that companies do not clearly understand their sustainable performance. This problem is a significant barrier to improving their processes. Therefore, investigating the factors affecting the sustainable business performance of companies can be a practical step toward their promotion and growth and, accordingly, the economic, social, and environmental evolution of different communities (Zhang et al., 2022). Also, sustainable development requires the cooperation of governments, legislative institutions, and public and private organizations to maintain and coordinate the main elements of sustainable development. It includes three components: society, economy, and environment (Goni et al., 2021).

Based on the report of the global statement of sustainable development, the challenges of sustainable development are fighting poverty, changing consumption and production patterns, and protecting and managing natural resources. It considers these challenges as the basis of social and economic development and necessary tools for sustainable development (Djalic et al., 2021). Small and medium-sized enterprises (SMEs) play a vital role in the sustainable development of a country. They form the core of an economic system since they create employment and contribute to the growth of GDP. Thus, stable performance is crucial (Zheng et al., 2021). Hence, business experts emphasize identifying the elements affecting business sustainability and refer to business sustainability conditions as conceptual and descriptive models.

The business sustainability model makes it possible to analyze and improve business management and create a clear vision by creating a shared understanding of business logic. Companies provide the conditions for entering, maintaining, and improving their status in domestic and global markets through their ideas and plans (Menne et al., 2022).

#### **Problem Statement**

Small and medium-sized businesses (SMEs) Or small and medium-sized businesses (SMBs) are the pillar of the economy in many countries because this sector has a generous contribution to the economy through GDP (Gross Domestic Product) creation (Etuk et al. 2014; Ilegbinosa and Jumbo 2015; Lloyd 2002). In comparison with large enterprises, SMEs are extremely resistant to technological change and more adaptive to market changes, while their organizational structure enables them to make quicker decisions (Pilar et al., 2018).

In many European countries, they comprise up to 80% of the gross domestic product and employment structure (Pletnev & Barkhatov, 2016). SMEs constitute more than half of businesses in developing countries. In Iran, SMEs form 91.5% of the total number of industrially licensed units, but despite their high percentage of presence, these companies hold only 24.4% of the capital and 42.2% of the total employment of the industry. These statistics indicate the existence of capacity and capability of these enterprises in order to increase the level of employment and improve the distribution of income in Iran (Hosseinpour et al., 2020).

According to Hallberg (1999), the definition of SME is different in each country and usually is determined on the basis of the number of employees or the number of assets (Hendijani Fard & Seyyed Amiri, 2018). SMEs are businesses whose personnel numbers fall below certain limits. Speaking of Iran, there is little unanimity regarding the definition of SMEs. Various ministries, institutions and organizations related to SMEs in one way or another have their own criteria to describe, categorize or define SMEs. As defined by the Ministry of Industry and Mines and Trade and the Ministry of Agriculture, SMEs are (rural) industrial and service enterprises with less than 50 employees, whereas the Ministry of Cooperatives alternately uses the criteria either determined by the Ministry of Industry or Mines and Trade, or by the Statistical Center of Iran (SCI) in defining SMEs (Kalhor, 2016).

Development of any SMEs is related to the future opportunities, risks and uncertainty. Therefore, profit making ability of a SME depends on managers' skills to apply modern business management methods and tools. The more mature are the business activities, the higher is the probability of a SME to face failure. Long-term existence of a SME depends on its ability to utilize resources efficiently and to create profit, taking into consideration the influence of business environment and its related factors (Ciemleja & Lace, 2011).

The degradation of ecosystems and consequent efforts towards sustainable development have refined the conditions in business performance models in recent years (Pieroni et al., 2019). Successful businesses have intensively adapted to the challenges and exploit opportunities for sustainability practices (França et al., 2017).

Literature on sustainability has appeared since the 1990s. The topic has become the interest of academics and practitioners after 2006 and remains a mainstream research until now (Gong et al., 2018). Elkington (1994) first introduced the integration of sustainable development into the business setting as the management of the "triple bottom line" (TBL) to achieve economic, environmental, and social goals (Nor-Aishah et al., 2020).

Sustainability is all about the consequences of meeting today's challenges successfully along with embracing the opportunities to account for future needs balancing the economic, social and environmental aspects. Business sustainability leads to develop the environment, enhance the social wellbeing along with generating profits (Usha & Devakumar, 2019). The goal of business sustainability is to begin the process of developing profitable opportunities and to work towards sustainable development. The factors contributing towards business sustainability are broadly classified as motivational, psychological and emotional apart from economic, social and environmental (Porcar et. al., 2018). Business sustainability is nothing but managing the obligations, risks and opportunities in long run (Usha & Devakumar, 2019).

Sustainable business performance has three core dimensions, economic, social and environmental (Ch'ng et al., 2021), agreed by many scholars, such as Evans et al. (2017) and Fernando et al. (2019). These tree main dimensions should be imputed to exemplify a holistic view of sustainable business performance. Correspondingly, the United Nations Decade of Education for Sustainable Development has also identified the economy, society and the environment as the key areas of the concept (UNDP, 2005). So, sustainable performance can be defined as the harmonization of financial, social, and environmental purposes in the delivery of fundamental business actions in order to maximize value. It is the performance of a corporation in all dimensions as well as for all drivers of corporate sustainability (Haseeb et al., 2019; Sebhatu, 2008).

Many firms are struggling with the paradox of redirecting their attention from the traditional single objective of financial performance to strategic performance, which also involves social and environmental sustainability. There are three performance metrics that need to be considered as key outcomes of business sustainability. The first is financial sustainability, which refers to the ability of the organization to provide for its needs now and into the future. The second is social sustainability, which comprises the development and fulfillment of people's needs and the maintenance of social relationships that will thrive in the long term. The third is environmental sustainability, which refers to the protection and renewal of the biosphere for present and future generations (Pava, 2007). Scholars have argued that all three of these are equally important for a firm (Jones & Kramer, 2010).

Sustainable Business Excellence, in the sense of achieving long-term, stable, and excellent financial and non-financial performance, is still rather an exception than a rule in the business community. It is argued that one reason for this situation is the widespread ignorance among management concerning the importance of information on non-financial business performance; information that must be based on consistently integrated high-quality measurement (Kristensen & Westlund 2004).

There is significant impact from the external factors like market competition and changing needs of the society on the business sustainability. The impact of market

competition and changing needs of the society is even more significant on the business sustainability of small businesses. Although sustainable business performance is based on several factors which are internal as well as external to the firms (Teece, 2007), few factors are very important in maintaining the core competency of the firms (Sheikh et al., 2018). Several studies have confirmed that technological opportunism capabilities help the firms to increase the assimilation of different business processes by creating a strong relationship between technology adoption and sustainable business performance. (Sheikh et al., 2018; Chen & Lien, 2013; Sarkees, 2011).

Technology implementation is the most essential step to building sustainable business performance among SMEs. Literature also shows that technology implementation and business performance have important connection with each other (Epelbaum & Martinez 2014; Malhotra 2005), increase sustainable business, and have a positive effect on overall business performance (Eisingerich & Bell 2008; Kristensen & Westlund 2004; Wang 2014). Therefore, it is needed for SMEs to develop good sustainable business practices, which will automatically lead to high performance, because it also reduces enterprise risk (Hameed et al. 2017).

The goal of the research is, studying the performance of SMEs and the factors affecting performance achieving, to encouraging the sustainable development of SMEs and to suggest performance evaluation approach according.

## Importance of the study and previous researches

Although SMEs, especially those operating in manufacturing sector, in one hand contribute significantly to the GDP of a country, on the other hand, they also generate negative impacts on the environment as predominantly these companies have not included environmentally sustainable practices in their processes, strategies, or long-term vision (Rita et al., 2018). So it is crucial that SMEs start to adopt more environmentally-friendly practices to ensure a better future for the generations to come. However, their business is challenging from both demand and supply sides due to numerous competitions (Malesios et al., 2021).

Environmental degradation is causing major challenges to humankind, their economic success, and nature (Leonidou et al., 2017). So being aware of hazardous impacts on the environment and society, companies must find the best way to ensure that their production activities meet sustainability requirements. Two considerations should be given priority when defining sustainable business performance. One is that business sustainability on the one hand refers to a firm's ability to make profits to ensure long-term survival. The other is that business sustainability is also connected to the ability of the organization to deliver products or services based on processes or technologies that do not harm the environment or the overall health of society. In other words, one main outcome of a sustainability strategy is that a company will be able to stay in the market longer by maximizing internal and external resources for the best financial yields (Fernando et al., 2019).

On one hand, in Iran, despite the emphasis on expansion and growth of SMEs in the Fourth and Fifth Five-Year Development Plans (2006–2016), SMEs appeared to have not benefited due to wrong policies and strategies such as fast return plans,

which never meet their intended target(Kalhor, 2016). On the other hand, Research on sustainability has been a subject of numerous studies but the results have not been conclusive. Some researchers debated whether the predominant drivers of sustainable performance are influenced by innovation and institutional quality; sustainable orientation, intellectual capital, government support, and norms Ahmad et al., 2018); opportunity, necessity, and personal values (Gast et al., 2017); strategic orientations, market orientation, and entrepreneurial orientation (Jansson et al., 2017); demographic background, work experience, education, and social factors (Hosseininia & Ramezani, 2016); the enterprise system (Ahmad & Mehmood, 2015); or attitudinal and perceptual factors (Koe et al., 2015).

Therefore, developing sustainable business performance and exploring the factors affecting Iranian SMEs sustainable performance is essential.

### **Research question**

- Which strategic factors can improve sustainable business performance of Iranian SMEs?

#### Research main objective

- Identify, prioritization and modeling of sustainable business performance in Iranian SMEs.

#### 1. Literature review

#### 1.1 SMEs and their definitions

Small and medium-sized enterprises (SMEs) are one of the most common forms of economic enterprises. Their role in developing the national economy has been acknowledged in most countries. They largely contribute to increasing national income and creating employment in developed and developing countries (Roxas et al., 2019). SMEs are the primary sector of any country. They play a significant role in the gross domestic product (GDP) of any country. An increase in GDP improves economic growth. Several studies have shown that SMEs are the primary source of employment in the 21st century. They also create an entrepreneurial, creative, and innovative environment. They provide new business opportunities (Akinwale et al., 2017). SMEs can develop new products faster than other companies, provide local, regional, and global competitive conditions, cause profitability and economic growth, and reduce unemployment in countries thanks to their unique characteristics such as informal structure, flexibility in absorbing and using advanced technologies (Bahta et al., 2021). SMEs are often classified based on the number of employees or the value of their assets.

The classification varies in different countries depending on their economic size and resources. Investigating the contribution of SMEs to the employment level, creating value-added, and gross domestic product of countries in the world indicates that more than 95% of the total employment is related to this type of enterprise (Kimanzi and Gamede, 2020). For example, there were about 40 million SMEs in the 21 OPEC member countries until 1998, which created 30 to 60 percent of the gross domestic product of these countries and more than 80 percent of employment. There are more than 16 million companies in Europe; less than one percent are large companies, and most are small and medium-sized (Lewandowska & Cherniaiev, 2022). Similarly, SMEs are the backbone of the Asia-Pacific region's economy. Accordingly, 32-48% of employment and 60-80% of the gross domestic product of this region's countries are created by SMEs.

The economic development of the United States in recent years has been mainly due to the creation and development of SMEs. They account for 43% of the employment index (Joensuu-Salo et al., 2018). Given what was said above, it can be stated that the development of any country, especially the economic development, depends mainly on the success of SMEs of that country since they have significant functions in different dimensions (Dumitriu et al., 2019). In the social dimension, SMEs facilitate progress and improve the quality of life of the people in society. In the political dimension, they reform the political structure of society and prevent the concentration of power in big cities. In the economic dimension, they are one of the main factors in creating employment, as mentioned earlier (Isensee et al., 2020). In the individual dimension, they provide the conditions for individual and specialized development

and create apparent professional horizons for the people of the society. Therefore, they play a significant role in the competitive, dynamic, and knowledge-based economy. They can also create ongoing growth, create employment, and strengthen social cohesion (Isensee et al., 2020).

Most definitions of SMEs are based on quantitative criteria such as the number of employees, financial turnover, the value of assets, and the capital level. Also, the most straightforward criterion to define and specify them is the number of employees. However, several definitions have been presented according to this criterion (Isensee et al., 2020). For example, the European Union has considered a maximum of 250 people for an SME. In the United States, a minimum of 500 people is used to define these enterprises. Although these quantitative definitions facilitate the classification, quantitative criteria are not always suitable for classifying enterprises and companies (Mazanai & Fatoki, 2017). For example, a steel company with 500 employees is considered a medium-sized enterprise in the steel industry. However, with the same number of personnel, a service company such as a financial consulting company is regarded as a large company. Therefore, the qualitative characteristics of companies are also crucial (Joensuu-Salo et al., 2018).

# 1.2.1 Sustainability, sustainable development, and sustainable performance

Sustainability is an organization's capability to continue its activities and apply its effects on environmental, social, and human capital to manage them. In another definition, it is a development that meets the needs of the current generation and helps future generations to meet their needs (Kim et al., 2015). Following the sustainability concept, the sustainable performance concept was raised, considered a crucial initiative in manufacturing companies. The importance of sustainability has made organizations focus on their sustainable performance. Thus, many academics and managers have paid attention to sustainable performance. An organization oriented toward sustainability develops its performance and activities over time through economic, social, and environmental management (Pislaru et al., 2019).

Additionally, sustainability is an appropriate way for industries to achieve sustainable development. Sustainability at the macro level is formed through sustainable development. Sustainable development means the capability to identify needs and pay attention to current and future aspirations without conservative presuppositions in building a complete future (Ng & Rezaee, 2020). With economic growth and the development of a society or a developed economy, beyond economic development, sustainable development aims at ongoing development in the field of corporate performance. Therefore, companies can improve more than one dimension of sustainable performance, such as environmental sustainability, economic sustainability, and social sustainability of the company by successfully implementing

sustainable development. The measures of companies to achieve sustainability include increasing importance on environmental, social, and economic factors (Zhao & Huang, 2022).

Companies are the essential elements in the economic system. Moving towards sustainability and sustainable performance in companies provides the conditions to achieve sustainable development at the economic level. At the organizational level, the development of sustainability leads to the establishment of sustainable performance in the organization. Therefore, there is a positive and direct relationship between sustainability in the performance of companies and sustainable development at the macro level (Goni et al., 2021). In the business area, this concept includes maintaining and expanding economic growth, stock value, credibility, company reputation, relationship with customers and the quality of products and services, and maintaining and improving performance. The following three criteria evaluate it:

- 1- Environmental sustainability
- 2- Sustainability of economic performance
- 3-Social sustainability (Zhao & Huang, 2022)

As mentioned, sustainability can be analyzed through economic, social, and environmental factors. Economic factors include indicators related to employment, sales increase, income Sustainability, and profitability. Social factors include actions related to basic needs, social recognition, empowerment, freedom, control, and child labor (Afzal & Lim, 2022). Environmental factors are related to water and energy use, waste and emissions, waste management, space management, and hygiene. Environmental, social, and economic factors are also included in the sustainable development goals to solve significant problems affecting the world's population. The vision of these goals is to focus on critical areas and work on them since these areas deeply affect the well-being of people of today and future generations (Zulkiffli et al., 2022). Business sustainability is the strategic achievement and integration of social, environmental, and economic business goals through the systematic coordination of business processes within the main organization to improve the long-term economic performance of a business and its value network. However, sustainability is a different concept from business activity continuity. It refers to the capability of business units to remain in the environment and society and, finally, in the entire economic system (Eliwa et al. ., 2019). In other words, business sustainability leads to greater business flexibility. It enables businesses to adapt to changes. According to previous studies, sustainable businesses seek to create desirable social values, including social efficiency, social effectiveness, social responsibility, intergenerational justice, and foresight for their business and society (Pislaru et al., 2019).

The sustainability of companies affects the world economic system. Lack of sustainability or collapse of organizations and commercial enterprises will cause stagnation and even collapse of the global economy. Given the importance of the

sustainability concept in business, various definitions of business sustainability have been presented in recent years (Hwangbo & Kim, 2019). Business sustainability is the capability to maintain or develop long-term performance and the result of continued satisfaction of business stakeholders over time. The sustainable business concept considers socially responsible business. It involves creating a business with positive relationships with the society in which it operates. The relationship between the business, society, and the environment is a key factor in effective performance. In general, a sustainable business can be defined as a business that creates economic value, increases public wealth by an appropriate mechanism for its distribution, has economic justification, does not destroy the environment, is morally guided, and is following laws and regulations (Ng & Rezaee, 2020).

#### 1.2.2 The necessity of paying attention to business sustainability

Since companies are responsible for negative impacts on the environment and society, they should integrate sustainability into their operations and help the sustainability of societies. Traditional business models should be transformed into more sustainable models to achieve the company's sustainability goals (Neumeyer & Santos, 2018). The sustainability concept was first used and popularized in response to environmental destruction by humans. However, the development of businesses faced more serious challenges due to their over-emphasis on economic dimensions and achieving profit. Thus, the sustainability concept as a tool for creating a balance between the ecological, environmental, and social dimensions of businesses and their financial and economic dimensions was also introduced in the business literature. The business sustainability concept has increasingly attracted the attention of various researchers and experts (Hu et al., 2022). With a holistic description of the value proposition (socially-, economically-, ecologically-, and inter-generationally-intertwined value), sustainable businesses can reconcile the dual goals of sustainable development and wealth acquisition. Hence, they can resolve the dichotomy between opportunistic business and altruistic philanthropy (Anser et al., 2018). Given the sustainable development nature, the sustainability goals in SMEs are creating a balance between social health, environmental quality, and economic prosperity. In other words, in business sustainability, environmental (environmental protection, improvement, and responsibility), economic (price, quality, and cost), and social (related to ethics, benefits, and social responsibility) values are considered in an integrated management approach.

Accordingly, most businesses have put their sustainability policies at the top of their plans, focusing on three main aspects, that is, achieving positive financial performance while emphasizing social and environmental performance (Zulkiffli et al., 2022). Paying attention to the sustainability of SMEs can bring various environmental, social, and economic benefits. The most significant of them are cost savings (reducing waste, unnecessary energy, fuel, and other inputs), better management of businesses risks

(dealing with the pressures of production chains and strict regulations, adopting sustainable strategies at the beginning of activities, and preventing heavy expenses in emergencies), and maintaining social acceptance to establish strong relationships with different stakeholders such as employees, customers, local community, and other companies (Caldera et al., 2019). All waste reduction and resource conservation programs are examples of business responsibility towards society and the environment that have been considered. Commitment to such responsibilities has a direct benefit on society and the environment. It also brings many benefits to the businesses implementing it and creates opportunities to increase their profits.

Businesses are responsible for future generations and should not overwhelm the future generations' rights to access the economic resources of the world, including the environment and other humans, to gain more profit (Babajide et al., 2021). Corporate sustainability in the past emphasized more environmental forms and green strategies. However, it currently includes different and wider dimensions and aspects, such as the economic, social, and cultural status of companies and their performance methods in these fields (Aydin & Emeksiz, 2018). Corporate sustainability creates values such as long-term relationships between companies, transparency, better relationships with employees, and resource efficiency. In other words, corporate sustainability is an evolved form of traditional and old concepts to describe the ethical behavior of companies (Bacinello et al., 2020).

#### 1.2.3 Social factors

Society is constantly changing. A change in social factors affects businesses. Changes in social factors can affect a company in several ways. Companies often focus on these deep changes (Henry et al., 2018). They use environmental analysis, such as PEST analysis, for this purpose. The extended versions include PESTLE, STEEP, and STEEPLED analyses. "S" in all these analyses indicates social or socio-cultural factors. Political, economic, technological, environmental, ethical, and legal factors are other factors that should be evaluated (Rotondo et al., 2019). Businesses select environmental analysis based on the nature of operations. However, all of them also study social factors. In the social step, it is necessary to look carefully at the social changes for such analyses. It is also necessary to look at cultural changes tailored to the environment of each business. Market studies are a critical part of this step. It is vital to look at the trends and patterns of society (Islam et al., 2021). It is also necessary to study the influential factors in detail to better understand social impacts. Most companies analyze population growth and age structure. They also pay attention to consumer attitudes and lifestyle changes. A manager's analysis can show if there are any defects and mistakes in his marketing strategy. It can also help to find new ideas (Afzal & Lim, 2022).

We here present a list of social factors that affect customer needs and market size. These factors include lifestyles, buying habits, education level, emphasis on safety, religion and beliefs, health consciousness, sex distribution, average disposable income level, social classes, Family size and structure, Minorities, Attitudes toward saving and investing, attitudes toward green or ecological products, attitudes toward renewable energy, population growth rate, immigration and emigration rates, age distribution and life expectancy rates, attitudes toward imported products and services, attitudes toward work, career, leisure, and retirement, attitudes toward customer service, and product quality(Gil-Gomez et al., 2020). The social aspect focuses on the forces within society. Family, friends, colleagues, neighbors, and media are considered social factors. These factors can affect our attitudes, opinions, and interests. Thus, it can affect the sales of the products and the revenues earned. Social factors shape us as people (Seow et al., 2020). These factors affect behavioral and buying habits. Population changes also directly affect organizations.

The supply and demand of goods and services in an economy can change with a change in the population structure. A reduced birth rate means reduced demand. It also indicates more competition with a reduction in total consumers. Predicting food shortages in the world can lead to more investment in food production. Increasing the world population can have the same effect. Organizations should provide products and services aimed at improving people's lifestyles. Non-responding to societal changes can be a costly mistake. They may lose market share and face reduced demand for their products and services (Nizam et al., 2019). The internal environment of every business is like a community and has its unique social environment. A business social environment includes everything that society believes in. including its customs, procedures, and the way it behaves. Every society creates its social environment factors affecting the businesses in that society (Kraus et al., 2020).

When such an environment is created by a society where a business operates and functions, this is known as its external social environment. When a business operates in a multicultural society, the external social environment becomes more complex due to an environment composed of diverse sub-populations. Each culture has unique values and customs and forms different social environment factors that affect the operation of businesses in that society (Lombardi et al., 2020). Also, businesses have their social and environmental factors. This is also known as the internal social environment. A business, concerning its external social environment, applies a level of control over its internal social environment, all of which are the factors affecting the businesses in their social environment. In simple terms, beliefs, customs, actions, and behaviors are within the confines of business (Rotondo et al., 2019).

#### 1.2.4 Economic factors

Understanding how economic factors affect business is essential for making smart decisions and guiding the company toward further growth. However, this begins with understanding the role of environmental and external factors and how they come into

place in business (Hou, 2019). Economic factors play a significant role in how a company makes decisions (especially financial decisions). Economic factors are related to goods, services, and money. Although these factors directly affect jobs, they refer to the financial status of the economy at a larger level, i.e., both local and global levels (Henry et al., 2018). It is because the state of the economy can be a determining factor in many of the important details of an operating company, including issues such as consumer demand, taxes, and asset values. All businesses, whether domestic or international, are affected by the conditions of the dynamic economic environment prevailing in the market. Interest rates, exchange rates, recession, inflation, tax, and demand/supply are among many economic factors affecting business (Bahta et al., 2021). Another excellent way to learn how economic factors affect a business is to look at a PEST analysis, which includes the following cases. For example, anthropology targets an affluent market, so they can afford to take a unique pricing tailored to that peculiar economy (Menne et al., 2022). Increasing global development and increasing global gross domestic product (GDP) means that their target market is gradually growing. Also, this global development may increase labor and material costs in less economically developed countries where their products are produced (meaning lower profits) (Barauskaite & Streimikiene, 2021).

#### 1.2.5 Environmental factors

Environmental factors are identifiable elements in the cultural, economic, demographic, physical, technological, or political environment affecting the growth, operation, and survival of an organization. Environmental factors for a business can be both internal and external (Kim et al., 2015). External factors can include economic and technological factors. However, internal factors can include the value system, objectives, or internal relationships of a business (Gil-Gomez et al., 2020). Every business, whether large or small, is affected by both internal and external factors (Henry et al., 2018). The company has no control over the external environment. The development of marketing strategies should consider environmental factors to provide a clear picture of market trends and the environment and to understand the company's status. Ignoring environmental aspects is like walking on a path where marketing fails, revenues are lost, and it finally affects the business brand health (Roxas et al., 2019).

The term "environmental" can sometimes refer to all the external factors that affect a business, from political to legal and everything in between. Environmental factors, sometimes called ecological factors, refer to variables related to the physical environment (for example, Earth's climate) (Nguyen et al., 2021). This issue may include things like consumer health, climate change, energy availability, or any direct consequence of these things (Singh et al., 2020). It seems that environmental factors are less related to business. However, environmental factors can affect many significant aspects of business, such as customer purchase intention, employee efficiency, and product/resource availability (Kraus et al., 2020). Environmental

analysis is a term that refers to the process of examining all the various external factors affecting a business. Like most other parts of business analysis, it is especially useful for executives of any company who seek to beat competitors, increase revenue streams, and grow their organization (Fernando et al., 2019). PEST analysis or its derivatives (such as PESTLE analysis!) are one of the most prominent tools in environmental analysis. PEST analysis takes into account four separate factors whose initials create the eponymous acronym 'PEST': Political, Economic, Social, and Technological (Martínez-Navalón et al., 2019). Although there are many other diverse variables (such as PESTLE analysis that includes legal and environmental variables), economic factors play a role in the business (Çop et al., 2021).

## 1.2 Some factors affecting the sustainability of companies 1.2.1 The culture role in sustainable performance

Various organizations in most industries currently implement strategic environmental performance programs to achieve competitive advantage. The increasing number of environmental laws and market pressures have enhanced the knowledge of organizations and managers about environmental performance (Afzal & Lim, 2022). Environmental performance is the outcome of the company's environmental actions. It indicates the appropriate integration of the company's policies, strategies, goals, and objectives tailored to the environment. Environmental performance is one of the most significant social responsibilities of the company. Companies can gain a competitive advantage by improving their environmental performance. The culture of organizations and companies is one of the most significant factors affecting environmental performance (Ketprapakorn & Kantabutra, 2022).

As stated earlier, organizational culture is one of the main environmental elements. It includes the values, beliefs, and behaviors of the organization's employees. Organizational culture is a guide for employees' behaviors. These behaviors turn into habits over time that will affect a person's life in the work environment (Ma & Cheok, 2022). Empowering factors of culture will improve green organizational culture and increase environmental performance through activities such empowerment and engagement, managers' messages and emphasis, and taking an active stance on environmental issues (Dyck et al., 2019). Additionally, the development of an innovative and productive corporate culture is one of the essential parts of the sustainability transition process. These healthy cultures can create better organizational performance and optimize using existing assets to achieve economic development, environmental significance, and society at large (Oriade et al., 2021). Corporate culture developed around the 1960s and then continued steadily until now. The relationship between culture and company is getting closer and more stable. However, the situation in organizational culture is different. Organizational culture has grown faster than corporate culture (Isensee et al., 2020).

Organizational culture is a mixture of managers' perceptions about any problem that is a crucial challenge. One solution for organizations to develop a sustainability-based organizational culture is to engage employees with sustainability change and develops a leadership supportive of the engagement of their employee. Culture should develop and accept new concepts and ideas continuously to become an advantage for organizational sustainability (Kiesnere & Baumgartner, 2019). Culture means the common structure of beliefs, values, opinions, and attitudes that form organizational behavior. A management group can develop an organizational culture to disseminate certain values to guide the company's goals. Thus, empowering factors of organizational culture have been one of the variables and concepts that have attracted the attention of researchers in recent decades. The empowering factors of organizational culture increase and improve environmental performance by emphasizing leadership, message credibility, engagement and cooperation, and empowering employees (Afzal & Lim, 2022).

Leaders will have a greater impact on employees' environmental performance if they show environmental behaviors in their daily work. Managers can talk to employees about reducing waste-producing and environmentally harmful activities in their daily roles. Also, cooperation and engagement in the organization are very effective in attracting the employees' opinions in implementing the organization's environmental strategies (Ma & Cheok, 2022). Training and empowering employees also play a crucial role in developing the skills needed to fulfill environmental responsibilities. Training makes employees more aware of the necessity of preserving the environment if provided regularly. It also increases their ability to adapt, change, and develop an active attitude toward environmental issues (Ketprapakorn & Kantabutra, 2022). Rosco et al. (2019) showed that the empowering factors of organizational culture have a positive impact on environmental performance.

#### 1.2.2 Access to finance

Reports suggest that most SMEs in developing countries face limitations in financing. Previous studies have indicated that these limitations on access to finance affect the performance of these institutions (Aydin & Emeksiz, 2018). Several studies show that the efficiency of SMEs depends on their good performance and access to finance. Hence, the lack of access to finance for SMEs can be a barrier to their development. However, past studies have revealed that the shortage of capital in SMEs is related to the peculiar features and strategic operation of SMEs (Mazanai & Fatoki, 2017). Access to finance means accessibility to financial capital and other business-related financial services. Access to finance may also be considered as access to financial capital, such as debt borrowing and equity for SMEs (Kimanzi & Gamede, 2020). Access to finance is defined as financial facilities provided by financial institutions. Financing is defined as the difference between the demand and the supply of finance needed by SMEs. Hence, it can be concluded that access to finance is a lack of

financial and non-financial barriers to accessing financial capabilities and services (Msomi & Olarewaju, 2021). Governments should provide tax incentives, subsidies, and provisions for start-up funds for SMEs to encourage them to join the formal sector. SMEs need more access to financial services and investment capital (Brixiová et al., 2020). Large companies do not have much problem in providing significant bank loans and private investments. However, SMEs cannot benefit from financial aid easily. However, microfinance, consisting of very small loans, benefits individual entrepreneurs (Seow et al., 2020).

As stated earlier, the finances of SMEs are often limited. It forces enterprises to select cheap solutions. However, hidden costs will emerge during the implementation of a project. It may result in abandoning projects or creating further financial crises (Zhang et al., 2022). SME development is strongly affected by the shortage of finances. For development goals, SMEs need adequate finances, banks, and credit institutions. Currently, SMEs face strict requirements in borrowing from such institutions, primarily in the form of collaterals (Zhang et al., 2022). Additionally, finances available to SMEs, such as bank loans and mortgage bonds, are expensive, leading to an increase in production costs for them (Almansour et al., 2019). Access to finance determines the success of SMEs and the different development stages. Access to finance may be characterized by SMEs gathering up a forceful position and obtaining more target customers. Obtaining sufficient finances is defined through the peculiar firm process, characteristics, and strategic activities that indicate the development of SMEs (Ahmed et al., 2021).

#### 1.2.3 The innovation role in sustainable performance

Researchers have focused more on innovation among all the variables that can affect the performance of SMEs (Gil-Gomez et al., 2020). In the literature, innovation is considered the center of economic growth and a crucial element of the competitive advantages of companies. Thus, innovations have become a permanent component of the business models of contemporary companies (Distanont & Khongmalai, 2018). Innovations have a positive impact on sustainable business models. The innovations introduced by companies should be sustainable. A sustainable business model developed in light of such innovations may be the source of the company's competitive advantage (Piątkowski, 2020). The potential of SMEs to compete innovatively plays a vital role as an aspect of competitiveness in SMEs (Anser et al., 2018).

Innovation is the process of transforming an idea or invention into goods or services that create value (Akinwale et al., 2017). The creation or adoption of new ideas, processes, products, or services to increase value for the customer and help the performance or effectiveness of the company is one of the characteristics of the individual or organization (Zhu et al., 2019). Innovation is based on the elements of

individuality, research and development, innovative processes or new products, and advancement in terminologies (Chatzoglou & Chatzoudes, 2018). Innovation is a vital factor for economic growth and competitiveness in any market. Many researchers have defined innovation as the capability to exploit new opportunities for business development to increase sustainable performance. A developing country can achieve a competitive advantage using limited resources if it makes the best use of innovative practices. Innovation has a significant impact on the sustainable performance of SMEs (Usha & Devakumar, 2019).

Maintaining a competitive advantage is achieved by creating innovation in the company and by using the company's resources, which should be valuable, rare, inimitable, and non-substitutable. It should also be consistent with the Diffusion of Innovation (DOI) Theory. SMEs have played a significant role in innovation thanks to the many advantages compared to large enterprises (Franceschelli et al., 2018). Innovation plays a vital role in determining the long-term success of organizations. Studies have emphasized it as a research field over the last few years. They focus on innovation since every organization needs it to achieve its organizational goals and deal with changes in the business environment, and successfully compete in the market. Moreover, the studies conducted by Chowhan (2016) and Swink (2000) have shown their moderating effect on the relationships between strategy, human resource management practices, and the performance of SMEs (Seow et al., 2020).

Green, sustainable, or environmental innovation can be defined as new or changed processes, systems, practices, and products improving the performance in all three dimensions of sustainable development, including social, environmental, and economic dimensions (Singh & El-Kassar, 2019). This definition encompasses all changes in the product portfolio or production processes related to sustainability goals such as waste management, environmental efficiency, reducing pollutant emissions, recycling, or any other action taken by companies to reduce their environmental impacts (Zhao & Huang, 2022). They evaluate environmental innovation as a way to meet environmental goals cost-effectively. They argue that environmental innovation measures can lead to a "win-win" situation that brings both financial and environmental benefits (Hu et al., 2022).

Innovation plays a significant role in increasing the productivity and growth of the gross domestic product of countries. It is a crucial factor in increasing market share and creating a competitive advantage in today's business world. Increasing competition in the market has made companies aware of the importance of innovation practices. SMEs need innovation in their business practices to compete in the business world or perform better under competitive market pressure (Lewandowska & Cherniaiev, 2022). Innovation is a key element for SMEs to overcome all problems while achieving a sustainable competitive advantage by providing strategic orientation (Fernando et al., 2019). Innovation is significant in SMEs since they can cover all the deficiencies using available resources innovatively. It is not limited to product and

process innovation but also includes marketing and organizational innovation (Shakeel et al., 2020).

# 1.2.4 The information and communication technology role in sustainable performance

SMEs are the pillar of the economy in many countries since they are generous in the economy by creating GDP (Gross Domestic Product). Compared to the nature of small enterprises, SMEs face different issues. One of these issues is the technological issue. The performance of SMEs is not smooth due to technological challenges (Aydin & Emeksiz, 2018). Economic growth is primarily determined by the industrialization and modernization of economic trade, based on the use of technology and favorable investment support. Information technology is one of the important aspects of supporting a country's economic stability (Hamadamin & Atan, 2019). Information technology plays a vital role in improving the productivity and competitiveness of SMEs. SMEs face various technological challenges. The term "challenge" is described as a call to prove or justify something by companies in a competitive environment (Sunday & Vera, 2018).

Strategic use of information technology can be especially beneficial for SMEs (SMEs), which are more vulnerable to external environmental factors and weak regarding operational resources compared to large companies. Information technology can help these companies to improve efficiency, effectiveness, and innovation, so they can overcome their limitations to compete with larger enterprises (Chege & Wang, 2020). Using information technology is a strategic necessity enabling companies to remain competitive in the market or to overcome their competitive disadvantages (Mulamula & Amadi-Echendu, 2017). Companies can improve their operational efficiency and performance in providing and managing resources thanks to information technology. Also, they can increase their competitive advantages in certain fields by performing activities against competitors or gathering resources and capabilities. Managing technological challenges is a challenge for SMEs since it is difficult to survive in a competitive environment (Caldera et al. 2019).

As mentioned, one of the challenges for SMEs to achieve success in a very competitive environment is to adopt new technologies (Mulamula & Amadi-Echendu, 2017). Negative values in companies, unconstructive beliefs of employees, and resistance to change or adoption of new technologies are due to fear of complexity in using the latest technology and lack of trust of employees to use new technology to improve business performance (Haseeb et al., 2019). Negative values and beliefs negatively affect sustainable competitive advantage, which finally reduces sustainable business performance. By eliminating or correcting negative values by managers through training or culture, new technologies can be applied in line with the company's goals and increase their performance (Lu et al. al., 2019).

The information technology role in today's corporate world is no longer limited to business support tools. Information technology is essential for overcoming competitive disadvantages and effectively compensating for resource scarcity. It has become an integral and significant part of business strategy for many companies. It has been proven that the alignment of information technology with competitive strategy has a positive impact on company performance. Theoretically, various theories such as the "technology acceptance model", "unified theory of acceptance and use of technology," and other theories related to individual behavior have addressed the use of technology and its performance (Kumar et al., 2020).

A few studies have looked at its impact at the company level. Using information and communication technology related to marketing activities plays a vital role in creating active companies at the international level. These technologies can be resources for the development of companies to achieve sustainable competitive advantage (Mushtaq et al., 2022). Compared to other companies that are less specialized in information and communication technology or in using electronic marketing, these companies are more successful. Also, the Internet enables the marketing department of companies to communicate with their potential customers by minimizing the tangible and intangible costs of communication from "one to one" to "many to many" (Singh et al., 2019). It is a difficult task for SMEs to accept a technology adoption due to a lack of resources and other market issues. Many technological challenges negatively affect the sustainable business performance of SMEs. However, the incorporation of Industry 4.0 can overcome various technological problems (Khan et al., 2021). Industry 4.0 has many features, including cloud computing, augmented reality, multi-level customer interaction, advanced algorithms with big data, smart sensors, mobile devices, IoT platforms, location detection, advanced human machine, and 3D printing. All these features play a significant role in promoting the implementation of information technology (IT) in companies, which helps their sustainable business performance (Haseeb et al., 2019).

SMEs face limitations in using the latest technologies used by large organizations. For this reason, the SME sector performance is low due to various challenges, and these SMEs do not show steady growth in performance (Zufan et al., 2020). Thus, they face the performance sustainability problem. SMEs are facing problems in implementing technology. These technical issues are related to data management, data mining, and the functional structure of the organization that supports the implementation of the new technology. Technology also requires skilled people to implement it properly. Thus, SMEs need good human capital for better implementation in adopting the latest technology (Singh et al., 2019).

### 1.2.5 Top management support

More companies are incorporating sustainability into core business strategies and are implementing sustainability at a much higher level than before. They are increasingly aware of sustainable development goals or SDGs (also called "global goals") and use them to set company performance goals (Lee & Joo, 2020). The United Nations Global Compact is the largest corporate sustainability initiative (9,400 companies in 2017). It is a platform for business leaders that supports businesses in implementing sustainable development goals (Kiesnere & Baumgartner, 2020). CEOs commit to ten principles of doing business that help them prioritize responsibility to people and the planet and pursue the Sustainable Development Goals by participating in the United Nations Global Compact. These principles should be implemented about human rights, labor, environment, and combat corruption in the strategies, policies, and procedures, creating a culture of integrity, empowering companies to prioritize their basic responsibilities toward people and the planet, and reorganizing companies for long-term success (Tran & Pham, 2020).

Management is a key term in many industrial, business, and research fields, etc. The success of SMEs as commercial organizations depends largely on their performance and the way they are managed (Hahn et al., 2018). Successful SMEs can maintain their sustainable performance thanks to their capability to accept effective factors that affect their performance. However, unsuccessful SMEs fail due to bad business practices and mismanagement (Henry et al., 2018). Top management support and involvement in corporate sustainability management are considered successful drivers of sustainability incorporation in companies. The CEO and the board of directors are the decision makers who should be committed to sustainability and convince all areas of the company about its high priority. This commitment provides the conditions to take measures such as measuring social and environmental impacts and reporting the sustainability management progress (Kiesnere & Baumgartner 2019).

Sustainability strategies are primarily top-down. Top management should engage in the development and implementation of the sustainability strategy. The CEO should transfer the expected values and behaviors to the employees and give feedback on the outcomes (Sheikh et al., 2018). CEOs can set proper incentives for employees and encourage them to engage with sustainability issues. The CEO leadership should be effective and consistent during the management processes to create internal credibility for sustainability motivations and improve the sustainability management practices in business units and organizational functions (Popescu et al., 2020).

To provide positive sustainability management results, leaders should:

- -Identify the current sustainability activities and impacts
- -Specify the strategy and sustainability goals
- -Interact with stakeholders

### -Implement supportive sustainability policies

The main goal of leaders should be institutionalizing sustainability in the organization (Wiengarten et al., 2017). Companies need strong support from top management to implement sustainability initiatives. Management involvement and commitment to these initiatives indicate that these initiatives are crucial and encourage subordinates to model the same behavior through the distribution of pay and job rewards. It should be assured that sustainable development is a long-term strategy and top managers appreciate the significance of sustainable development (Chatterjee et al., 2022). Leaders and champions are key internal drivers for sustainability implementation. Champions have the insight that sustainability is critical to the long-term success of the company and society. They unite organizational parties to take action for it. CEOs and chief sustainability officers can act as champions. For this purpose, there is a need for more people within the company to accept sustainability ideas and for other employees to follow them for reasons other than their authority. They cause the sustainability agenda to be implemented in the company (Leal Filho et al., 2020).

#### 1.2.6 Digital Marketing

Marketing based on social and environmental considerations is one of the most significant activities of companies. It has received much attention since the early 1980s (Kim et al., 2015). Thus, enhancing the awareness of the manager about marketing in situations where the company is facing many competitors in the domestic and foreign markets is considered the main factor in maintaining the company's survival among other competitors (Sheikh et al., 2018). The advancements in the information and communication industry in recent years have led to an informatics revolution. It has transformed traditional marketing methods and has led to new operational and dynamic methods in this field. Therefore, a shift in attitude toward the digital market and its marketing to regain credibility is crucial (Saura et al., 2020). New business models have emerged focusing on using sustainable strategies in corporate social identity and marketing strategies due to the emergence of new technologies and the development of the Internet in the last years (Martínez-Navalón et al., 2019). The sustainability concept has been linked with the environment and sustainable development, the types of resources used by companies, and the technologies and tools used by companies, thanks to the development of these technologies (Hwangbo & Kim, 2019). The Internet has become a tool for the sustainable growth of many companies. These companies should adapt their business models to sell their products and services 24 hours a day, seven days a week. These new business models are based on Internet users' behavior in social networks and involve analyzing user-generated content and the tools used by the users (Hwangbo & Kim, 2019).

Although sustainable business performance is based on multiple internal and external factors of companies, quantitative factors are crucial in maintaining the core competency of the companies (Paul et al., 2018). Nowadays, companies are focusing on making smarter decisions since it is decreasing with increasing technology in the life cycle of products. Hence, the company should be more aware and competitive to understand the market digitally rather than doing business traditionally. Using digital marketing tools and techniques has increasingly become a necessity for most modern SMEs (Dumitriu et al., 2019). Companies have realized the significance of digital marketing and its implementation in recent years to make smarter decisions for sustainable business performance. Digital marketing plays a significant role in business development. Digital marketing involves using the Internet, mobile phones, social networks, search engines, and other means of communication to introduce the goods and services of a business and attract more customers constitutes (Joensuu-Salo et al. al., 2018).

Various digital marketing techniques can be linked to companies' sustainability strategies. However, the challenge is to make users understand that companies develop these strategies sustainably and send positive messages that create positive emotions in users searching the Internet. Digital marketing strategies used primarily by companies are related to search engine optimization, search engine marketing, social media marketing, programmatic advertising, and influencer marketing (Denicolai et al., 2021). Digital marketing techniques are increasingly used. They are complemented by algorithms that analyze users' feelings about the ways of sharing messages by companies on the Internet (Mário, 2018). Digital marketing techniques should transfer the supportive messages of sustainability, the environment, and the success of business models sustainably. The significant point here is that users should understand that companies are taking sustainable actions over time (Pandey et al., 2020). Additionally, different digital marketing techniques are developing these strategies in environments such as specialized platforms, e-business, or social networks to evaluate the impact of their development at the business level and identify the internal problems (Apasrawirote et al., 2022).

#### 1.2.7 Social responsibility

Nowadays, businesses have realized that social issues should be taken into consideration seriously. One of the main requirements of companies to survive and gain a larger market share and a competitive advantage in a competitive economy is to observe the social responsibility in businesses. Social responsibility is a challenge for companies to achieve smooth performance (Feng et al., 2021). This issue plays a crucial role in SME performance. However, developing countries should pay much attention to the foundations required for social responsibility and create the necessary motivations to remove barriers and overcome challenges. Corporate social responsibility provides solutions for using the business environment and meeting

society's needs in the legal, ethical, business, and social areas. Organizations have many environmental, social, and economic responsibilities toward employees, shareholders, customers, governments, suppliers, and other stakeholders (Barauskaite & Streimikiene, 2021). Any organization that aims at maintaining its legitimacy and survival should accept its social role. Some researchers argue that organizations that fulfill their social responsibility will benefit from these activities through the right image they show in society (Ye et al., 2020).

Nowadays, organizations have new responsibilities aimed at meeting the needs of their societies in addition to their traditional responsibilities. These new responsibilities are called social responsibilities (Waheed & Zhang, 2020). All companies should focus on improving service quality and social responsibility to improve their performance. Corporate social responsibility is generally a voluntary activity fulfilled by an organization to act sustainably economically, socially, and environmentally (Weller, 2020). The World Business Council for Sustainable Development defines corporate social responsibility as a business commitment to contribute and cooperate for sustainable economic growth, working with workers, their families, local communities, and society to improve the quality of life. (Anser et al., 2018). The increase in public awareness of the organization, society, and the environment's dependence on each other indicates that organizations achieve their goals through their facilities, and their actions should be useful for society (Zhang et al., 2022).

In the 1970s and in industrially developed countries, there were requirements for environmental studies. In this regard, the assessment of environmental effects was gradually formed and completed. With the follow-up and insistence of independent organizations, many countries agreed to include social impact assessment alongside environmental assessments to realize corporate social responsibility (Phillips et al., 2019). Currently, the sustainability performance of companies includes three dimensions, economic, social, and environmental, referring to the social responsibility of companies. The corporate social responsibility concept is close to the sustainable development concept. The sustainable development approach outcome pays special attention to the concepts of corporate social responsibility disclosure and reporting (Shanyu, 2022). Companies with better sustainability performance perform better than their competitors in the long term in the stock market. They also show better accounting performance and are less affected by external shocks that affect value creation within the organization (Islam et al., 2021).

Achieving social goals in line with sustainable development highlights the significant role of companies in the social responsibility form. Corporate social responsibility reports business activities and includes issues such as environmental issues, social reporting, and the company's interactions with multiple stakeholders (Nguyen et al., 2018). Based on the above concept, an increasing number of companies are included in the corporate social responsibility culture. However, there are different approaches

to promoting corporate social responsibility. However, all companies accept such responsibility. It is a task performed now voluntarily and will preserve the long-term interests of companies (Herrera & de las Heras-Rosas, 2021). Companies require a mechanism that fulfills responsibility based on the theory of social responsibility and accountability to stakeholders. A corporate governance system is a tool for such a mechanism. The lack of necessary platforms for implementing a corporate governance system overshadows the possibility of fulfilling corporate social responsibility (Feng et al., 2021).

The type of systems governing the economic and social environment of companies significantly affects the success rate of companies in fulfilling social responsibility and implementing the corporate governance system. Social responsibility has an economic nature, as it pays fair wages to employees, creates new resources, improves technology, innovates, and makes new products (Rehman et al., 2020). Corporate social responsibility meets the information needs of various stakeholders. It also gives managers a unique opportunity to highlight the behavior and involvement of their companies in the economic and social development areas. Social communities try to affect the operations of companies in various ways, such as through behavioral regulations and transparency (Hou, 2019).

Companies also react to these regulations and group pressure by improving their mechanisms. They also voluntarily observe certain behavioral regulations to restrict some aspects of their operations. Corporate social responsibility is one of the practical mechanisms of companies to achieve this goal (Zhu et al., 2019). The term "corporate social responsibility" refers to the emergence of a movement that includes environmental and social factors in companies' business decisions, strategies, and accounting aimed at increasing social, environmental, and economic performance that is beneficial for the business units, society, and environment (Bahta et al., 2021). Corporate social responsibility includes the societies' economic, legal, ethical, and expedient expectations of companies. Creating a strategic approach to the ways of managing the companies, this concept can guarantee the sustainability of companies' activities and the management of their social, environmental, and economic risks (Bacinello et al., 2020). Corporate social responsibility activities may affect the financial performance of the organization through the connection with the strategic activities of the organization. For example, CSR strategic activities affect the creation of new opportunities in the market of that company. Also, expanding these activities increases the company's reputation and improves financial performance (Lombardi et al., 2020). Corporate social responsibility is an excellent approach to business by considering the social impact of the organization on the internal and external society. It aims at increasing the cooperation between public, private, and non-profit sectors. This cooperation aligns the economic profit with the environment and causes business sustainability (Sánchez-Hernández et al., 2021). However, the benefits of social responsibility make it essential for all businesses. Companies facing globalization challenges know that social responsibility can create direct economic value (Lu et al.,

2018). They do not consider social responsibility costs as costs but as investments for a long-term strategy and a factor to reduce risk and increase trust (Ngai et al., 2018). Some people argue that social responsibility reduces competition and economic freedom. However, companies can improve the society in which they operate by making the right and rational decisions. Hence, it creates social value and optimizes the organization's profitability. A low level of social responsibility in companies has caused problems, including financial crises, investors' huge losses, damaged reputation of companies, low level of standards, high rate of unemployment, and low level of social development in recent years (Kraus et al., 2020).

## 1.2.8 Professional ethics and sustainable performance

Nowadays, many countries in the industrial world know that neglecting ethical issues and escaping social responsibilities and obligations destroy the company. Thus, many successful companies feel the need to develop a strategy based on ethics. They believe that an ethical culture should be used in the organization (Weller, 2020). Ethics also has a close and tight association with values. It is viewed as a tool that turns values into action. Hence, it plays a significant role in behaviors, decisions, and performance. Organizations need specialized knowledge in recognizing their ethical obligations toward the environment and solving ethical issues in business. This knowledge is "professional ethics." As one of the crucial spiritual factors, it affects organizational success. It affects organizational performance and creates better performance by increasing the level of ethics in the organization (Guarnieri & Trojan, 2019). Professional ethics, as a set of principles, is defined as a charter for guiding and directing. This set of principles provides a framework for action. Professional ethics is like a double-edged sword, one edge of which is a threat, and the other edge is an opportunity (Abalala et al., 2021). Lack of paying attention to ethical principles reduces communication and increases losses in the organization. It also causes management to rely more on retrospective control since people do not provide information to management. It will cause that organization's power to be spent on rumors, not on the goal (Xiang et al., 2022).

Nowadays, the issue of human relations is considered one of the most significant issues in management science. The realization of ethics at the individual and organizational levels is one of the main goals of society and requires a strategic approach. The relationship between the organization and the environment will provide potential opportunities for the organization with such an attitude. It will finally create a competitive advantage for the organization based on universal ethical principles. Professional ethics significantly affects their activities and outcomes in the organization (Aftab et al., 2022). Professional ethics increase productivity, improve communication, and reduce risk-taking. Professional ethics in the organization facilitates the information flow and makes the manager informed of an incident before it occurs (Asad & Fatima, 2018). Besides the issues such as lack of human capital and

global competition, professional ethics is nowadays considered one of the future challenges for organizational excellence (Agyabeng-Mensah et al., 2020). Since organizational sustainability is associated with the development and sustainable performance in the long term, it provides an advantage for organizations so that companies can achieve sustainability in survival and development. Organizational success is achieved by adhering to professional ethics and observing its principles by employees and managers in the organization. Thus, it is vital to examine the effect of this intangible organizational resource on sustainability in the performance of organizations (ElGammal et al., 2018).

Sustainability is formed when a valuable, rare, inimitable, and structured resource or capability provides a competitive advantage. Based on this approach, resources have different levels and can be divided into two classes, including tangible and intangible (Looser & Wehrmeyer, 2016). Some of these resources, such as human resources, have both tangible and intangible dimensions. From this viewpoint, organizations can improve their sustainable performance in the competitive environment by adhering to principles of professional ethics as an intangible resource (Phukan & Dhillon, 2000). Ethics can help foster a high-quality culture in which employees are encouraged to think about improving work processes and the organization's performance. Organizations emphasize professional ethics due to the role of ethics as a part of the organization's strategy and management, its effect on the organization's performance, and the legal responsibility of managers and organizations to observe ethical principles.

Therefore, it is necessary to focus on professional ethics to improve organizational performance. Various theoretical studies have revealed the effect of professional ethics on organizational performance (Adla & Gallego-Roquelaure, 2019). Ethics is known as a classification of philosophy that deals with good and bad principles. Ethical principles provide guidelines for action in the organization since they reflect what is "right." Ethics supports businesses in making ethical decisions and performing ethical actions (Xiang et al., 2022). Ethical sensitivity is related to the sustainability performance of SMEs. Ethical sensitivity focuses on environmental and sociological components of sustainable development (company performance). Organizational ethics integrates the ethical climate and ethical culture in companies, and it significantly affects ethical decision-making. These results finally cause sustainable performance. The organizational ethics concept provides long-term business tools (Aftab et al., 2022). Businesses should remain ethical for stakeholders in uncertain conditions. Companies are expected to consider their own and others' interests in society to serve sustainable development. Organizations focusing merely on profit often make short-term decisions without considering long-term sustainable benefits (Torelli, 2021).

#### 1.2.9 Sustainable entrepreneurship

SMEs are closely associated with entrepreneurship. Various theories and studies in the entrepreneurship field indicate the significance of entrepreneurial orientation. They justify its impact on business performance by investigating the impact of entrepreneurial orientation (including innovative elements, proactivity, and risk), marketing orientation, culture, and performance (including sales growth, profit growth, and asset growth) (Gray et al., 2018). An entrepreneur's entrepreneurial orientation can increase business performance. Entrepreneurial orientation is integrated when facing the environment dynamism to select and implement management and strategies to achieve improved performance and competitive advantage in SMEs (Tur-Porecar, 2018).

The SMEs' potential to create employment is much higher than that of large enterprises. SMEs are responsible for promoting the entrepreneurial culture. The performance of small enterprises is defined as their capability to create employment and wealth by launching, surviving, and sustaining the business (Vasilescu et al., 2022). Environmental, social, and economic problems, including global warming, hunger, and unemployment, have increased all over the world. Sustainable development is proposed as an alternative to such problems. It seeks alternatives that satisfy current needs without compromising the ability of future generations to satisfy their own needs (Usha & Devakumar, 2019). It has been proven that entrepreneurship is an effective mechanism for generating wealth. It is also one of the drivers of change, innovation, and economic growth. However, entrepreneurship has goals beyond economic benefits when we face the connection between sustainable development and the significance of its adequate implementation (Roxas et al., 2019).

Also, entrepreneurship highlights the need for business models to match sustainability to respond to Sustainable Development Goals (SDGs). Therefore, sustainable entrepreneurship has become a relevant subject. It focuses on preserving nature, supporting life and society, and producing services and products reflected in people's well-being, economy, and society. Thus, sustainable entrepreneurship should be viewed as a possible solution that contributes to sustainable development. Sustainable use of terrestrial ecosystems at high levels, sustainable growth, decent work, and good access to affordable, sustainable energy and clean water contribute to promoting sustainable entrepreneurship over time (Yin et al., 2022). SMEs are instrumental in nurturing entrepreneurial talent and ensuring economic sustainability at the people level. Hence, they promote balanced and equitable growth of the country. Additionally, the development of SMEs can contribute to economic diversification and flexibility (Lee & Kim, 2019). SMEs account for up to 45% of total employment and 33% of the GDP of emerging Asian economies. They provide employment opportunities to millions of poor people. They also help to improve the skill level of the low-skilled or unskilled labor force (Ye et al., 2020 Sustainable entrepreneurship integrates the sustainability concept with entrepreneurial activities. It primarily focuses on preserving nature and supporting the life and well-being of society by searching for opportunities in the environment/market to develop products and services with or without economic profit. Sustainable entrepreneurship refers to all investments that imply significant concerns about environmental, social, and economic issues. This entrepreneurial stream has values and a vision that looks to the future, and its operations are performed for a sustainable goal (Hu et al., 2022). The long-term approach of sustainable entrepreneurship is one of the characteristics that define it. Sustainable entrepreneurship is ta society's commitment to respect and properly regulate the use of resources by always thinking about long-term well-being (Muo & Azeez, 2019). Sustainable entrepreneurship remains sustainable over time since it commits society to respect and properly regulate the use of resources. It is done only by thinking about long-term well-being. Sustainable entrepreneurship eliminates the bad practices of other entrepreneurs who have been constantly criticized since they are merely thinking about enriching themselves, not about the well-being of society, and neglecting the sustainable approach (Vasilescu. et al., 2022).

Sustainable entrepreneurship ensures socially responsible behavior with a long-term focus since it recognizes that indiscriminate use of resources in the short term is impossible. Thus, such entrepreneurship seeks innovative alternatives to provide individual and social development (Hu et al., 2022). The value systems of these entrepreneurs guide them toward the goal of future sustainable action. Sustainable entrepreneurship has a strong ethical and moral basis by recognizing the commitment to society and future generations as an ethical duty. Since ethics and social commitment are dominant in this entrepreneurship, its entrepreneurs are looking for solutions to social, economic, and environmental problems that match current and future needs (Nor-Aishah et al., 2020). Therefore, sustainable entrepreneurship links performance over time to maintaining an adequate economic, social, and environmental balance and respecting the needs of future generations. Supporting economic development by sustainable entrepreneurship is based on increasing physical capital development through reducing exploitation levels, promoting investment plans, and increasing the efficiency of services and production products. Sustainable entrepreneurs can reduce environmental problems by maintaining ecosystem integrity (Orobia et al., 2020).

## Research background

	Author (year)	Title	Main findings
1	Hu et al., 2022	How do businesses achieve sustainable success and improve the quality of products in the green competitive era?	The empirical outcomes find that green factors help companies improve the quality of products and sustainable success. Also, technology readiness positively influences the quality of products and sustainable success in business. In addition, the impact of green entrepreneurial orientation on the quality of products and sustainable success is positive and significant. The findings illustrated that green market orientation is an essential factor in the quality of products and sustainable success in business.  Another point is that green innovation positively affects the quality of products and sustainable success. Finally, the quality of products has significantly affected sustainable success in business.
2	Afzal & Lim, 2022	Organizational Factors Influencing the Sustainability Performance of Construction Organizations	The findings revealed that, among the five key factors, business strategies, technological capabilities, and organizational culture are found to have a significant positive impact on the environmental sustainability performance of construction organizations. Also, it is found that the organizations' social sustainability performance is positively influenced by their organizational culture and business strategies.
3	Ketprapakorn & Kantabutra, 2022	Toward an organizational theory of sustainability culture	A dynamic theory of sustainability organizational culture is introduced, comprising sustainability assumptions, sustainability vision and values, vision and values communication, emotionally committed organizational members, culture-reinforcing people management practices, corporate sustainability practices, and sustainability performance.
4	Zhao & Huang, 2022	green HRM, green innovation and organizational support on the sustainable business performance: evidence from China	The results indicated that GTL, green HRM, and green innovation have a significant and direct association with the sustainable business performance of manufacturing organizations in China. The outcomes also revealed that organizational support significantly moderates the nexus of GTL, green HRM, green innovation, and sustainable business performance of the manufacturing organizations in China.
5	Zhang et al., 2022	Linking corporate social responsibility (CSR) practices and organizational performance in the construction industry: A resource collaboration network	The findings of this study provide a helpful reference for practitioners to collaborate with corporate resources, optimize their current CSR strategies, and improve business performance for sustainable development.
6	Babajide et al., 2021	Financial literacy, financial capabilities, and sustainable business model practice among small business owners in Nigeria	The study shows that environmental sustainability, financial sustainability, and social responsibility are significant determinants of small firms' sustainability in Nigeria.  Financial literacy and financial capabilities practices also have a significant positive impact

	T		
			on firm sustainability. However, the use of savings products shows a significant adverse effect on firms' sustainability. The findings imply that financial literacy knowledge and practice in small business operations enhance firms' sustainability.
7	Feng et al., 2021	The impact of corporate social responsibility on the sustainable financial performance of Italian firms: the mediating role of firm reputation	The results revealed that CSR has a positive association with a firm reputation and sustainable business performance. The findings also indicated that firm reputation has a significant and positive association with sustainable business performance. Moreover, firm's reputation plays a positive and significant mediating role between CSR and sustainable business performance. These results provide valuable recommendations.
8	Ch'ng et al., 2021	Eco-innovation practices and sustainable business performance: The moderating effect of market turbulence in the Malaysian technology industry	Each dimension of sustainable business performance (economic, social, and environmental) can be obtained by distinguishing an eco-innovation strategy, whether eco-process, eco-product, or eco-organizational innovation.
9	Msomi & Olarewaju, 2021	Factors Affecting Small and Medium Enterprises Financial Sustainability in South Africa	Specifically, through a descriptive and multivariate regression analysis, it was found that financial awareness, budgeting, accounting skills, and access to finance have positive and significant effects on the financial sustainability of SMEs, with all the variables having 0.005 probability values, respectively.
10	Saura et al., 2020	Digital Marketing for Sustainable Growth:  Business  Models and Online Campaigns Using Sustainable Strategies	They analyze how companies adopt new technologies in a digital environment that is increasingly concerned with the sustainability of business models and actions on the Internet.
11	Chege & Wang, 2020	The influence of technology innovation on SME performance through environmental sustainability practices in Kenya	Technological innovation affects environmentally friendly owners who have a positive impact on the performance of the company. Innovation from management and employee participation in environmental protection practices can improve the company's performance and enhance its image to stakeholders.
12	Nor-Aishah et al., 2020	Entrepreneurial Leadership and Sustainable Performance of Manufacturing SMEs in Malaysia: The Contingent Role of Entrepreneurial Bricolage	Entrepreneurial Leadership has significant effects on environmentally sustainable performance and socially sustainable performance but has an insignificant effect on economically sustainable performance.
13	Kumar et al., 2020	Application of industry 4.0 technologies in SMEs for ethical and sustainable operations:  Analysis of challenges	In the era of Industry 4.0 and circular economy, small and medium enterprises (SMEs) are under huge pressure to make their manufacturing operations ethical and sustainable. Business with ethical and sustainable operations is the need of the day in the present environment of Industry 4.0 and circular economy.
14	Usha & Devakumar 2019	Determinants of Sustainable Business with Respect to Agricultural Engineering Manufacturing Companies	Entrepreneurial competency, business model, and innovation are the key influencing factors of business sustainability.
15	Haseeb et al., 2019	Industry 4.0: A Solution towards Technology Challenges of Sustainable Business Performance	Findings reveal that Industry 4.0 is a key to the growth of sustainable business performance among SMEs. Elements of Industry 4.0, such as big data, the Internet of Things, and smart

positive role in promoting
ology (IT) implementation,
es to sustainable business
eover, organization structure
hen the positive relationship
4.0 and IT implementation.
unlock better sustainable
ce innovation capability has
nt positive mediating effect;
capability ultimately benefits
owing them to differentiate
is on value creation; service
act as a business strategy to
new entry by competitors.
ological challenges played
sting sustainable competitive
ninable business performance
d provide a starting point for
Es that choose to follow the
ty by creating and enhancing
through digital marketing
and techniques.
strategic orientation enables
nore proactive stance toward
stainability practices which
rior firm performance.
t support had a significant
with the use of e-marketing
n performance. The use of e-
ed the relationship between
le firm performance. Finally,
' pressure moderated the
en top management support
arketing, and technological
oderated the relationship
e-marketing and sustainable
performance.

#### The theoretical framework

Sustainability has become a part of the business model worldwide. Companies communicate with physical, biological, and social environments, affect them, and are affected by them. The business sustainability model makes companies ready to enter the market, maintain, and improve the company status in domestic and global markets by creating a common understanding of business logic, enabling analysis, improving business management, and creating a clear vision. Researchers have found various factors effective in improving the sustainable performance of SMEs. Many studies have identified the fields of sustainable performance improvement and the influential factors. The effect of these factors on SMEs' performance and creating sustainability in them has been proven. Therefore, the table below presents some of these factors discussed more in the literature:

Table 2-2-Factors affecting the sustainable SMEs performance

Row	Criterion	Reference
1	Entrepreneurship	(Zhang et al., 2022)
		(Lee & Kim, 2019)
		(Tur-Porcar et al., 2018)
		(Gray et al., 2018)
		(Zhao & Huang, 2022)
		(Lewandowska & Cherniaiev, 2022)
2	Innovation	(Chowdhury et al., 2022)
		(Zulkiffli et al., 2022)
		(Kluza et al., 2021)
		(Zhang et al., 2022)
		(Zhang et al., 2022)
3	Access to finances	(Babajide et al., 2021)
3		(Masomi & Olarewaju, 2021)
		(Ahmed et al., 2021)
		(Kimanzi & Gamede, 2020)
	Corporate social responsibility	(Shanyu, 2022)
4		(Babajide et al., 2021)
4		(Feng et al., 2021)
		(Waheed & Zhang, 2020)
		(Savastano et al., 2022)
	Digital marketing	(Saura et al., 2020)
5		(Hwangbo & Kim, 2019)
		(Dumitriu et al., 2019)
		(Sheikh et al., 2018)
		(Chatterjee et al., 2022)
6	Top management support	(Kiesnere & Baumgartner, 2020)
U		(Henry et al., 2018)
		Sheikh et al., 2018)

7	Information and Communications Technology	(Savastano et al., 2022)  (Afzal & Lim, 2022)  (Kumar et al., 2020)  (Chakraborty et al., 2020)  (Haseeb et al., 2019)
8	Organizational Culture	(Afzal & Lim, 2022)  (Chowdhury et al., 2022)  (Ketprapakorn & Kantabutra, 2022)  (Ma & Cheok, 2022)  (Isensee et al., 2020)
9	Ethics	(Aftab et al., 2022)  (Abalala et al., 2021)  (Kumar et al., 2020)

#### 2. Methods and Material

## 2.1 Data Collection and Delphi Technique

Delphi technique includes the following steps: (i) Identifying an expert group, (ii) Determining the individuals' willingness to serve in a group, (iii) Collecting individual input about a particular subject and then collecting them in main statements, (iv) Analyzing group data, (v) Collecting information about a new questionnaire and sending it to each panel member for a survey, analyzing new data and restoring distribution of responses to members of the panel, (vi) Request each member to check data and appraise their position according to group responses, and (vii) Evaluating input and sharing minority supporting statements with the panel (Salmzadeh et al., 2021).

The statistical population of the research is consist of academic professors and experts in the field of business and sustainability(With acceptable knowledge related to SMEs in Iran) who will be selected by purposeful sampling. Data were collected by sending emails to experts in the study area. In fact, first, a list of experts was prepared. In the next step, a secondary list was prepared according to who was available and more chances to respond. Finally, it was decided to send the emails in several stages (10 emails in every step), and after receiving feedback in each stage, the next emails will be sent. Despite the efforts and accuracy of the author, the data collection phase took more than three months (December 2022 to February 2023) to collect 45 data. Inclusion criteria included at least ten years of study or work experience in sustainability and business performance. According to the group counseling and literature based on the Delphi technique, 9 main criteria were determined (Table 2.1).

The experts were identified by examining the available resumes on social media and Google scholar. Several experts have also been identified based on previous collaborations with researcher and universities. Experts' contact information, including email and telephone numbers, was identified, and their willingness to respond to the questionnaire was questioned. In some cases, depending on the importance and background of the person in question, he was asked to answer questions via Skype.

**Table 2.1.** Identified factors based on literature review

	Factors	
F1	Sustainable	
	Entrepreneurship	
F2	Innovation	
F3	Access to finance	
F4	Corporate social	
	responsibility	
F5	Digital marketing	
F6	Top management	
	support	
F7	Information and	
	Communications	
	Technology	
F8	Organizational Culture	
F9	Ethics	

Coefficient of variation (COV) Changes were applied to study the indicator's stability to ensure the Delphi technique consensus in this study. The mean COV in the first study was 0.19, which dropped to 0.17 in the second, thus showing an acceptable consensus (Wong et al., 2020). To ensure validity, the inter-class correlation (ICC) coefficient value was consistently confirmed (Bouzari et al., 2021; Fekete-Farkas et al., 2021; Khajeheian & Ebrahimi, 2021). The questionnaire was to be evaluated by experts using the "average measurement of each factor." The ICC coefficient was assessed using these scores. Also confirmed was the absolute agreement coefficient's value at 95% confidence intervals.

## 2.2. Interpretive Structural Modeling

Warfield's (1974) approach toward Interpretive Structural Modeling (ISM) is followed to reach a visualized hierarchical structure. It is a collaborative learning process in which a number of closely related and dissimilar elements are combined into a model and widely applied from various management viewpoints (Khan, Akhtar, Ansari, and Dhamija, 2020; Ebrahimi, Kot, & Fekete-Farkas, 2020). It manages decision-making by analyzing and resolving complex problems, such as those in entrepreneurship, performance and digital

marketing. This study follows an eight-step process suggested by Singh and Kant (2008) and Dhir and Dhir (2020).

## 2.3. Building Adjacency Matrix or SSIM

Based on the opinions of 45 experts, an adjacency matrix is created to show the contextual correlations among 9 factors (Table 2.2). According to the advice of the judgment experts, the contextual correlation between the factors needs to be developed before the ISM method can be applied. Through structured interviews, which is a less biased method, we were able to determine the contextual relationships between the nine factors mentioned by experts. The interviewer inquired about the pair-wise comparison of the two factors without mentioning the interviewee. What connection exists, for instance, between F1 and F2? A symbol from the list of V, A, X, and O was chosen by the interviewee, as shown in the table: in the following order: (i) V: F1 variable i affects F2 variable j, (ii) A: F2 variable j affects F1 variable I, (iii) X: Both variables i and j are inter-related, and (iv) O: Both variables i and j are unrelated.

F9 F8 F7 F6 F5 F4 F3 F2 F1 F1 Α  $\mathbf{O}$ O Α  $\mathbf{O}$ Α Α Α F2 O O O A Α V Α F3 O O A V O O F4 X A  $\mathbf{O}$  $\mathbf{O}$ A F5 0 0 A Α F6 O O F7 O O F8 Α F9

Table 2.2. Structural self-interaction matrix

## 2.4. Initial Reachability Matrix (IRM)

The reachability matrix must be created according to SSIM. For this purpose, the SSIM must be transformed into the reachability matrix by converting symbols into 1s or 0s (Table 2.3). This conversion follows some rules mentioned in previous studies (e.g., Sadeh & Garkaz, 2019; Chillayil, Suresh, Viswanathan, & Kottayil, 2021).

**Table 2.3.** Initial reachability matrix

	F1	F2	F3	F4	F5	F6	F7	F8	F9
F1	0	0	0	0	0	0	0	0	0
F2	1	0	0	0	1	0	0	0	0
F3	0	0	0	0	0	1	0	0	0
F4	1	0	0	0	0	0	0	0	1

F5	0	0	0	0	0	0	0	0	0
F6	1	1	0	1	1	0	0	0	1
F7	0	1	1	0	1	0	0	0	0
F8	1	1	0	1	0	0	0	0	0
F9	1	0	0	1	0	0	0	1	0

## 2.5. Final Reachability Matrix (FRM)

The power iteration analysis and research into the transitivity rules were done using the MATLAB program. Inference was used to fill in some IRM cells. Therefore, the pair-wise comparison entries as well as some inferred entries serve as the foundation of the FRM. The inference and gaps were filled by the authors using the transitivity concept. Incorporating the transitivity is represented by any entry 1\*.

$$R_f=R_j^K=R_j^{K+1}, K>1$$

where R<sub>f</sub> is the FRM, and R<sub>i</sub> is the IRM.

The reachability and antecedent sets of the variables can be identified using the FRM (Table 2.4). Each variable's driving force reflects the total number of variables (including itself) it may influence. The total number of variables (including itself) that could have an impact on the variable is known as its dependence.

Table 2.4. Final reachability matrix

	F1	F2	F3	F4	F5	F6	F7	F8	F9	Driving
										power
F1	1*	0	0	0	0	0	0	0	0	1
F2	1	1*	0	0	1	0	0	0	0	3
F3	1*	1*	1*	1*	1*	1	0	1*	1*	8
F4	1	1*	0	1*	1*	0	0	1*	1	6
F5	0	0	0	0	1*	0	0	0	0	1
F6	1	1	0	1	1	1*	0	1*	1	7
F7	1*	1	1	1*	1	1*	1*	1*	1*	9
F8	1	1	0	1	1*	0	0	1*	1*	6
F9	1	1*	0	1	1*	0	0	1	1*	6
Dependency power	8	7	2	6	8	3	1	6	6	

**Note**: During the checking of transitivity,\* indicates the values which are changed from "0" to "1" and shown with 1\*, power=k=4.

## 2.6. Level Partitions

The accessibility set includes the main component and other components that may help to be achieved. In contrast, the previous set includes the component itself and other components that may help achieve it. Then, these sets' intersection is derived for all factors. Factors for which access and intersection sets are the same occupy a high level of the ISM hierarchy. The hierarchy's top-level element does not help us achieve any other element above that level. Once one detects the high-level element, it could be separated from the others. The same procedure is then repeated to identify the components at the next level. Continue doing this until you locate the surface of each element (Table 2.5). For the ISM model, the tables display six levels. In this study's ISM model, the top-level components are F1 and F5 (Figure 2.1).

**Table 2.5.** Level partitioning factors

		First iteration		
Factors	Reachability set	Antecedent set	Intersection set	Level
F1	1	1,2,3,4,6,7,8,9	1	1
F2	1,2,5	2,3,4,6,7,8,9	2	
F3	1,2,3,4,5,6,8,9	3,7	3	
F4	1,2,4,5,8,9	3,4,6,7,8,9	4,8,9	
F5	5	2,3,4,5,6,7,8,9	5	1
F6	1,2,4,5,6,8,9	3,6,7	6	
F7	1,2,3,4,5,6,7,8,9	7	7	
F8	1,2,4,5,8,9	3,4,6,7,8,9	4,8,9	
F9	1,2,4,5,8,9	3,4,6,7,8,9	4,8,9	
		Second iteration		
Factors	Reachability set	Antecedent set	Intersection set	Level
F2	2	2,3,4,6,7,8,9	2	2
F3	2,3,4,6,8,9	3,7	3	
F4	2,4,8,9	3,4,6,7,8,9	4,8,9	
F6	2,4,6,8,9	3,6,7	6	
F7	2,3,4,6,7,8,9	7	7	
F8	2,4,8,9	3,4,6,7,8,9	4,8,9	
F9	2,4,8,9	3,4,6,7,8,9	4,8,9	
		Third iteration		
Factors	Reachability set	Antecedent set	Intersection set	Level
F3	3,4,6,8,9	3,7	3	
F4	4,8,9	3,4,6,7,8,9	4,8,9	3
F6	4,6,8,9	3,6,7	6	
F7	3,4,6,7,8,9	7	7	
F8	4,8,9	3,4,6,7,8,9	4,8,9	3
F9	4,8,9	3,4,6,7,8,9	4,8,9	3
		Fourth iteration		-
Factors	Reachability set	Antecedent set	Intersection set	Level

E2	2 6	2.7	2	
F3	3, 6	3,7	3	
F6	6	3,6,7	6	4
F7	3,6,7	7	7	
		Fifth iteration		
Factors	Reachability set	Antecedent set	Intersection set	Level
F3	3	3,7	3	5
F7	3,7	3,7		
		Sixth iteration		
Factors	Reachability set	Antecedent set	Intersection set	Level
F7	7	7	7	5
F7	7	7	7	5

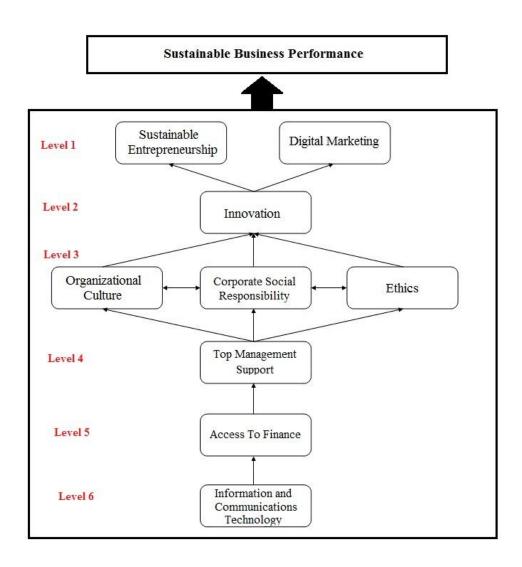


Fig 2.1. ISM model(source: researcher's calculation)

## 2.7. MICMAC Analysis

According to Table 2.5 and Fig 2.1, "Sustainable entrepreneurship" and "Digital marketing" are all at Level I. As a result, these could be positioned at the model's peak. It is conceivable to identify the variables, their correlations, and each variable's hierarchical level in Figure 2.1. The linkage factors are at the model's core, according to Figure 2.1, which means they are the primary force behind achieving the other variables examined in this study. For the purpose of examining how effects are distributed "through reaction loops and paths for developing hierarchies for members of a set of elements," the Matrices d'Impacts Croises Multiplication Appliqué a Un Classement (MICMAC) method is used (Wang et al., 2008). According to their reliance and driving forces, each Factor has been categorized (Table 2.5). There are four types of factors in MICMAC: autonomous factors, dependent factors, linkage factors, and independent factors. Figure 2.2 displays F4:CSR, F8: Organizational culture and F9: Ethics in organization are the most important strategic variables compared to others: (i) Segment I Autonomous: In this study, under this segment, there is no autonomous factor, (ii) Segment II Dependent: In this case, there are 3 dependent factors: F1, F2, and F5, (iii) Segment III Linkage: This study has 3 linkage factors in this segment, i.e., F4 F8, and F9, and (iv) Segment IV Driver or independent: In this segment, there are 3 independent factors, i.e., F3, F6 and F7.

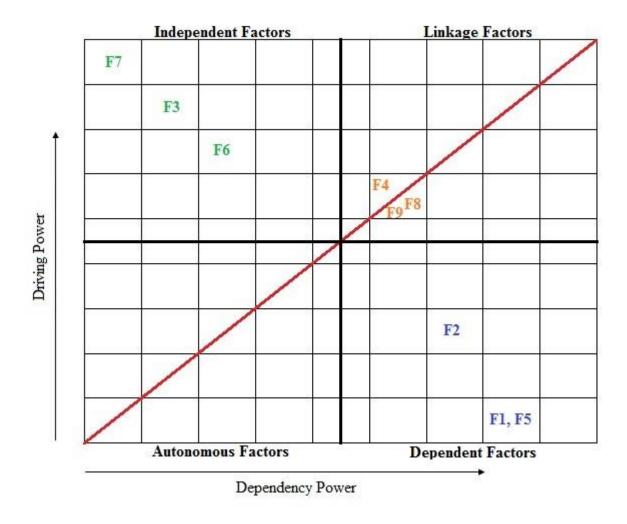


Fig 2.2. MICMAC Analysis

#### **Results / Discussion**

The present study identified 9 factors affecting the sustainability of the business performance of Iranian SMEs using the opinions of experts and specialists in the field of performance sustainability and the literature of this field based on the Delphi technique (the factors are listed in Table 2-1). After identifying the 9 factors, these factors were leveled to achieve the business performance sustainability model in Iran's SMEs using the ISM and MICMAC methods. In the ISM model, factors were classified into six levels. Figure 2-1- shows the contextual relationships of each variable with each other. As shown in Figure 2-1 and Table 5-2, the two variables "Sustainable Entrepreneurship" and "Digital Marketing" formed Level 1. Thus, these two variables are placed at the top of the model. Figures 2-1 and Table 2-5 show other variables and their relationships. Accordingly, ethics, CSR, and organizational vulture variables, placed right in the middle of the model, form the core of the model. They are linking factors in our model. Thus, it can be concluded that these variables are the primary forces to achieve other higher-level variables in this study. Accordingly, other variables are classified based on their dependence or driving force in the model.

In the present study, based on the reviews presented in the Material and Methods Chapter, we concluded that our variables fall into three categories: dependent, linking, and independent. Each of these categories consists of several variables that have special cause and effect depending on their placement in each category. The dependent variables that have the highest effect on other variables in our model include sustainable entrepreneurship, digital marketing, and innovation. The linking variables include organizational culture, CSR, and Ethics. Finally, the independent variables are in the lower levels of the model. They include ICT, access to finances, and top management support. Additionally, according to the results of analyses, as shown in Figure 2-2, the three variables of CSR, organizational culture, and ethics are strategic factors of the model and they have high significance.

As mentioned in the literature review section, the structure of SMEs is closely associated with entrepreneurship. Several studies have indicated the significance of entrepreneurial tendencies in SMEs and their direct and significant effect on the performance of these businesses. In this regard, Moya-Clemente (2020) revealed a positive and significant relationship between environmental and economic factors, and sustainable entrepreneurship over time. It means that countries that make more efforts to consolidate their economic and environmental factors will achieve a higher sustainability rate for their sustainable entrepreneurship, which results in sustainable performance in the structure of SMEs and other organizations in that country. Moreover, Gray et al. (2018) showed the significance of entrepreneurial orientation in SMEs by investigating its effect on the variables of sales growth, profit growth, and assets. Lee & Kim (2019) also stated that fostering entrepreneurship in SMEs guarantees economic sustainability at the community level. Investigating the variable of digital marketing showed that our results are consistent with the literature. Based on the literature review, researchers such as Saura et al. (2020) showed that the

transformation in marketing methods and its change to a digital method leads to the growth of operational methods and more dynamism of SMEs. They considered it a necessity for the survival of such enterprises. Sheikh et al. (2018) showed that digital marketing can maintain the survival and sustainability of the performance of SMEs among their competitors when they are in an intense competitive position.

Moreover, the literature supports the role of innovation and its effect on sustainable business performance and its association with the variables of digital marketing and entrepreneurship that we achieved in our ISM model. For example, Zho & Huang (2022), reported that green and sustainable innovation with changes in processes, systems, and methods, and the production of new and changed products result in improved sustainable performance in all three dimensions of sustainable development. Chowdhury et al. (2022) also reported that innovation is a key factor in increasing market share and creating competitive advantage, and increasing productivity in today's business. Companies have realized the significance of innovation in their business practices in facing today's competitive market environment. The middle-level variables of the ISM model, which are the linking variables in our research, are very significant and strategic. They play a significant role in achieving the sustainable business performance of SMEs and are the basis for the growth of other variables to achieve the goals of sustainable business performance of SMEs (see Figure 2-1). Some studies have been conducted in this regard. For example, Afzal & Lim (2022) reported that organizational culture is a factor affecting the performance and biological actions of companies in line with sustainability. MA & Cheok (2022) also reported that organizational culture is one of the strategic factors affecting performance sustainability and it is achieved only when the entire structure of the enterprise is involved in it in various ways, including all employees and managers.

CSR is another strategic factor that our study showed it. Corporate social responsibilities should be taken very seriously. In this regard, Feng et al. (2021) reported that CSR is one of the primary needs of companies to survive and gain a larger market share and economic performance in intense competition. Additionally, Shanyu (2022) stated that the sustainability performance of companies in three economic, social, and environmental dimensions refers to CSR and the concept of CSR is highly related to the concept of sustainable development and the implications of sustainable development approach in companies.

Professional ethics is another strategic variable, and its significance has always been reported in the literature. It is in line with the results of our study. Achieving professional ethics at the individual and organizational levels is one of the primary ideals that society needs. In this regard, Aftab et al. (2022) consider the realization of professional ethics as a strategic approach to increase the level of performance in the enterprise. They also state that ethical sensitivity focuses on the environmental and sociological components of sustainable development (enterprise performance). Based on our model, the mentioned strategic factors also affect each other. In other words, there is a mutual relationship between them (Figure 2-1). Weller (2020) also reported

that ignoring ethical issues and avoiding social responsibilities leads to the destruction of SMEs. Ethics-based corporate strategies affect both the organizational culture and social responsibilities of that organization and improve these variables. Independent factors of the model are placed in the next levels. Mismanagement can cause failure in SMEs. Consistent with our results, Kiesner & Baumgartner (2021 showed that top management support and its participation in sustainability management are strong drivers of success in increasing sustainability performance in SMEs.

Sheikh et al. (2018) also reported that sustainability strategies in organizations are topdown. In other words, top management should participate in the development and implementation of sustainability strategies so they can be established throughout the enterprise. The finances of SMEs are often limited. This issue restricts the companies in selecting sustainability strategies appropriate to the financial conditions of the enterprise. The enterprise may not be capable to afford the hidden costs of sustainability and fail and face a financial crisis (Masomi & Olarewaju, 2021). SMEs also face technological challenges in addition to the challenge of limited access to performance. finances. This problem complicates their Information communication technology (ICT) has become an integral part of competitive strategies in companies. The promotion and implementation of ICT in SMEs affect the position and sustainable business performance of companies. It is consistent with the study conducted by Kuar et al. (2020).

### 3. Conclusions and Recommendations

Based on the results presented in detail in the previous section, 9 factors affecting the sustainable business performance of SMEs in Iran were identified. The managers, policymakers, and officials of these companies should pay attention to these 9 factors and their significance in achieving sustainable performance in the trade and business of SMEs. I start from the most independent variable affecting the sustainable business performance of companies (From level 6 to level 1).

-Based on the results and the positive effect of the ICT variable on increasing sustainable business performance, SMEs face electronic challenges. Generally, ICT is one of the significant aspects of supporting economic stability. The strategic use of ICT in SMEs can be useful since they are more vulnerable to the impact of external factors and have weaker operational resources than large enterprises. Information technology helps SMEs to improve their efficiency and effectiveness and innovation and overcome their limitations in competition with large enterprises. ICT can help manage resources in SMEs and facilitate the collection of information and resources for them. It gives them a competitive advantage and reduces tangible and intangible costs. These results are in line with those of studies conducted by Savastano et al. (2022), Afzal & Lim (2022), Kumar et al. (2020), Chakraborty et al. (2020), and Haseeb et al. (2019). Hence, it is recommended to employees and managers not resist the changes caused by new technologies for the fear of the complexity of their application. It is recommended to correct the negative values and beliefs that prevent the establishment of ICT in the enterprise by trusting the new ICT methods through receiving practical training and the presence of specialists in this field in the enterprise. This goal is achieved merely in the light of proper training and creating a culture of cooperation among employees. The training of capable human beings is very helpful in this field.

-Since limited finances are one of the barriers to the development of the sustainable performance of SMEs and performance is tied to finances, lack of access to finances prevents SMEs' development. This result has been also reported in the studies by Zhang et al. (2022), Babajide et al. (2021), Masomi & Olarewaju (2021), Ahmed et al. (2021), and Kimanzi & Gamede (2020). Providing adequate resources and necessary financial capital for SMEs, such as considering loans and necessary financial facilities by policymakers and the government through banks and financial institutions, can be very helpful. Investment in the projects of these companies results in their better access to finances and thus sustainable growth of business performance. Moreover, reducing the strict requirements, including the types of collateral when these companies use financial services and reducing the percentage of interest in repaying loans, can help SMEs access better financial facilities.

- The success of SMEs highly depends on the performance of their top managers and their management style. Appropriate management is one of the factors that prevent the failure of SMEs. Top managers are the primary decision-makers, who can decide on the adoption of sustainable strategies affecting the performance of SMEs. Top managers can make all their subordinates aware of the high priority of implementing sustainability strategies and convince them to implement these strategies. This commitment and support of performance sustainability methods should first happen in top managers, so it is supported in other sectors of SMEs since the implementation of these strategies is formed from top to bottom. Hence, it is recommended that top managers first raise their awareness of business performance sustainability strategies, improve sustainable management practices, validate sustainable practices, and transfer these values, motivations, and necessary behaviors to their employees. They are in line with the results of the studies by Chatterjee et al. (2022), Kiesnere & Baumgartner (2020), Henry et al. (2018), and Sheikh et al. 2018).

- Professional ethics, ethical responsibilities, and ethics-based cultural development in organizations can positively affect the survival and sustainability of that organization. Ethics is a value that manifests itself in performance. Thus, it can be stated that professional ethics are expanded by recognizing moral obligations toward the environment. Paying attention to human relationships by addressing professional ethics in the organization makes ethics a strategic approach to the organization. These relationships should be strengthened at the interpersonal and organizational levels. This issue changes people's operations and activities in business and results in better performance, better management, increased productivity, and reduced risk. Promoting professional ethics in SMEs makes it possible to transfer information to managers properly and to predict and prevent any unwanted event. They are consistent with the results of the studies by Aftab et al. (2022), Abalala et al. (2021), and Kumar et al. (2020). Thus, it is recommended to managers establish an organizational atmosphere based on professional ethics and to develop principles to achieve competitive advantages and bring survival and development for their sustainable business performance. Lack of focus on profit and considering the interests of others along with the interests of SMEs, and acting based on professional ethics strategies and ethical obligations will lead to an increase in the sustainable business performance of SMEs.

-The survival and proper function of the enterprise depend on CSR. A strong motivation should be created to solve the challenges facing the establishment of corporate social responsibility since the solutions provided by CSR in the business environment help the enterprise meet society's needs in legal, ethical, and business areas. With increasing society employees, managers, and people's knowledge and awareness of their connection to each other, they can take actions that are useful for both sides with cooperation since CSR is a voluntary responsibility that should be adopted for the enterprise to act sustainably. This is consistent with the studies such as (Shanyu (2022), Babajide et al. (2021), Feng et al. (2021), and Waheed & Zhang (2020). Honest reporting of business activities, social and environmental reporting, and the enterprise's interaction with stakeholders are ways to strengthen CSR processes. Providing appropriate conditions for establishing a culture based on observing CSR principles and developing an enterprise's strategic system in line with

it promotes CSR. Additionally, fair payment of wages to employees, improvement of technologies used in the enterprise, and innovation in making new products will be also useful. It is recommended to look at social responsibility costs in the enterprise as an investment and make it a long-term strategy to reduce risk, increase trust in SMEs, and stabilize business performance.

- Organizational culture is one of the most significant factors affecting performance, integration of environmental policies and objectives in observing environment and CSR and achieving competitive advantages in line with sustainability. It is possible to improve the organizational culture in SMEs by empowering employees and supporting their participation by leaders and managers of SMEs, taking an active position on environmental issues, and paying attention to the promotion of green organizational culture. It is a key factor to achieve sustainable performance by SMEs. Additionally, paying attention to innovation in the organizational culture, training employees to empower them, and paying attention to the skills needed to better perform CSR activities will be also useful in this regard. Culture should become a habit to affect sustainable performance in all three dimensions. It is in line with the studies such as Afzal & Lim (2022), Chowdhury et al. (2022), Ketprapakorn & Kantabutra (2022), Ma & Cheok (2022), and Isensee et al. (2020).
- -Sustainability of innovation creates a competitive advantage. It is more significant in SMEs since by increasing SMEs' potential in implementing innovative practices, it will be more successful in competing with competitors. Innovation creates value and customers are willing to pay for this value. Thus, it is essential to create and adopt innovative ideas and processes in SMEs. Innovation affects the sustainable performance of SMEs. Paying attention to green innovations, waste management, environmental productivity, reducing the emission of polluting substances, paying attention to recycling, and taking similar measures using innovative environmental practices will help SMEs achieve sustainable business performance and maintain both financial and environmental benefits. These results are consistent with the studies by Zhao & Huang (2022), Lewandowska & Cherniaiev (2022), Chowdhury et al. (2022), Zulkiffli et al. (2022), and Kluza et al. (2021).
- Enhancing the managers' awareness of marketing in the competitive conditions of SMEs is a vital factor for the survival of SMEs. Transforming and turning marketing methods into digital methods and using informatics developments is an undeniable element for SMEs in gaining credibility among customers and getting a suitable market position. It leads to sustainable business performance. Sustainability is linked to the use of technology in the organization. It is consistent with the results of studies by Savastano et al. (2022), Saura et al. (2020), Hwangbo & Kim (2019), Dumitriu et al. (2019), and Sheikh et al. 2018). SMEs should expand their business models based on the current internet methods to sell their products and services at every time of day. Managers should know how to analyze the content generated by the enterprise and user and utilize it in line with the enterprise's sustainable business performance. It is also very significant to send positive messages that evoke positive emotions in

customers. Optimizing search engines and marketing in social media, strengthening digital marketing techniques, by employing experts, sending messages supporting the environment, and users' understanding of the enterprise's beneficial actions in the field of sustainability and preserving environmental benefits will increase the level of business performance.

-Adopting entrepreneurial orientations in SMEs will enhance sustainable business performance. These orientations should be implemented in an integrated way in the enterprise so they can improve performance and create a competitive advantage in facing the dynamics of the environment. Paying attention to the high potential of SMEs to create jobs and promote entrepreneurial culture in them brings business survival and sustainability. Innovation can be a driving force for entrepreneurship to help SMEs in economic growth and wealth generation. It is necessary to provide conditions for SMEs to use the available ecosystems sustainably since SMEs can focus on promoting sustainable entrepreneurship if they have good access to sustainable and affordable energy.

One of the characteristics of sustainable entrepreneurship is a long-term focus on socially responsible behaviors and individual and social development in the long term requires innovative facilities. Thus, the development of physical capital through reducing exploitation levels, improving investment plans, and increasing the efficiency of services and production products, reducing environmental problems, maintaining the integrity of the ecosystems that SMEs use are necessary to help sustainable entrepreneurship and achieve sustainable business performance. These results are in line with the results of the studies by Zhang et al. (2022), Lee & Kim (2019), Tur-Porcar et al. (2018), and Gray et al. (2018).

# 4. Summary

This thesis entitled "An ISM-MICMAC approach to identify the factors of sustainable business performance: Evidence from Iranian SMEs" was an attempt to identify the factors that can affect the sustainable performance of SMEs in Iran by reviewing the available literature in the field of sustainability and sustainable performance. By reviewing the literature and using the experts' opinions, 9 factors were identified. Then, these factors were leveled using ISM-MICMAC methods, and the ISM model was finally presented. It also identified the independent, dependent, and linking variables. It also identified the strategic variables. These 9 factors, including information and communications technology, access to finances, and top management support as independent variables, organizational culture, corporate social responsibility, and ethics as linking and strategic variables, and innovation, entrepreneurship, and digital marketing as independent variables were placed in the upper levels of the model.

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# **Appendix 1: ISSM Questionnaire**

This questionnaire is intended to support the research regarding the study An ISM-MICMAC approach to identify the factors of sustainable business performance: Evidence from Iranian SMEs. To attain this objective we design an expert questionnaire. we appreciate it if you could fill in the next questionnaire. It takes only a few minutes.

The following table intends to register the perception of professionals and academics about An ISM-MICMAC approach, fill in the table considering the following symbols:

V: F1 variable I leads to F2 variable j

A: F2 variable j leads to F1 variable i

X: Both variables i and j lead to each other

O: Both variables i and j are unrelated

	j=F9	F8	F7	F6	F5	F4	F3	F2	F1
i=F1									
F2									
F3									
F4									
F5									
F6									
F7									
F8									
F9									

Thanks for your responsiveness and collaboration

#### Appendix 2: MATLAB codes for ISM approach

```
ISM Simulation:
```

```
clc;
clear;
close all;
Dim=15;
Itr=100;
outs=zeros(Itr,Dim);
for q=3:Dim
  for w=1:Itr
  SSIM=CreateRandomMatrix(s,q,e);
  FinalMatrix=BooleanProduction(SSIM);
  levels=ISMLevels(FinalMatrix);
     if size(levels) == 1
       outs(w,q)=0;
     else
       outs(w,q)=1;
     end
  end
end
a=sum(outs,1);
ISM Level codes:
function level=ISMLevels(a)
[n,\sim]=size(a);
aa=1:n;
counter=1;
level={ };
while isequal(a,[]) == 0
  [n,\sim]=size(a);
  [r, s, \sim] = find(a);
  enter=\{n\};
  exit={n};
  same={n};
  c=[];
  for i=1:n
     enter\{i\}=r(s==i);
     exit{i}=s(r==i);
     same{i}=intersect(enter{i},exit{i});
     if isequal(exit\{i\}, same\{i\}) == true
       c=[c i];
     end
```

end

```
a(:,c)=[];
  a(c,:)=[];
  level{counter}=aa(c);
  counter=counter+1;
  aa(c)=[];
end
ISM Model codes:
clc;
clear:
close all:
%% Initial Matrix
%Importing Data From Excel
Model\Codes\a.xlsx','Sheet4');
% clearvars raw;
% [ISM.InitialMatrix, ISM.Np]=ISMAggregation(Data);
% ISM.InitialMatrix=...
ISM.InitialMatrix=...
[0\ 0\ 0\ 0\ 0\ 0\ 0\ 0\ 0]
1\ 0\ 0\ 0\ 1\ 0\ 0\ 0\ 0
0\,0\,0\,0\,0\,1\,0\,0\,0
1\ 0\ 0\ 0\ 0\ 0\ 0\ 1
0\,0\,0\,0\,0\,0\,0\,0
1 \; 1 \; 0 \; 1 \; 1 \; 0 \; 0 \; 0 \; 1
0\,1\,1\,0\,1\,0\,0\,0\,0
110100000
100100010];
%% Creating Final Matrices
[ISM.FinalMatrix, ISM.Power] = BooleanProduction(ISM.InitialMatrix);
%% Creating MicMac Plot
effect= sum(ISM.FinalMatrix,2);
dependance=sum(ISM.FinalMatrix,1);
ISM.MicMac=[dependance' effect];
%% scatter (dependance',effect);
clear effect dependance
%% ISM Levels
```

ISM.Levels=ISMLevels(ISM.FinalMatrix);

The undersigned student **Parisa Bouzari** I declare as the full course graduate student of University of Agriculture and Life Sciences, Institute of Business Regulation and Information Management, Supply Chain Management Master Program, that my dissertation (thesis) with the following title:

An ISM-MICMAC approach to identify the factors of sustainable business performance: Evidence from Iranian SMEs

The diploma thesis / dissertation submitted for defence is the result of my own work, and during the preparation of it I handled the used literature in accordance with the copyright rules.

Gödöllő, 2023 year 0 month 1 day

Jin Sing

## 2<sup>nd</sup> appendix:

This thesis entitled "An ISM-MICMAC approach to identify the factors of sustainable business performance: Evidence from Iranian SMEs" was an attempt to identify the factors that can affect the sustainable performance of SMEs in Iran by reviewing the available literature in the field of sustainability and sustainable performance. By reviewing the literature and using the experts' opinions, 9 factors were identified. Then, these factors were leveled using ISM-MICMAC methods, and the ISM model was finally presented. It also identified the independent, dependent, and linking variables. It also identified the strategic variables. These 9 factors, including information and communications technology, access to finances, and top management support as independent variables, organizational culture, corporate social responsibility, and ethics as linking and strategic variables, and innovation, entrepreneurship, and digital marketing as independent variables were placed in the upper levels of the model.

Name of the author of the diploma thesis: Parisa Bouzari

Title of the diploma thesis:

An ISM-MICMAC approach to identify the factors of sustainable business performance: Evidence from Iranian SMEs

Name of the independent organizational unit that published the topic:

Institute of Agricultural and Food Economic, Department Agricultural logistics, Trade and Marketing

Name of internal supervisor and position: Dr. Mária Farkas Fekete

Name of external supervisor (if relevan):

**Keywords:** (4-5 keywords)

Short description of the thesis: (8-10 lines description)

# 3<sup>rd</sup> appendix:

## **Certification of participation in consultations**

Name of the student: Parisa Bouzari

Name of internal supervisor and position: Dr. Mária Farkas Fekete

Name of the independent organizational unit that published the topic:

Institute of Agricultural and Food Economic, Department Agricultural Logistics, Trade and Marketing

In the 2021/2023 academic year, the nominated student regularly participated in the consultations related to the preparation of the diploma thesis. The completed dissertation (title)

An ISM-MICMAC approach to identify the factors of sustainable business performance: Evidence from Iranian SMEs

presented. I agree with the submission of the dissertation to the assessment procedure related to the Final Exam.

As primary supervisor of the author of this thesis, I hereby declare that review of the thesis was done thoroughly; the student was informed and guided on the method of citing literature sources in the dissertation, attention was drawn to the importance of using literature data in accordance with the relevant legal and ethical rules.

Approval of thesis for oral defense on Final Examination: \*approved not approved

Gödöllő, 2023 year 05 month 1 day

Farkanie Felicial

# 4<sup>th</sup> appendix:

#### Statement(2)

Name of the author of the diploma thesis: Parisa Bouzari Title of the diploma thesis:

# An ISM-MICMAC approach to identify the factors of sustainable business performance: Evidence from Iranian SMEs

Location of the research work (name of the company / organization):

External supervisor or contact person:	
Name:	
Position:	
Phone number:	

E-mail:

I certify that in the academic year  $20 \dots / 20 \dots$  the nominated student performed the research task related to the above-mentioned thesis / diploma thesis at the named location (s). We have provided access to the company information and data used, and we consent to their use. The student presented the completed dissertation. I agree with the submission of the dissertation to the assessment procedure related to the Final Exam.

Gödöllő, 20 year	month	day
		External supervisor/contact person
		(duly) Sign of