

PAPER NAME AUTHOR

Economic Business Sustainability and St rengtening.pdf

**Batara Surya** 

WORD COUNT CHARACTER COUNT

21471 Words 122465 Characters

PAGE COUNT FILE SIZE

37 Pages 1.6MB

SUBMISSION DATE REPORT DATE

May 8, 2023 5:21 PM GMT+8 May 8, 2023 5:23 PM GMT+8

# 22% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

• 8% Internet database

Crossref database

• 13% Submitted Works database

- 16% Publications database
- · Crossref Posted Content database

# Excluded from Similarity Report

- · Bibliographic material
- · Cited material

- Quoted material
- Manually excluded sources





Article

# Economic Business Sustainability and Strengthening Human Resource Capacity Based on Increasing the Productivity of Small and Medium Enterprises (SMEs) in Makassar City, Indonesia

Hernita Hernita 1,\*, Batara Surya 1,2,\*, Iwan Perwira 1, Herminawaty Abubakar 3 and Muhammad Idris 3

- Pepartmen Economic, STIM Lasharan Jaya, Makassar City 90231, Indonesia; iwanpzb69@gmail.com epartment of Urban and Regional Planning, Faculty of Engineering, University Bosowa, Makassar City 90231, Indonesia
- Department of Economic Management, Faculty of Economic and Bussines, University Bosowa, Makassar City 90231, Indonesia; herminawati.abubakar@universitasbosowa.ac.id (H.A.); idrismuh1955@gmail.com (M.I.)
- \* Correspondence: hernita@stimlasharanjaya.ac.id (H.H., latara.surya@universitasbosowa.ac.id (B.S.)

Abstract. The dynamics of urban development coupled with economic growth have contributed positively to the development of small and medium enterprises (SMEs). Optimizing the utilization and strengthening of the capacity of SMEs' human resource. Jill encourage increased productivity of economic enterprises and th <sup>34</sup> ustainability of small and medium enterprises (SMEs). This study aims to analyze (1) strengthening the apacity of human resources (HR) of small and medium enterprises to work as a determinant of increasing the productivity of mall and medium enterprises (SMEs) and labor absorption; (2,2 he effect of strengthening the capacity of human resources (HR), business productivity, technology utilization, and business diversification on the sustainability of and medium enterprises (SMEs); and (3) optimizing the role of government in supporting business development, increasing productivity, business stability and sustainability of small and medium enterprises (SMEs). This study sees a sequential explanatory design approach. Data were obtained through observation, in-depth interviews, surveys, and documentation. Qualitative analysis in this study 2 as carried out through a process of data reduction, data presentation, and conclusion drawing, while the quantitative analysis in this study uses quantitative escriptive analysis, correlation, and multiple regression. The results showed that strengthening the capacity of human resources, coupled with the use of technology, and followed by diversification of business, had a positive contribution to increasing the productivity of small and medium enterprises (SMEs). Furthermore, <sup>5</sup> rengthening human resource capacity, business productivity, technology utilization, and business diversification simultaneously have a positive and significant correlation to the sustainability day and medium enterprises (SMEs) with a determination coefficient of 72.3%. This study recommend 2 at government policy support through strengthening human resource capacity, increasing business productivity, technology utilization, and business diversification have an impact on the sustainability of mall and medium enterprises (SMEs) in Makassar City, Indonesia.

**Keywords.** Luman resource capacity; business productivity; technology utilization; business sustainability of SMEs

# Citation 23 ernita, H.; Surya, B.; Perwira, I.; Abubakar, H.; and Idris, M. Economic Business Sustainability and Strengthening Human Resource Capacity Based on Increasing the Productivity of Small and Medium Enterprises (SMEs) in Makassar City, Indonesi. 14 stainability 2021, 13, 3177. https://doi.org/10.3390/

Academic Editors: Miguel Torres García and Marc A. Rosen

Received: 11 February 2021 Accepted: 12 March 2021 Published: 14 March 2021

su13063177

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).

#### 1. Introduction

The economic growth of big cities and metropolitan areas in developing countries is directly related to industrialization and modernization, and the coordinated development of industrialization and urbanization has become a common goal and concern for these countries [1,2]. Furthermore, that industrialization increases the productivity of small and medium enterprises (SMEs) and is the driving force for regional economic growth. Entrepreneurship and entrepreneurs are considered important drivers of economic growth because they contribute to the creation of new employment opportunities and the emergence of new innovations, while also stimulating competition and competitiveness [3,4]. Thus, people's economic efforts, which tend to increase each year, positively contribute to employment and decrease the unemployment rate among productive-age individuals. Human resources (HR), including social capital, are the main determinants of the productivity of economic enterprises and the sustainability of resources [5]. SMEs are business activities independently developed on the initiative of the community. They are crucial for local economic development, playing a noteworthy role in job creation, poverty alleviation, and economic growth, but they encounter many funding barriers [6,7].

There are 64 million SMEs in Indonesia [8], 99.9% of which are already in production. hailand and Malaysia have 3.5 million and 600,000 SMEs, respectively. The involvement of Indonesia's SME sector in global marketing is still categorized as low when compared to five other countries in the Asian region. SMEs in Indonesia are still faced with challenges, such as limited access to capital, raw materials, information technology, high-quality human resources, and marketing for products or services, a lack of guidance from the government, unfavorable exchange rates, and high-interest rates [9,10]. Accordingly, the Indonesian government has started to shift the focus of its economic development approach toward the backbone of the domestic economy—micro, small, and medium enterprises [11].

19 he contribution of SMEs to exports in Indonesia only reached 15.8%, or around USD 23 billion, of total non-oil-and-gas exports. This is low when compared to contributions in other Southeast Asian countries, such as 20% in Vietnam, the Philippines, and Malaysia, and 29.5% in Thailand [12]. Thus, the ASEAN countries are the fourth-largest importers the world after the European Union, the United States, and China. The economic efforts of SMEs and development strategies in ASEAN countries are a "driving force" of bilateral trade relations between countries and also an opposing force that limits trade expansion [13,14]. SMEs in Indonesia play an important role in the national economic system, including (1) the expansion of employment opportunities and the demand for labor, (2) the formation of gross domestic product (GDP), and (3) the provision of safety nets, especially for enabling low-income people to carry out economically productive activities [15]. In addition, the efficiency and effectiveness of this process is directly related to the way SMEs apply new knowledge and information related to local, regional, national, and global markets [16–18] to advance their business activities [19,20].

There are 2,764 small and medium enterprises that have developed in Makassar City, consisting of 35.02% culinary businesses, 27.03% fashion businesses, 9.7% electronic workshop businesses, 14.54% motorcycle and bicycle repair shops, 6.11% agribusiness businesses, 1.2% tour and travel business, 4.41% creative product business, and 1.99% salon and beauty business [21]. The SMEs developing in Makassar City are identified as requiring strengthened human resource capacities, mastery of technology, business diversification, and potential market access to maximize their potential. The factors that need to be considered to encourage their improvement are infrastructure, innovation, technology, regulations, taxes, trade, and labor [22,23]. Accordingly, SMEs need to adopt survival strategies and strategic methods to succeed in confronting the various global challenges they currently and will face [24]. In the era of economic globalization, SMEs are recognized as engines of sustainable economic development [25,26].

he main problems faced by SMEs players in Makassar City hat can be identified are related to increasing the productivity of the developed economic enterprises, among others, (1) the lack of capital used, (2) lack of knowledge in business management and business development, (3) lack of product innovation, (4) difficulties in distributing goods, (5) nonoptimal marketing through the use of online media, (6) lack of understanding regarding the branding and product brands produced, and (7) business management's

Sustainability **2021**, 13, 3177 3 of 37

existing reliance on manual bookkeeping. These seven factors are directly related to the quality of human resources in relation to product innovation efforts, business diversification, business management, and product marketing of SMEs. Furthermore, government policy support plays an important role in encouraging increased business productivity, innovation, and creativity toward the sustainability of SME businesses [27]. Human resource development is an important activity to be carried out by any economic business organization so that the knowledge, abilities, and skills of the workforce are in accordance with the demands of the job and given responsibilities [28,29]. Optimal performance can be achieved by a person or group of people, according to the authority and responsibility provided by strengthening the capacity of human resources in order, to achieve organizational goals [30]. Thus, strengthening the capacity and competence of human resources will have an impact on optimizing the performance of SMEs. This means that strengthening the capacity and competence of human resources followed by mastery of technology will encourage increased business performance, increased income, and the welfare of SME players in Makassar City.

trengthening the capacity of human resources is very importants support the sustainability of small and medium enterprises. This means that quality resources will contribute increasing the productivity of economic enterprises. Thus, increasing the productivity and sustainability of SMEs in Makassar City will have an impact on economic growth and absorption of labor towards ducing unemployment and poverty. Furthermore, the economic sustainability of SMEs in the study is contextualized on four basic principles, namely (1) economic sustainability, which is oriented toward the effectiveness and efficiency 46 business management based on the management of potential production and market factors, (2) social sustainability, which is oriented toward creating social cohesion, strengthening business capacity, and creating social responsibility for SMEs actors toward their social environment, and (3) environmental sustainability, which is oriented toward efforts to build awareness of SMEs actors toward their environment through clean business products, product recycling, and ensuring environmental stability in which their business is based on pollution control-stored environment. Thus, the business sustainability of SMEs in this study is contextualized on economic, social, and environmental sustainability based on strengthening human resource capacity.

Research results that support this study include (1) the results of the study by Pech and Vrchota [31], which confirmed that SMEs' economic enterprises have a greater opportunity if they use technology, are easily accessible, and invest in Industry 4.0, thus encouraging increased profits for SMEs; (2) research conducted by Andalib and Halim [32], which emphasized that the challenges faced by SMEs are related to financial performance, regulation, and innovation so that efforts to increase the productivity of SMEs are needed by building innovation and creativity; and (3) research conducted by Nigri and Baldo [33], which emphasized that the effectiveness and efficiency of financial and human resource management will have an impact on economic performance and the sustainability of SME businesses. The three results of these studies are at an intersection with the affirmation that SMEs' economic enterprises that utilize technology, innovation, effectiveness, and efficiency of financial managemen will have an impact on increasing the profitability and business sustainability of SMEs. The focus of this study is more oriented toward strengthening the capacity of human resources, followed by mastery of technology and diversification of business tha vill have an impact on increasing economic productivity and the sustainability of SMEs. Thus, the novelty of this research is that trengthening the human resource capacity of SMEs through government policy support, coupled with the ability to utilize technology, will encourage increased business productivity, business diversification,<sup>64</sup> nd the economic sustainability of SMEs businesses.

The sustainability of SMEs had Makassar City is very important and strategic to support economic growth, job creation, and social justice toward strengthening human resource capacity and accessing the productivity of economic enterprises. This study is aimed at examining and analyzing the strengthening of human resource capacity toward

Sustainability **2021**, 13, 3177 4 of 37

increasing usiness productivity, technology utilization, business diversification, and the sustainability of SMEs. Thus, his study is aimed at answering research questions, namely, (1) how can strengthening the capacity of the human resources of SMEs ork as a determinant of increasing business productivity and labor absorption? and (2) how is the effect of trengthening human resource capacity, business productivity, technology utilization, and business diversification on the sustainability of SMEs?

#### 2. Conceptual Framework

SMEs play<sup>68</sup> in important role in economic growth, employment, and the distribution of development. They create job opportunities and are an important driver of growth in the gross domestic product (GDP). As for the moderating effect of entrepreneurial orientation (EO), innovativeness in entrepreneurship positively and significantly regulates the entrepreneur's ability (EA)–SMEs' sustainable growth (SMESG) relationship; proactiveness positively regulates the relationship between almost all EA dimensions and SMESG, and risk tendency regulates the EA–SMESG relationship in terms of creativity and ability to control risk [34,35].

The SMEs that predominantly contribute to economic growth in Indonesia are in the industrial, trade, and transportation sectors. It is often stated in the literature that one comparative advantage of micro-small to medium-sized enterprises (MSMEs) relative to their larger counterparts (LEs) is their flexibility and capacity to move from one product to another when market demand changes, and they can easily expand when the economy grows and contract in the case of economic crises [36,37]. Furthermore, in the social realm, SMEs have the ability to reduce income inequality and social disparities. Income redistribution can cause large-scale transformations in the human resource structure, essentially changing economic outputs via its impact on life satisfaction and motivation for work [38]. Thus, the letter of SMEs is to provide goods and services to consumers with low purchasing power and provide such to urban consumers with higher purchasing power. SMEs also contribute by providing raw materials or services for large businesses and local governments. Increases in output and productivity can increase the wages paid by SMEs and lift millions of people out of poverty [39].

The empowerment and increased productivity of SMEs are very important and strategic for strengthening the structure of the national economy. Economic globalization has posed many challenges for SMEs due to increasingly fierce competition [24]. SMEs are developed to create independence, are highly competitive, and play a major ble in the production and distribution of basic resources, raw materials, and capital necessary to face free competition. SMEs receive the highest priority among policymakers regarding the socio-economic situation of a country [40]. The strategic attributes of SMEs that enable optimal development include (1) the innovation and use of technology for product development, (2) the formation of humanitarian relations that are mutually beneficial, (3) the ability to create job opportunities and absorb labor, (4) flexibility and the ability to adapt to market conditions, and (5) managerial dynamics and entrepreneurial roles. SMEs are at the heart of a nation's wealth creation, job creation, and economic development [41]. SMEs are divided into several categories, namely, livelihood activities—SMEs whose aim is to provide a living, more commonly called the informal sector; (2) micro-enterprises MEs that have the character of craftspeople but are not yet entrepreneurial; and (3) small dynamic enterprises—SMEs that have an entrepreneurial spirit and are able to accept subcontracts and export jobs. The observed high levels of emotional intelligence and trends of ever-increasing interpersonal skills as managers increasingly experience working with people is a strong argument for the sustainable development of SMEs [42,43].

SMEs have the potential to be developed through broad market support, the availability of readily available raw materials, and the availability of human resources. Adaptability has emerged in the management/entrepreneurship literature as a business strategy

Sustainability **2021**, 13, 3177 5 of 37

for innovation, performance, and responding in a flexible manner to ever-changing contexts [44]. Furthermore, several things need to be optimized in relation to SMEs, including (1) good management support for the development of SMEs, (2) business and product planning to minimize failure, (3) the mastery of science and technology to support business sustainability, (4) efficient and effective production systems, and (5) the ability to make breakthroughs and innovations, thus differentiating the competitiveness of SMEs. The challenges presented by global competition force SMEs to grow and lead innovation initiatives [45,46]. They must often rely on technology-based capabilities [47], conveyed and supported by larger companies geographically collocated in regional clusters [48]. According to [49], the newer a company is the more it has, to be globalized, which requires a timely flow of information [50], to explore the market and identify profitable opportunities [51], market share, profitability, products, services, capital, intellectual property [52], technology [53], and sustainability [54,55].

## 2.1. 1 Juman Resources and Productivity of SMEs

Human resources ar 153 n important factor in driving economic growth and increasing the productivity of SMEs. Some of the key aspects for human resource development are information, technology, training, education, new skills, automation, communication, innovation, professionalism, productivity, artificial intelligence, digitization, and electronic recruitment [56,57]. Increasing per capita opinion is closely related to human resource development in terms of honesty, authority, knowledge, and work performance, so it is necessary to increase the capacity of human resources through training, through evaluation to assess how effective these efforts are to exploit the potential of existing human reources [58]. Furthermore, scientific developments and technological advances require MEs to be able to harness human resources to become more efficient and produce products more quickly. In today's dynamic and competitive business world, where the exchange of ideas is proficient, "sustainable competitive advantage" (SCA) is no longer deeply rooted in an organization's physical resources but is instead influenced by the nonphysical human resources of the organization [59,60]. Thus, strengthening the capacit  $\sqrt{39}$ human resources and the use of technology will have an impact on increasing the productivity, business diversification, and business sustainability of SMEs. Technology capability has a positive and statistically significant relationship with company performance in the manufacturing industry, but not in the service industry, whereas innovation culture has a positive and statistically significant relationship with firm performance in the service, but not the manufacturing industry [61,62].

Kuznets [63] stated that business innovations fall into two categories, which are (1) cost reductions that do not result in any change in product quality and (2) innovations that create new products and demand for these products. Furthermore, cultural factors, such as hard work, honesty, and courtesy contribute positively to the business development of SMEs. A sustainable economic enterprise is oriented toward developing a culture in which employees are effectively involved in company activities, leading to long-term success [64,65]. Capital resources also play an important role in managing natural resources through the support of science and technology to encourage the improvement of SMEs. Optimizing resource potential and strengthening human resource capacity through the use, of technology and cultural changes in society should encourage economic growth and SME development [66].

Capital resources are inventories of factors of production that can be physically produced. If the stock of capital increases within a certain time frame, this is called capital accumulation or capital formation. This transition has a profound bearing on human productive capabilities, adaptability, creativity and values, the organization of the economy, public policy, social awareness, and lifestyles, thereby influencing sustainability [67,68]. The formation of venture capital means not directing all activities to merely meet the urgent needs and desires of consumption but carefully directing the improvement of the quality of goods, capital, equipment, machinery, transportation facilities, factories, and

Sustainability **2021**, 13, 3177 6 of 37

equipment. Thus, the formation of capital is an investment in the form of capital goods that can increase capital stock and production output. The total factor productivity (TFP) of a region is perhaps the most highly appropriate indicator of economic performance and is most related to technological complexity and production effectiveness [69].

Human resources are everyone in the organization who is selected through a process of recruitment and selection processes that are responsible the task of personnel management to achieve organizational goals [70–72]. Thus, human resource management is a policy, practice, and system that affects employee behavior, attitudes, and performance in relation to the utilization, development, assessment, remuneration, and management of employee groups [73,74]. Furthermore, to deal with changes in the organizational environment, both micro and macro, which are constantly changing and complex, every economic business actor and company must be dynamic in order to adapt and make efforts to strengthen the capacity, competence, and improve the quality of the workforce used.

Hasibuan [75] mentioned that the development and strengthening of human resource capacity is part of an effort to improve the technical, theoretical, conceptual, and moral abilities of employees in accordance with job requirements through education and training. This means that planned and organized training and development aimed at increasing the knowledge, skills, and abilities of employees will influence employee attitudes towards the work and responsibilities given [76]. Thus trengthening the capacity and competence of human resources will build honesty, responsibility, cooperation, creativity, and employee discipline toward the ability to utilize technology, diversify business ventures, increase productivity, and sustain the economic business.

#### 2.2. SMEs' Product Quality and Service Quality

The quality of SMEs' products is related to service quality as an integral part of the SME business management process. Innovative technology-based entrepreneurship will be able to encourage entrepreneurs and employees, economic business continuity, and the growth of SMEs [77]. The two main factors that affect service quality are the expected service and perceived service, that is, if the service received is as expected, the service quality is perceived as good or satisfactory. The special characteristic of a multilingual organization is that, when dealing with the influence of the perceived quality dimension, it is necessary to consider the perceived quality of the individual services and the overall perceived quality of the multilingual organization and overall satisfaction with it [78,79]. The dimensions of access, financial aspects, and employee competencies are important aspects of service quality, along with other subscales, for increasing customer satisfaction [80]. Conversely, if the service received is worse than expected, the service quality is perceived as poor [81]. Service quality is measured in several stages in terms of the service that is experienced (delivered service). At various points, the relation to internal processes involves the end service perceived by the consumer and the input of the service delivery process. The service industries are mostly customer-driven, and their survival in a competitive environment largely depends on the quality of the services provided by them [82,83].

Input consists of the sources used through information-system-based services [84]. Service quality has two cycles: First, the quality of a service is defined and formulated. The actual service is delivered by the operational employee, a response is provided by the customer, and the service quality design can be modified. Second, customers have their own perceptions coupled with their experiences of quality elsewhere [85]. Furthermore, service quality is defined as the totality of the features and characteristics of a product or service related to the product's ability to meet consumer needs and desires in terms of the value of use, product design, and marketing. The customer has always been and always will be a priority in the development of a new product; it is necessary to first understand his/her requirements and expectations [86]. Indicators for measuring product quality include (1) the types/variations of the many types of product.

Sustainability **2021**, 13, 3177 7 of 37

judgment. Consumer intelligence refers to the idea that multi-dimensional quality supports various roles, so it is very important to explore each segment's profile in this regard in terms of demographic and behavioral characteristics [87,88].

Consumer satisfaction is very important for a business entity and the economic sustainability of SMEs. For instance, positive relationships have been found between these drivers and the adoption of sustainable practices, access to new markets and gaining a competitive advantage [89,90], a positive brand image and increased customer base [91], and internal social relations with employees [92,93]. Without consumers, a business entity cannot survive [94]. SMEs can become stable and sustainable by implementing (1) sustainable development with a customer-focused perspective and sales, (2) sustainability in trade, and (3) customer-centricity and sustainability [95]. Thus, every business venture must be able to provide products/services that can meet the needs and desires of consumers so as to achieve consumer satisfaction. We communications and computing technology, and the establishment of reasonably open global trading regimes, mean that customers have more choices, variegated customer needs can find expression, and more transparent alternatives can be supplied. Businesses, therefore, need to be more customer-centric, especially since technology has evolved to allow the provision of information and customer solutions at lower cost [96].

he level of customer satisfaction is a function of the difference between the perceived performance and desired or expected performance. Retailers need to continuously improve customer experience in different shopping situations to maintain customer satisfaction in the long term and achieve sustainability [97]. If performance is below expectations, consumers are disappointed [98]. Customer satisfaction is the level at which the needs, wants, and expectations of consumers are met, which results in repeat purchases or continued loyalty [99]. Consumer satisfaction is reflected the results of products or services that can meet their needs or wants in consumption. This means that consumers evaluate a product or service according to their needs or expectations, which can lead to dissatisfaction [100]. Thus, customer satisfaction value refers to the consumer's experience with a product or service obtained. Customer satisfaction and a positive relationship with a company, in general, can affect both areas, such as by reducing stress, creating positive social interactions and relationships, enabling more well-considered purchases, thus reducing both costs for consumers and the impact on the environment [101,102].

#### 2.3. Economic Business Sustainability of SMEs

Business organizations have a direct relationship with the use of production factors as a unitary economic system. Strategic programs and basic infrastructure modernization are considered the primary and best ways to promote local economic development [103]. Economic business organizations and strategic programs complement each other (complementary) with capital and labor to increase SMEs. Economic development policies play an important role in increasing the productivity of SMEs [104]. The concept of modern economic growth requires entrepreneurs to be organizers and risk-takers in the face of uncertainty. Furthermore, entrepreneurs have special abilities for work compared to society in general. Sustainable entrepreneurship (SE) is oriented toward social and environmental goals leading to economic success [105].

Schumpeter [106] stated that an entrepreneur does not need to be a capitalist in the sense that the main function of economic business organizations is to make reforms and innovations. In the social innovation process, social enterprises collaborate with various stakeholders regarding their business and social goals [107]. Thus, economic enterprise organizations include governments, and other financial institutions involved in advancing the economy and the sustainability of SMEs. SMEs play an important role in the development of economic enterprises, including start-ups that spark innovation, increase productivity, and bring about structural change [108]. Ancreasing the productivity of SMEs toward the sustainability of economic enterprises is contextualized on the follow-

Sustainability **2021**, 13, 3177 8 of 37

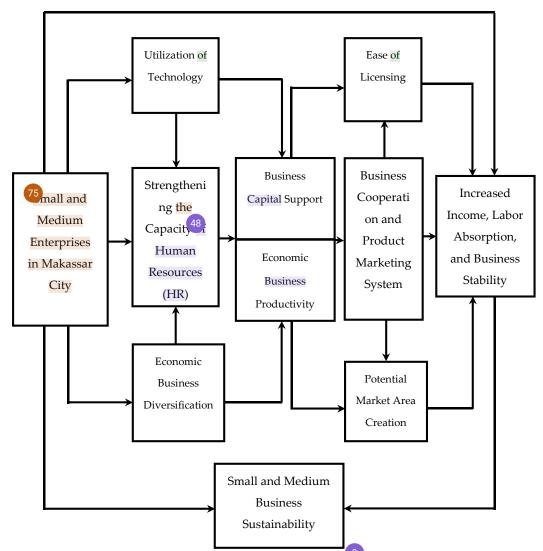
ing three basic principles: First is economic sustainability, in this case, ensuring the sustainability of economic enterprises in a sustainable manner and promoting economic efficiency arough efforts to optimize the use of natural resources. The sustainability of the economic business will be related to stakeholders, the environment, and the community as a single system [109].

The second is social sustainability, in this case, encouraging the increase in the productivity of SMEs in the direction of creating jobs, reducing productive unemployment, reducing poverty, and creating social cohesion. Economic business sustainability refers to a balance between dimensions, namely, economic, social, and environmental in the direction of increasing productivity and optimizing the utilization of human resources [110]. The third is environmental sustainability, in this case, encouraging in increase in the productivity of economic enterprises coupled with saving the environment toward fulfilling people's basic needs, 33 ecycling products, clean products, and controlling environmental pollution based on the participation of SME business actors. The productivity of economic enterprises is oriented toward several features, namely, waste management and disposal, promoting environmentally friendly product designs, reducing greenhouse gas emissions, safer supply of raw materials, and encouraging competitiveness and innovation, and employment [111]. These three basic principles will require support for strengthening the capacity and competence f human resources, followed by mastery of technology. Human resource development is one of the principles that must be implemented consistently, meaning that employee development must be carried out with a long-term perspective and future competencies as the basis for implementing Industry 4.0 [112,113].

Referring to the theory used as a reference in this study, efforts to promote the sustainability of SMEs based on strengthening human resource capacity will require strengthening support from the government, including (1) the use of environmentally friendly technology in relation to increasing the productivity of SMEs will require strengthening the capacity of human resources and (2) diversifying SMEs through innovation and building creativity, hard work, recognizing target markets, and knowing consumer tastes and expectations. Both of these aspects are developed to encourage increased economic productivity of SMEs through support for the use of venture capital from formal financial institutions and economic business cooperation toward optimization of product marketing. Thus, efforts are needed to expand financial support and cooperation support for SMEs and entrepreneurs, so that they can continue to play their role in investment, growth, innovation, and employment [114,115]. Increased business productivity of SMEs, coupled with the ability to access potential markets, will encourage increased income, absorption of productive labor, and business stability. The economic sustainability of SMEs will be created through the support of strengthening human resources in a sustainable manner.

The hypotheses a roposed in this study include (1) there is a positive and significant relationship between attengthening human resource capacity on the sustainability of small and medium enterprises (SMEs); (2) and sustainability of small and medium enterprises (SMEs); (3) are is a positive and significant relationship between business productivity and sustainability of small and medium enterprises (SMEs); (3) are is a positive and significant relationship between the use of technology on the sustainability of small and medium enterprises (SMEs); and (4) are is a positive relationship between business diversification and the sustainability of small and medium enterprises (SMEs). The conceptual framework of this study is presented in Figure 1.

Sustainability **2021**, 13, 3177 9 of 37



**Figure 1.** Conceptual framework for sustainability managemen and strengthening human resource capacity based on increasing productivity of small and medium enterprises (SMEs). Source: Authors' elaboration.

## 3. Materials and Methods

#### 3.1. Research Design

It is apparent that the number of SMEs in Makassar City has continued to increase over time. The research approach chosen in this study combined qualitative and quantitative assessments. The assessments are studies were selected with the following considerations: (1) the productivity of developing SMEs is not optimal for supporting the economic growth of Makassar City, (2) human resources are not yet optimal in supporting the economic enterprise performance of SMEs, and (3) the mastery of technology and business diversification are not optimal in supporting the stability of SMEs. Furthermore, the qualitative approach in this study aimed to reveal the potential and constraints of SMEs in increasing the productivity of developing economic enterprises. In this context, it is assumed that the development of SMEs in Makassar City can be improved through strengthening the capacity of human resources and the use of technology to increase the stability of the developed economic enterprises. Thus, the quality approach was used for interpreting the meaning of the dynamics of SMEs developing in Makassar City. This information was collected prough observation and in-depth interviews.

Sustainability **2021**, 13, 3177 10 of 37

A quantitative approach was used to study and analyze the characteristics of SMEs, the conditions, and problems of human resources for SMEs, and the productivity of SME businesses in Makassar City. This information was collected using a questionnaire instrument. The quantitative approach in this study employed percentage analysis, multiple regression analysis, and correlation analysis. Furthermore, the answer to each question in the questionnaire was based on an ordinal and interval scale for measurement. According to the approach chosen, i.e., the case study, this type of research is a combination of quantitative-qualitative approaches [116]. The reasons the researchers combined the two approaches include (1) the specific nature of SMEs cases in Makassar City, (2) the prominent consistency and sequences of the observed cases, and (3,30 obtain data from two different realities; hence, it was necessary to combine the two approaches, namely, quantitative and qualitative.

The qualitative approach in this research is used to study and analyze the estrengthening of the human resource capacity of SMEs to work as a determinant of increasing business productivity and labor absorption, which is followed by an interpretation of the meaning of the dynamics of SMEs that develop in the field. The process and meaning are not strictly tested or measured in terms of quantity, quantity, intensity, or frequency. More emphasis is placed on the nature of the social construction of SMEs. Furthermore, a quantitative approach is used to analyze the effect of temperature capacity, business productivity, technology utilization, and business diversification on the sustainability of SMEs. This information is collected through a survey using a questionnaire instrument. Thus, the lata collection techniques used in this study were observation, indepth interviews, questionnaires, and documentation. The results of the data obtained are then discussed qualitatively and quantitatively. The combination of the qualitative and quantitative research in this study is presented in Figure 2.

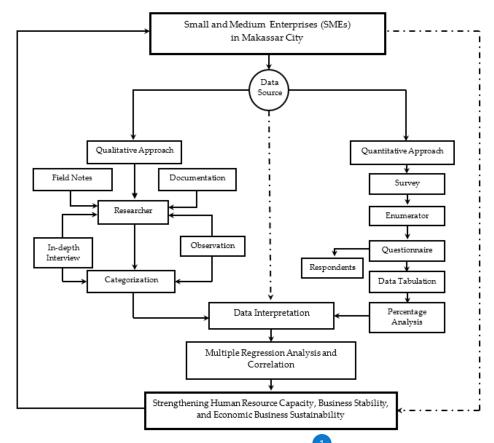


Figure 2. Sequential qualitative–quantitative approaches. Lource: Authors' elaboration.

Sustainability **2021**, 13, 3177 11 of 37

#### 3.2. Study Area

This study was conducted in Makassar City by identifying the presence of SMEs distributed in 15 districts. This study was conducted from February to August 2020. Furthermore, in order to make it easier to obtain data, the location of this study was differentiated based on the types of businesses developed by SMEs actors. The SMEs in Makassar City were divided into several categories, which are (1) culinary businesses, including food and beverage businesses; (2) fashion business, including clothes, shoes, and accessories retailers; (3) business in the technology sector, including website writers, website creation services, social media administrator services, and buyers and sellers of technology tools; (4) cosmetic businesses; (5) automotive businesse, including buyers and sellers of vehicles and spare parts, and workshops; (6) souvenir businesses, including sellers of traditional clothing, key chains, regional souvenirs, and regional handicrafts; and (7) agribusinesses, including agricultural businesse, fisheries, and sellers of animal husbandry and agricultural products.

There are 276. Mall and medium enterprises (SMEs) in Makassar City and a total of 16,492 business units engaged in various sectors of economic activity [21]. SMEs predominantly develop in the centers of economic activity and new development areas in Makassar City. They are predominantly located in strategic locations and easily accessible in terms of accessibility and population movement. Furthermore, the development trends of SMEs are different in terms of the numbers of workers employed and the use of technology. The results of preliminary observations suggest that the capacity and competence of the human resources and technology used in SMEs are closely related to the type of business being developed and the factor of the capacity of the business capital used.

Table 1 shows the mall and medium enterprises (SMEs) in Makassar City. The dominant developing SMEs are located in Mariso District, as much as 18.70%, Rappocini District, as much as 14.76%, Bontoala District, as much as 13.78%, and UjungPandang District, as much as 13.17%. Furthermore, 0.18% of SMEs in the Sangkarrang Islands District is the smallest number. These mall and medium enterprises (SMEs) are predominantly developing in the centers of economic activity in Makassar City. Thus, the existence of the location of the SME closely related to the system of socio-economic activities, the ease of movement, and the distance from the location of human settlements.

**Lable 1.** Numbers of small and medium enterprises (SMEs) by sub-district in Makassar City.

Districts	Total Population (Person)	Number of SMEs (Units)	Percentage (%)
Makassar	85,515	149	5.39
Mariso	60,499	517	18.70
Tamalate	205,541	157	5.68
Panakukang	149,664	176	6.37
Tallo	140,330	82	2.97
Bontoala	57,197	381	13.78
Ujung Tanah	35,354	8	0.29
Sangkarrang Islands	14,531	5	0.18
Mamajang	61,452	81	2.93
Rappocini	170,121	408	14.76
UjungPandang	29,054	364	13.17
Wajo	31,453	25	0.90
Manggala	149,487	323	11.69
Biringkanaya	220,456	63	2.28
Tamalanrea	115,843	25	0.90

Source: Authors' elaboration and [21].

Sustainability **2021**, 13, 3177 12 of 37

## 1.3. Method for Collecting Data

The data in this study are divided into two categories, namely, primary data and secondary data. Primary data in this study were obtained directly in the field through observation, in-depth interviews, and questionnaires. Meanwhile, secondary data were obtained from various purces in the form of documents related to the potential and profile of SMEs developing. Makassar City. Furthermore, the data collection method is divided into two stages, namely qualitative and quantitative data. (1) Qualitative at were obtained through field observations, in-depth interviews, and documentation. The instrument used a qualitative research is the researcher himself who acts in the data collection process, establishes research focus, and selects be informants as data sources. These data are used provide an overview regarding the existence of SMEs in Makassar City. The data collection results are then presented in the form of descriptions and categorizations. (2) Quantitative data were obtained using a questionnaire instrument. These data are used to describe the development of SMEs in Makassar City in relation to business productivity carried out by SME actors. The results of data collection through questionnaires are presented in tables and diagrams.

#### 3.3.1. Observation

Data collection was carried out through beservations in this study using instruments, namely, field notes, periodic notes, cameras, and checklists. The aim is to understand the situation, conditions, and characteristic 15 f SMEs in Makassar City. The observations used in this study to trace data include (1) investment development, technology use, and SMEs' business management, (2) shifting of SMEs normative space, (3) rationalization of actions activities, and (4) human resource capacity in SMEs. The data obtained through observation are used to compare the characteristic of small and medium enterprises in Makassar City. The results are then linked to the assumptions and theories used in this study. Thus, the observations in this study are aimed at exploring and observing the conditions and characteristics of SMEs that are developing in Makassar City.

In addition, observation is also used to observe SME actors in developing their business activities continuously within a certain period of time, both individually and in groups, in addition to the efforts made to increase business productivity in relation to the capabilities of their human resources, without manipulating and controlling that took place in the field. This process is carried out by recording field and indings that allow or qualify for use in interpretation and analysis. Furthermore, the results of the data obtained through observation are used to compare and categorize the types of SMEs that are developing in Makassar City. The aim is to differentiate the adaptability, shifting normative space, and rationalization process of actions by SME. The responding to changes in the environment. This categorization is carried out in a qualitative manner (low, moderate, and upper) for the purpose of classifying the types of businesses developed by SME actors.

# 2.3.2. In-Depth Interviews

In-depth interviews in this study were conducted for two purposes, namely, (1) to obtain an overview from informants regarding the efforts of SME actors in developing their business activities and (2) to obtain a description of the characteristics and types of businesses developed by SME actors. The instruments bed in in-depth interviews included a tape recorder, camera, and interview guides, equipped with freelance notes and a data checklist. Thus, in-depth interviews that were used in this study to trace data involved (1) the mode of production carried out by SMEs actors, (2) the strength of the production business, (3) production relations, (4) ownership of business capital, (5) production relations, and (6) the technology and investment used. The data obtained through indepth interviews were then categorized (low, moderate, and upper). The categorization

Sustainability **2021**, 13, 3177

is used for interpretation using a qualitative approach. Furthermore, the results of the categorization are used to show the differences in the types of SME businesses and the ways in which economic business management has been carried out in relation to the human resources that are owned and utilized. Thus, the information obtained from informants has a relationship with the productivity of small and medium enterprises (SMEs), only differentiating and without value. This means that these results are not rigorously tested but are used for the purposes of exploration and interpretation.

#### 3.3.3. Questionnaire

The data collected through questionnaire this study were used for two functions, namely, (1) descriptive, describing the conditions and characteristics of the SMEs that developed in Makassar City and (2) measurement, in this case, referring the characteristics of the data obtained in the field. Measurement of questionnaire data was conducted sing ordinal scales and ratios. The purpose of using the questionnaire is to provide an overview of some of the characteristics of developing SMEs in Makassar Citylased on the type of business being developed. The questions posed to respondents are divided into two categories, namely, structured, and unstructured. Furthermore, 24 he questionnaire in this study was used to trace data, including (1) the human resource capacity of SMEs was measured using the following indicators: education level, skills and expertise, ability to manage businesses, ability to carry out work, quality of work produced, mastery of technology, and the productivity of the workforce used; (2) the productivity of SMEs was measured using the following indicators: business effectiveness and efficiency, labor productivity, and capital productivity utilized; (3) utilization and mastery of technology was measured by the following indicators: utilization of technology, skills and knowledge, service to consumers, and marketing of products through the use of technology; (4) SMEs business diversification was measured by the following indicators: the complexity of the business being developed, business governance, business performance and business competitiveness, and the marketing of the resulting business products; and (5) SMEs business sustainability as measured by the following indicators: business growth, income level, product quality, competitiveness, and business environment conditions.

ased on the data obtained through a questionnaire, the scale of data measurement this study is divided into two categories: First, data were measured using an ordinal scale, which in this case, showed categories based on the parameters and indicators used. The category was then given an assessment, namely, 5 for the very supportive category, 4 for the supportive category, 3 for the sufficiently supportive category, 2 for the less supportive category, and 1 for the unsupportive category. Second, the ratio scale in this study was used for the questions posed in the questionnaire, which can be distinguished, sorted, had a certain distance, and allowed for comparison; in this case, it was used to measure the types and characteristics of economic enterprises developed by SME actors. Furthermore, the measurement results of the two scales then produced the quantitative data that were used as the basis for statistical analysis.

Questionnaires were distributed to 15 districts in Makassar City. Furthermore, respondent hold filled out the questionnaire in this study were grouped based on the type of business, business status, labor used, length of business, and business productivity. Furthermore, the questions posed in the questionnaire include (1) capacity and competence of human resources used, (2) productivity of mall and medium enterprises (SMEs), (3) mastery and utilization of technology used in managing and developing businesses, (4) methods and efforts made in business diversification, and (4) efforts made to maintain business stability and sustainability. Thus, the criteria for actors filling out the questionnair this study are (1) small and medium enterprises (SMEs), (2) the type of business being developed, (3) having a business location and employing a workforce of three to five people, (4) being married and having family dependents, and (5) having been in business for five years.

Sustainability **2021**, 13, 3177 14 of 37

#### 3.3.4. Documentation

Data were collected from various 3. ocuments and study results related to developing SMEs in Makassar City. The documents included (1, 2 ata on the number of SMEs in Makassar City, (2) the profiles of SMEs, and (3) Makassar City Government policy documents relating to developing SMEs. and other documents related to the research objectives. The documentation in this study included (1, 3 ata on the number of SMEs and types of SMEs developing in Makassar City, obtained from the Makassar City Central Statistics Agency; (2) profile data for the 3 MEs, obtained from the Office of Cooperatives and SMEs in Makassar City; and (3) Makassar City SMEs profile, obtained through the District Office and the Makassar City Small and Medium Enterprise Empowerment Office. The three types of documents are used to support data from in-depth interviews, observations, and questionnaire results.

#### 3.4. Research Informants and Respondents

Qualitative data were collected from the informants in this study. The informants were determined by snowballing, that is, the researchers determined the SME actors to be interviewed based on information obtained from the SME community association in Makassar City. This means that the key informants selected were actors able to provide good information about the existence of SMEs in Makassar City. The next step was finding out other SME actors that could be interviewed, whose information was obtained from the key informant. The goal was to obtain the same information and pictures of the SME actors. Furthermore, apart from the informants, several respondents who had been interviewed were also identified. The aim was to explore some of the questions answered in the questionnaire that required more detailed explanations. The selected informants were the SMEs that were being researched.

Referring to the snowball method used, the number of informants was 16. Of these, 10 people were non-respondents and 6 were respondents. The 10 non-respondent informants were identified based on information from the SME groups. Based on this information, the base informant was determined; information was then obtained from the base informant to identify the next informant, etc. until 10 people had been selected. Thus, all the informants who were non-respondents were identified through the snowball method. The six informants who were respondents were chosen based on the following criteria: (1) conducting economic business activities, (2) having developed economic relations with other economic enterprises, (3) being able 7 provide good information about the development and obstacles faced by SMEs, and (4) being able 7 provide good information about economic relations and the ways in which SMEs reach potential markets. The snowball method used in this study is presented in Figure 3 below.

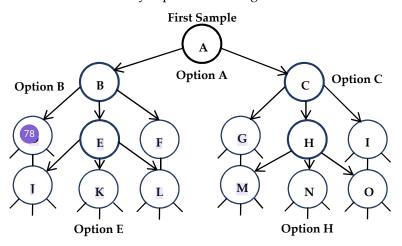


Figure 3. Schematic of the snowball sampling technique.

Sustainability **2021**, 13, 3177 15 of 37

The research 24 ample in this study was determined using purposive sampling, based on conditions and characteristics of the SMEs in Makassar City, which the researchers setermined based on certain and specific characteristics, i.e., the sample (respondents) had to be local, residents currently developing economic enterprises, with families, and business actors having run their SMEs for at least five years and with regular consumers. The questionnaire answers were then analyzed using statistics, percentages, and frequencies. Sampling refers to Cohran [117] with the following formulation:

$$n = \frac{Z^2 \alpha pq}{d^2}$$



where n is the sample size Z² is the confidence level of 95%, 38 the desired level of accuracy, p is the estimated proportion resent in the population, q is 1-p, and Z is the value obtained in the statistical table containing areas below normal. The appropriate number of samples was determined to be 350. The number of respondents in this study is presented in Table 2 below.

Table 2. Number of respondents of small and medium enterprises (SMEs. Makassar City.

Number	District	Number of SMEs (Units)	Number of Re- spondents	
1	Makassar	149	25	
2	Mariso	517	70	
3	Tamalate	157	25	
4	Panakukang	176	30	
5	Tallo	82	10	
6	Bontoala	381	42	
7	Ujung Tanah	8	1	
8	Sangkarrang Islands	5	1	
9	Mamajang	81	10	
10	Rappocini	408	55	
11	UjungPandang	364	39	
12	Wajo	25	5	
13	Manggala	323	24	
14	Biringkanaya	63	8	
15	Tamalanrea	25	5	

urce: Authors' elaboration.

#### 3.5. Data Validity and Reliability

The validity of the data in this study was divided into two categories as follows: the First category is the validity of the qualitative data obtained from observations and indepth interviews. The stages of the validation process that are carried out include (1) extension of observations for the purpose of increasing data trust and credibility, which means to examine and deepen information in different situations in order to obtain data for certainty and consistency; (2) increasing persistence for the purpose of obtaining data results that are more accurate and continuous at different situations and times, which is used to obtain data for certainty and sequence of events so that it can be definite and systematic; and (3) triangulation in describing the credibility of the data, which is carried out by checking various sources of data obtained.

Testing 56 he validity of quantitative data in this study was carried out on the results of the data obtained through a questionnaire, which was 55 wided into two categories, namely, the validity of the factors and the validity of the items. 11 actor validity is measured when items are arranged using more than one factor (there are similarities between one factor and another). Furthermore, the measurement of the validity of the factor is carried out by correlating the factor score (the sum of the items in one factor) with the total factor score (the total of all factors). The validity of the item is indicated by the correlation or

Sustainability **2021**, 13, 3177 16 of 37

support for the total item (total score), and the calculation is carried out by correlating the item score with the item's total score. The results of the orrelation coefficient are used to measure the level of validity of an item and determine whether an item is suitable for use. Determination of whether or not an item is used refers to the significance test of the correlation coefficient the 0.05 significance level, meaning that an item is considered valid if it has a significant correlation to the total score. In this study, variable I is in the form of purely discrete or dichotomic data, while variable II is in the form of continuous data. Thus, the measurement of the validity of the data used is the biserial point correlation technique. The formulations used in testing the questionnaire data validation are as follows:

$$r_{xy} = \frac{n\sum x_i y_i - \sum x_i \sum y_i}{\sqrt{n\sum x_i^2} - (\sum x_i)^2} \sqrt{n\sum y_i^2 - (\sum y_i)^2} ,$$
 (2)

where n is the amount of data or samples,  $x_y$  is the correlation coefficient between variable X and variable Y,  $\sum x_i y_i$  is the multiplication between variables  $x_i$  and Y,  $\sum x_i^2 x_i$  is the sum of squares of the x-value,  $\sum y_i^2 x_i$  is the sum squared of the y-value,  $(\sum x_i)^2 x_i$  is the sum of squared, and  $(\sum y_i)^2 x_i$  is the y-value, which is then squared. After the correlation number is known, the next step is to calculate the t value of  $x_i$  t count is greater than t table, it means that the data are significant (valid) and suitable for use  $x_i$  testing the research hypothesis. Conversely, if the t count is less than or equal to the t table value, it means that the data are not significant (invalid) and therefore not included in testing the research hypothesis.

Data reliability in this study 22 efers to the degree of stability, consistency, predictive power, and accuracy, that is, a measurement that has high reliability is a measurement that produces reliable data 11 eliability shows the extent to which the measurement results can be trusted [118]. The reliability of the data in this study is used to determine whether the instrument used is reliable or not; in this case, the answer given by the respondent is in the form of an ordinal scale, namely, 5 for the very supportive category, 4 for the support category, 3 for the moderately supportive category, 2 for the unsupported category, and 1 for the very unsupportive category. Furthermore, the instrument in the study is said to be reliable if the reliability coefficient ( $\alpha$ ) is greater than 0.6. Thus, in the instrument reliability study using the Alpha Cronbach technique. The Alpha Cronbach formulation used is as follows:

$$\alpha = \left(\frac{n}{n-1}\right) \left(1 - \frac{\sum_{i=1}^{n} \partial_i^2}{\partial_t^2}\right),\tag{3}$$

where  $\alpha$  is the reliability sought, he resulting  $\alpha$  coefficient of reliability ranges from 0 to 1 in providing this overall assessment of a measure's reliability; if all of the scale items are entirely independent of one another (i.e., are not correlated or share no covariance), then  $\alpha = 0$ , and if all of the items have high covariances, then  $\alpha$  will approach 1 as the number of items in the scale approaches infinity. In other words, the higher the  $\alpha$  coefficient, the more the items have shared covariance and probably measure the same underlying concept. The the number of question items tested,  $\Sigma \partial_i^2$  is the total variance score for each item, and  $\partial_t^2$  is the total variance. Furthermore, he basis for decision making in the reliability test, namely, (1) if the Cronbach's Alpha value is greater that  $\Omega_i^{(2)}$ . 60, then the questionnaire is declared unreliable or inconsistent.

# 3.6.41 ata Analysis Method

The data analysis in this study consisted of two stages. Firstly, data were analyzed using a qualitative approach. This meant that the data collected to rough observation and in-depth interviews were analyzed. Second, data were analyzed using a quantitative approach, that is, researchers collected information on the object of the research using a questional process.

Sustainability **2021**, 13, 3177 17 of 37

tionnaire instrument and then analyzed it using quantitative descriptive statistics, correlation, and multiple regression. The data obtained were then subjected to combined qualitative and quantitative analysis. The steps taken for qualitative research were also used for quantitative research. At the time of interpretation and analysis, the data set was reduced by categorization for the qualitative data and statistical analysis for the quantitative data. The two types of data were then subjected to triangulation interpretation; the questionnaire data were explored again two methods qualitative and quantitative. This combination was to strengthen the validity of the analysis results.

#### 3.6.1. Qualitative Data Analysis

The qualitative analysis in this stud 16 as used to answer research questions, namely, strengthening the capacity of human resources for MEs to work as a determinant of increasing business productivity and labor absorption. Furthermore, qualitative data analysis in this study was carried out during the data collection in the field and after the data collection had been completed. At the time of the interview, the researcher analyzed the answers of the interviewed informants; in this case, the analysis was carried out interactively. Thus, qualitative analysis has this study is divided into three categories, namely, data reduction, data presentation, and conclusion drawing. Data reduction was arried out with the following considerations: (1) the data obtained in the field was quite large, complex, and complicated, and therefore, data reduction and similar data grouping were required for interpretation needs; (2) the results of field findings were then identified and summarized referring to the focus of the study, its aspects, and themes, then the conclusions were formulated based on field facts; (3) the reduced data were then used to provide a clear pictur <sup>16</sup> ased on the focus and study objectives to be achieved; and (4) data reduction was conducted by providing codes for certain aspects according the objectives to be achieved in this study.

Qualitative data analysis in this study was carried out in the field and during the data collection process. The activities carried out by researchers were separating information into categories, coding, creating information in a story, and presenting writing qualitatively. Encoding is the process of dividing data into several parts of a classification system [119]. Thus, the data analysis study was conducted using a qualitative approach, namely, domain analysis, taxonomy, components, and analysis of cultural themes.

## 3.6.2. Quantitative Analysis

The quantitative analysis in this study was used to answer the research question of what is the effect of trengthening human resource capacity, business productivity, technology utilization, and business diversification on the sustainability of SMEs? Multiple gression analysis was used to determine how much influence the independent variables Xi Suman resource capacity), X2 (business productivity), X3 (technology utilization), and X4 (business diversification) had on the dependent variable Y (SME sustainability). Thus, multiple regression analysis was used to determine how much influence the independent variables Xi Suman resource capacity), X2 (business productivity), X3 (technology utilization), and X4 (business diversification) had on the dependent variable Y (SME sustainability). Thus, multiple regression analysis was used to determine how much influence the independent variables and Xi (business diversification) had on the dependent variable Y (SME sustainability). Thus, multiple regression analysis was used to determine how much influence the independent variables. The multiple regression analysis model is presented in Figure 4.

Sustainability **2021**, 13, 3177 18 of 37

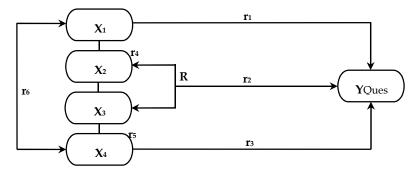


Figure 4. Model of multiple regression analysis.

A multiple variable relationship model with four independent variables— $X_1$ ,  $X_2$ ,  $X_3$ , and  $X_4$ —and one dependent variable, Y, was developed, to determine the relationships of  $X_1$  with Y,  $X_2$  with Y,  $X_3$  with Y, and  $X_4$  with Y. Those of  $X_1$  with  $X_2$ ,  $X_2$  with  $X_3$ ,  $X_3$  with  $X_4$ , and  $X_4$  with X were determined using a simple correlation technique. The relationship of  $X_1$ , together with  $X_2$ ,  $X_3$ , and  $X_4$ , with Y was determined using multiple correlations. Correlation analysis uses the following formulations:

$$r_{xy} = \frac{\sum xy}{\sqrt{(\sum x^2)}\sqrt{(\sum y^2)}},\tag{4}$$

where  $r_{xy}$  the correlation between the x and y values, x is the deviation from the mean for the value of variable X, y is the deviation from the mean for the value of variable Y,  $\sum xy$  is the number of times the value of x and y,  $x^2$  is the square of the x value, and  $y^2$  is the square of the y-value. Furthermore, the model Multiple regression analysis is expressed by the mathematical equation  $x^3$  follows:

$$Y = a_0 + a_1 X_1 + a_2 X_2 + a_3 X_3 + a_4 X_4 + e$$
 (5)

$$R^2 = \frac{a_1 \sum X_1 y + a_2 \sum X_2 y}{\sum X_2 y^2},$$
 (6)

<sup>4</sup> there Y is the dependent variable,  $X_1$ ,  $X_2$ ,  $X_3$ ,  $X_4$  are independent variables, constant  $a_0$  and coefficients  $a_1$ ,  $a_2$ ,  $a_3$ , and  $a_4$  are obtained from sample data,  $\epsilon$  is the error or residue, and  $R^2$  is the coefficient of determination.

## . Results

## 4.1. Determinants of Human Resource Capacity and Productivity of SMEs

The SMEs in Makassar City have a tendency to occupy strategic locations and be located in the centers of commercial activities. MEs in the manufacturing and service industries play an increasingly important role in economic development. SMEs have the potential to support economic growth and employment [120,121]. The productivity of SMEs in Makassar City is generally still constrained by the low mastery of technology due to the inadequate competence of human resources. Traditionally, it is believed that SMEs lack the ability to adopt and persistently practice social sustainability [122]. Thus, these SMEs, the motors of economic growth, are not yet optimal and sustainable. A role should therefore be played by the government, universities, and companies to build an entrepreneurial ecosystem to promote the entrepreneurial sustainability of SMEs [123].

It was found in the field that the weak mastery of technology by SME actors is influenced by several factors, including (1) the ability and skills of the workforce being relatively low, (2) product marketing remaining focused on meeting local needs, (3) access to information and product marketing through online media remaining limited, (4) the types of products marketed still being limited in relation to business diversification, and (5)

Sustainability **2021**, 13, 3177

products being insufficiently competitive to compete in regional and global markets. These five factor wave an impact on the production ability of SMEs in Makassar City in terms of the products produced still being limited. SMEs have socio-economic relevance worldwide and must be prepared to survive and respond to the market's challenges, which sometimes translated into differentiation and innovation capacities [124,125].

The results in the field show several factors that become obstacles to increasing the productivity of SMEs in Makassar City in relation to the capacity of human resources. First, limited business capital means that SME players have not been able to increase the number of goods produced, therefore the benefits obtained are not optimal. Product excellence, market potential, the fulfillment of customers' needs, pre-development, capabilities, and the utilization of resources are factors with significant effects on the performance of a new product [126,127]. The characteristics of business management in SMEs necessary to obtain maximum profit are quite complex because various problems related to complicated combinatorial optimization require the use of many intricate iteration procedures [128]. This study's results illustrate that the lack of business capital for SMEs occurs due tell ifficulties in obtaining financing capital from formal financial institutions and meeting the requirements set. In many developing countries, obtaining financial services at affordable rates under fair terms has been a significant challenge for SMEs [129]. Second, some SME actors lack experience in business management. This means that SMEs' economic efforts only focus on producing goods but have not considered expanding and diversifying their business ventures. As a result, the businesses that have been developed have not changed significantly. Forms of economic value include profit, return on investment, financial resilience, long-term viability, and the business stability of SMEs [130].

Third, there is a lack of product innovation. In this case, the products produced by SMEs have not been able to compete in regional and national markets due to their low quality and competitiveness, only meeting local needs. Innovation can involve different types of change and depends on the organization's resources, capabilities, strategies, and requirements [131]. Fourth, there are difficulties in distributing goods. In this case, SMEs have not been able to build business network an arough the use, of information technology. The entrepreneurial business network provides a platform for building business relationships; identifying, developing, or acting upon economic opportunities; sharing information; and seeking potential business partners for ventures [132]. This study found that SME actors in Makassar City only focus on distributing goods to certain partners and collectors whose reach is not yet wide and dominant only on a local scale. This is due to the suboptimal creativity of the SME actors. Creativity is an important element of entrepreneurship in the sense that individuals must be creative to identify and take advantage of opportunities [133]. Fifth, SME players have not been able to utilize and optimize online marketing for the products they produce; therefore, the distribution of goods is limited and has not reached potential markets. SMEs are very important for meeting market needs and should adopt sustainable marketing as part of business strategies for the purpose of providing long-term benefits in the social, economic, and environmental dimensions [134].

Sixth, SMEs do not take advantage of branding because they do not understand the importance of branding for the products they produce and the businesses they develop. The brand congruence of a business builds trust and commitment and influences the economic behavior of consumers toward an item [135]. This study found that most SME players in Makassar City only focus on selling and have not thought about the quality of their product brands. The components of ethical marketing include product, price, place, and promotion with an ethical consideration of the brand–consumer relationship and perceived product quality in a transaction [136]. Seventh, the SMEs in Makassar City have not been able to implement customer loyalty programs, in this case, related to member registration, customer communities, and regular promotions. The survival of SMEs relies on innovation and organizational culture, which are important components for realizing product innovation goals [137].

Sustainability **2021**, 13, 3177 20 of 37

Eighth, the dominant SMEs still rely on manual bookkeeping. It was found that manual bookkeeping by SME actors is very vulnerable to damage, loss, and mistakes in recording sales. The sales reporting systems and business managements are still traditional. It is very important for SMEs to use modern methods of management, making decisions in an environment of uncertainty while taking advantage of limited resources [138]. Furthermore, to remain competitive, SMEs must secure and maintain technology; a business needs to stay informed about future technology while developing a maintenance and asset replacement strategy [139].

The finding <sup>16</sup>, the field illustrate that the rationalization of the actions of SMEs in Makassar City in relation 13 the use of technology and human resource competence shows difference 1 ased on the type of economic business being developed. The adaptation and rationalization of the action <sup>9</sup> f SMEs in Makassar City, based on the type of business, are presented in Table 3.

**Table 3.** Comparison of adaptation processes, shifting normative spaces, and rationalizing processes for SMEs' actions.

Description	Adaptation of Economic Enterprises and Rationalization of the Actions of SMEs					
	Culinary	Fashion	Cosmetics	Agribusiness	Souvenir	Automotive
Development of						
Investment, Tech-	Lorus	Linnor	Linnor	Madamata	Madamata	Moderate
nology, and Man-	Low	Upper	Upper	Moderate	Moderate	Moderate
agement						
Normative Space	Low	Madamata	Moderate	Moderate	Madamata	Moderate
Shifting	LOW	Moderate	Moderate	Moderate	Moderate	Moderate
Action Rationaliza-	Low	Linnor	Modorato	Moderate	Linnor	Moderate
tion Process	Low	Upper	Moderate	Moderate	Upper	Moderate
Human Resource	Low	Moderate	Moderate	Low	Low	Moderate
Capacity	LOW	Moderate	wioderate	LOW	LOW	Moderate

Source: primary data and analytical results.

There are several possible interpretations for these results, such as the following. First, human resource capacity, business productivity, and employment are closely related to developments in investment, technology, and business management. The production procedures in fashion and cosmetic businesses are categorized as effective; this is influenced by investment support, technology, and management. Furthermore, the efforts made by SME players in the fashion business are building investment cooperation networks based on economic motivation and developing possible business opportunities. This means that SME business actors in the fashion sector have the ability to build business cooperation, including the use of technology, when compared to other SMEs. Open innovation (open flows of knowledge regarding market needs and the potential of technologies, in addition to collaboration with customers) is a concrete precondition for business model innovation [46]. Sanderson [140] states that technology is a tool, technique, and form of knowledge possessed by members of society and is used in fulfilling the necessities of life and economic activities that cannot exist without technology, but the economy is something greater than the level of technology.

In the culinary sector, investment, technology, and management development are categorized as low. This is influenced by the ability of SMEs to access very limited sources of venture capital. Likewise, the investment network built is also very limited, and the mastery of technology is still relatively simple. This means that the economic business patterns developed tend to be simple and only aimed at meeting the needs of local consumers, making them less adaptive in response to stimuli for environmental change. Thus, business protection and innovation are needed in SMEs to attain sustainable business

Sustainability **2021**, 13, 3177 21 of 37

management [141]. Furthermore, agricultural, souvenir, and automotive businesses are categorized as medium in development. This is influenced by three main factors—(1) the difficulty in procuring raw materials, (2) the limited skills and abilities of the workforce, and (3) inadequate production reserves. The three types of business are relatively stagnant terms of business development and profits. Information technology plays a vital role in improving the productivity and competitiveness of SMEs. The dynamic business environment has brought fierce competition among SMEs and, therefore, requires the owners to actively interact with internal and external members [142,143].

Second, the shift in the normative space for SMEs in Makassar City shows a difference in terms of production procedures. The shift in the normative space in the fashion, cosmetics, souvenir, and automotive businesses is categorized as moderate. This study finds that the mechanisms, production procedures, and work systems of the four types of businesses are contractual and collective, based on the efforts made to reach a certain position. The ability and position that can be realized are largely determined by the adaptive capacity of each individual workforce. Furthermore, in culinary and agricultural businesses, the shift in the normative space shown is categorized as low. This is due to the influence of values and traditions that are still inherent and quite strong, and hence the principles of togetherness are still characteristic of the SMEs developing their business. This means that expertise and skills are not the basis for the development of economic enterprises. Additionally, the positions and statuses of the workers employed are relatively similar.

Third, the adaptation process of SMEs is followed by the rationalization of actions by each SME actor. (1) For the fashion and souvenir businesses, the rationalization of actions is categorized as high; (2) the cosmetic and automotive businesses are categorized as medium; and (3) the culinary businesses are categorized as low. The differentiation of the rationalization of actions of the small and medium business actors is based on the motivation of each business in its efforts to maintain its existence and achieve prosperity. In a contemporary complex and competitive business environment, the adaptation of appropriate strategies is particularly important for furthering the development of companies in the SME sector [144].

Fourth, The human resource capacity of small and medium enterprises (SMEs) illustrates that culinary, agribusiness, and souvenir businesses are categorized as low, while clothing cosmetics, and automotive businesses are categorized as medium. These results indicate that the small and medium enterprises that are developing in Makassar City have not been optimal in increasing the productivity of SMEs. Field facts that are found illustrate that the human resource capacity of SMEs is categorized as low. This means that the ability and competence of employees, leadership, and business management are still carried out traditionally. Limited knowledge, limited mastery of technology, and traditional business management will hinder innovation, creativity, and business productivity [145]. Furthermore, the differences in the mode of production and the SMEs' economic business management system are presented in Table 4 below.

**Table 4.** Differences in production modes and SME business management.

Distinguishing Param	Production Procedures for SMEs				
eters	<b>Small Businesses</b>	Medium Enterprises			
Mode of Production	Relatively simple and tends to be traditional; the use of technology is very limited.				
Production Power	Family as a production force and	Companies and business units as pro-			
i ioduction i owei	business unit.	duction forces, however, are still limited.			
		Local and regional in character through			
Production Relations	Local context and very limited.	the production network and business re-			
		lationships.			

Sustainability **2021**, 13, 3177 22 of 37

Ownership of Business Capital	Individuals and families.	Individuals in family business groups.
Type of Production Relationship	The employer-worker relationship is egalitarian.	The employer–worker relationship is egalitarian and moving towards the transitional (contractual) type.
Technology and Investment	he use of technology is simple and has not been aimed at effi- ciency but is more of a service nature. The capital used is very limited.	nology.  The use of a limited amount of investment includes the utilized business cani-

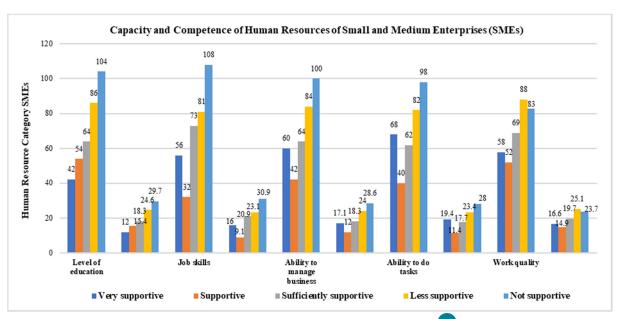
Source: primary data and analytical results.

Table 4 shows the production and management procedures for SMEs. There are substantial differences between the six distinct categories. There are three important categories that show the most basic distinguishing elements—the forces of production, production relations, and the use of technology and investment. Possible interpretations for these results include the following. (1) the power of production determines the pattern of production relations among SMEs; therefore, the power of production is important in business management; (2) the relationship between the production processes in medium-sized enterprises shows a pattern of cooperation in the production business leading to profit creation; (3) the ability to acquire business capital and develop business networks in medium-sized enterprises is shown through the cooperative relationship between production elements and the capital turnover system in relation to business development; and (4) small businesses are characterized by very limited capital ownership, including local production relations, and are susceptible to market fluctuations. Thus, government policy becomes an important element in the development of SMEs, which includes promotional activities, innovations, and the optimization of small business enterprises [146].

## 4.2. Human Resource Capacity and Business Sustainability of SMEs

Human resource of lay an important role in business development and the productivity of economic enterprises. Increasing the productivity of SMEs in relation to luman resource competence is a key factor for their success and performance. Furthermore, the business environment tends to change in both micro and macro fashions, requiring SMEs to be able to respond, be dynamic, and be able to adapt to changes in the strategic environment. The responsibility of SMEs is shown by their ability to make changes through developing and improving the quality of the workforce employed. The need to contribute to society, both socially and environmentally, and maintaining financial profitability has slowly become a focal point for businesses [147]. The capacity and competence of SMEs Makassar City is presented in Figure 5 below.

Sustainability **2021**, 13, 3177 23 of 37



**Figure 5.** Capacity and competence of human resources for SMEs in Makassa Vity. Source: Primary data.

Figure 5 provides an overview of the competence and human resources of SMEs in Makassar City. 16 terpretations that can be put forward in connection with these results are as follows: (1) the education levels of SMEs are as follows: 27.4% very supportive of the development of SMEs, 18.3% were supportive, and 54.3% were not supportive; (2) regarding the skills and expertise of the workforce utilized by SMEs, 25.1% were included the very supportive category, 20.9% supportive, and 54% were not supportive; (3) for the ability to manage SMEs businesses, 29.1% were included in the very supportive category, 18.3% supportive, and 52.6% not supportive; (4) regarding the ability to manage the work and duties of employees, 30.8% were in the very supportive category, 17.7% supported, and 51.4% not supportive; and (5) the quality of work of SMEs showed that 31.5% were in the very supportive category, 19.7% supportive, and 48.8% not supportive. Therefore, it is necessary to make efforts to empower SMEs in Makassar City through strengthening the capacity of human resources to increase the productivity of economic enterprises in a sustainable manner. Sustainable entrepreneurship, based on the principles of sustainable development, also includes social sustainability, expressed in personnel policy, which includes management and care for all employees [148]. The productivity of the SMEs in Makassar City presented in Figure 6.

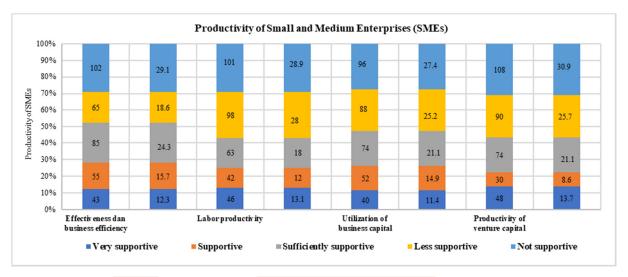


Figure 6. The productivity of SMEs in Makassar City. Source: Primary data.

Sustainability **2021**, 13, 3177 24 of 37

These results can be interpreted as follows: (1) the productivity of SMEs in relation to business effectiveness and efficiency showed 28% in very supportive categories, 24.3% in supportive categories, and 47.7% in not supportive categories; (2) labor productivity in relation to business productivity showed 25.1% in very supportive categories, 18% in supportive categories, and 56.9% in not supportive categories; (3) the utilization of business capital in relation to increasing the business productivity of SMEs showed 26.3% in very supportive categories, 21.1% in supportive categories, and 52.6% in not supportive categories; and (4) the productivity of business capital in relation to increasing the business productivity of SMEs showed 22.3% in very supportive categories, 21.1% in supportive categories, and 56.6% in not supportive categories. Thus, it can be concluded that SMEs in Makassar City still need guidance and assistance to increase the productivity and stability of economic enterprises in a sustainable manner. It is, therefore, necessary to increase support for SMEs, including in financial management, production, business management, and market access [149]. Furthermore, missions, visions, and strategies are very important in supporting SME economic enterprises to maintain business sustainability in the long term [150]. The use of technology by SMEs in Makassar is presented in Figure 7 below.

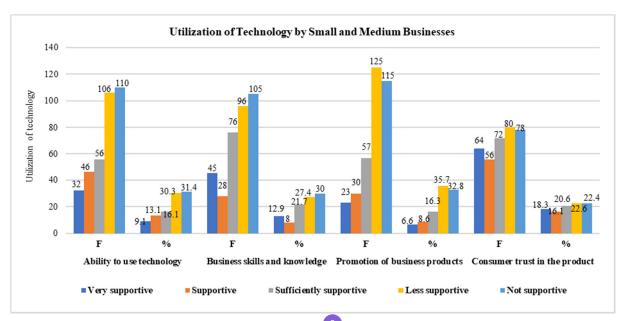


Figure 7. Technology utilization by SMEs in Jakassar City. Source: Primary data.

Figure 7 shows the use of technology by SMEs in Makassar City. Possible interpretations of these results include the following: (1) the ability to use and mastery of technology in SMEs showed 22.2% in very supportive categories, 16.1% in supportive categories, and 61.7% in not supportive categories; (2) the skills and knowledge of SME actors showed 20.9% in very supportive categories, 21.7% in supportive categories, and 57.4% in not supportive categories; (3) the business promotion carried out by SME actors showed 15.2% in very supportive categories, 16.3% in supportive categories, and 68.5% in not supportive categories; (4) consumer confidence in the resulting products showed 34.4% in very supportive categories, 20.6% in supportive categories, and 45% in not supportive categories. Thus, it can be concluded that the inability to master technology, limitations in business management, and the lack of promotions carried out have positively contributed to the weak consumer confidence in the products of SMEs and suboptimal business productivity. In particular, SMEs will need access to technology that is easy to implement and fits the characteristics of the SMEs but compatible with the overall approach [151]. The diversification of SME businesse. Makassar City is presented in Figure 8 below.

Sustainability **2021**, 13, 3177 25 of 37

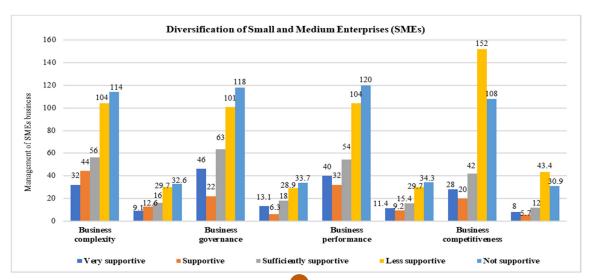


Figure 8. Diversification of SME 10. Makassar City. Source: Primary data.

Figure 8 shows the diversification of SMEs in Makassar City. The following may be inferred from the results: (1) the ability in managing the complexity of economic enterprises for SMEs showed 27.1% in very supportive, 16% in supportive categories, and 62.3% in not supportive categories; (2) the business governance of SME actors showed 19.4% in very supportive categories, 18% in supportive categories, and 62.6% in not supportive categories; (3) business performance in relation to the business productivity of SMEs showed 20.6% in very supportive categories, 15.4% in supportive categories, and 64% in not supportive categories; (4) the business competitiveness of the products produced showed 13.7% in very supportive categories, 12% in supportive categories, and 74.3% in not supportive categories. Thus, it can be concluded that the dominant SMEs in Makassar City have not been able to manage their businesses effectively, and hence the business competitiveness of the products produced is still low; training and coaching efforts are needed to foster creativity and sustainable business innovation. Changes in business patterns, independence, supplier closeness, and optimization of customer service are needed to create a sustainable SME business [152]. Furthermore, the business continuity of SMEs iresented in Figure 9 below.

Sustainability **2021**, 13, 3177 26 of 37

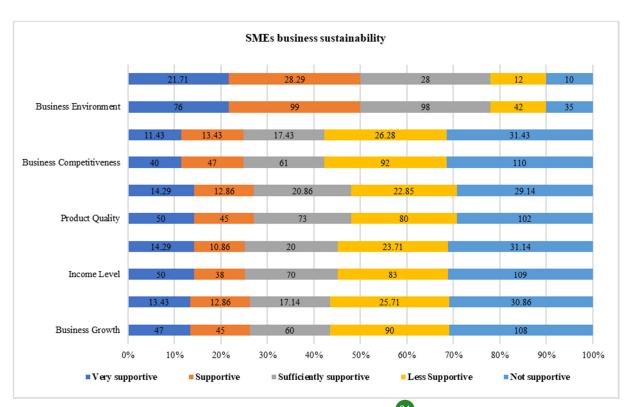


Figure 9. SMEs business sustainability. Source 24 rimary data.

Figure 9 shows the business sustainability of SME Makassar City. Interpretations that can be proposed in relation to these results include (1) business growth obtained an overview of 26.29% with the supportive category, 17.4% with the supportive category, and 56.57% with the not supportive category; (2) the level of business incometained an illustration of 25.15% with the supportive category, 20% with the sufficiently supportive category, and 54.85% with the not supportive category; (3) the quality of the resulting product obtained an overview of 27.15% with the supportive category, 20.86% with the sufficiently supportive category, and 51.99% with the not supportive category; (4) the business competitiveness obtained a picture of 24.86% with the supportive category, 17.43% with the sufficiently supportive category, and 57.71% with the not supportive category; and (5) the business environment obtained an overview of 50% with the supportive category, 28% with the sufficiently supportive category, and 40% with the not supportive category. The five categories measured indicate that business continuity toward business stability in SMEs is not optimal. Field facts found indicate that uman resources in terms of capacity, competence, and mastery of technology are quite low, as well as limited business capital and inability to access potential markets are a positive correlation to the stability of small and medium enterprises (SMEs) in Makassar City. Business competition tends to increase especially against large and modern competitors, placing SMEs inside a vulnerable position due to the traditional business management system in production and marketing [153,154]. The effect of 2 trengthening human resource capacity, business productivity, technology utilization, and business diversification on the sustainability of SME presented in Table 5 below.

Table 5. Summary of the results of the regression coefficient significance test.

Correlation	Coefficient	Error	T-Count	T-Table
Strengthening the capacity of human resources toward sustainability of SMEs (ryx1)	0.173	0.063	2.836	1.92
Business productivity towards the sustainability of SMEs (ryx <sub>2</sub> )	0.164	0.056	2.682	1.92

Sustainability **2021**, 13, 3177 27 of 37

Utilization of technology towards the sustainability of SMEs (ryx3)			0.202	0.092	4.235	1.92
Diversify business towards the sustainability of SMEs (ryx4)			0.138	0.053	2.854	1.92
Source Variant	Sum of Squares (JK)	Free Degrees (db)	Average of the Sum of the Squares (RJK)	35_Co	ount	F–table $\alpha = 0.05$
Regression Residue	24.870 0.470	4 8	8.260 0.046	85.816		5.45
Total	24.87	132		-		-
R	$\mathbb{R}^2$	db1	db2	F-Co	unt	F-Table
0.850	0.723	4	8	85.8	316	5.45

Table 5 shows the effects of 2 trengthening human resource capacity, business productivity, technology utilization, and business diversification on the sustainability of SMEs in Makassar City. It can be inferred from these results that (1) human resource capacity; (2) the use of technology; (3) business diversification; and (4,5 trengthening human resource capacity, business productivity, technology utilization, and business diversification all have a positive correlation to the sustainability of SMEs. Thus, it can be concluded that the effect of strengthening human resource capacity, business productivity, technology utilization, and business diversification explains 72.3% If the sustainability of SMEs in Makassar City.

#### 5. Discussion

## 5.1. Strengthening the Capacity and Competence Human Resources in SMEs

In terms of the ability to master technology, business management, business innovation and diversification, and the ability to access broader potential markets, the human resources of the SMEs in Makassar City are still very limited and could be improved in capacity and competence. Thus, a process of business mentorship and training is needed to realize economic empowerment promoting the sustainability of SME economic enterprises. Human resource management covers the various activities needed to ensure the economic sustainability of SMEs [155]. Furthermore, several actions and strategies are needed encourage the increased productivity of the SMEs in Makassar City, including (1) reviewing and evaluating the business processes developed by SMEs for economic diversification; (2) improving the governance and economic management of SMEs; (3) improving the expertise and skills of the workforce regarding the mastery of technology; (4) optimizing the use of business capital to make production more effective and efficient; (5) identifying consumer needs and improving the innovation and creativity of SMEs actors to allow them to reach a broader potential market; and (6) increasing business productivity and the quality of the products and their packaging to increase their competitiveness. There are different drivers in society that are relevant and warrant the attention of professionals and decision makers, such as sustainability, digital transformation, innovation, and entrepreneurship [156].

The strengthening of the capacity and competence of the human resources of SMEs in Makassar City will require the following support in action and policy from the government: (1) the provision of business mentoring in the form of training and workshops for SME workers; (2) providing opportunities for liaison with university resources, in this case, utilizing the results of higher education research to improve resource utilization and technological mastery; (3) skill and managerial development through technology strengthening cooperation; and (4) training in business management based on strengthening the organizational capacity and leadership of SMEs. Furthermore, strengthening the

capacity and capability of SMEs in terms of their human resources to increase their competitiveness in production and subsequent reach to potential markets will require various forms of support, including (1) increasing access to finance through the government, banks, and non-bank institutions; (2) increasing investor networks and support for issues encountered in running businesses including SMEs; (3) effective business promotion based on information technology systems through partnerships with potential investors; and (4) financial management assistance to SMEs to elp them to run their businesses effectively, efficiently, and accountably.

#### 5.2. Business Stability and Sustainability of SMEs

Government support for increasing the productivity of SMEs in lakassar City will have an impact on the stability of economic enterprises. The competence of human resources based on human capital is very important to consider as the lifeblood of an organization, and human capital is a crucial resource for innovating and developing an organization [157]. The strategic steps needed to achieve business stability and economic sustainability for the SMEs in Makassar City include (1) establishing business independence and strengthening the capacity of the workforce, management, and leadership; (2) build cooperation and networks among SME players through mutually beneficial information exchange processes; (3) the management of business finance to increase productivity and business innovation; (4) technology-based financial management to facilitate efficient corporate financial allocation; (5) the provision of additional business capital through the support of formal, non-formal, and government financial institutions; (6) enhancing the managerial and personal capabilities of SME actors and ensuring adequate workforce competence in the mastery of technology and information; and (7) building business partnerships through government policy support for enabling SMEs to reach potential markets and become more sustainable.

The sustainability of the SMEs in Makassar City will also require several forms of support, including (1) government cooperation with SMEs and private actors who build and develop training and information centers based on joint production houses oriented towards the research and development of potential products for SMEs; (2) helping the managers of SMEs to establish a work contract system based on improving the quality of labor resources and guaranteeing work safety; (3) training in the management of SMEs in the industry to improve the quality of leadership; and (4) improving the quality of the workforce through rewards and punishments. These four factors—in addition to increasing productivity business innovation, the mastery of technology, and product assurance for consumers will have an impact on the business stability and business sustainability of SMEs. Sustainability in the context of the business world refers to a company's ability to survive and succeed in a dynamic, competitive, and challenging business environment [158]. The business continuity of SMEs. Makassar City is presented in Figure 10.

Sustainability **2021**, 13, 3177 29 of 37

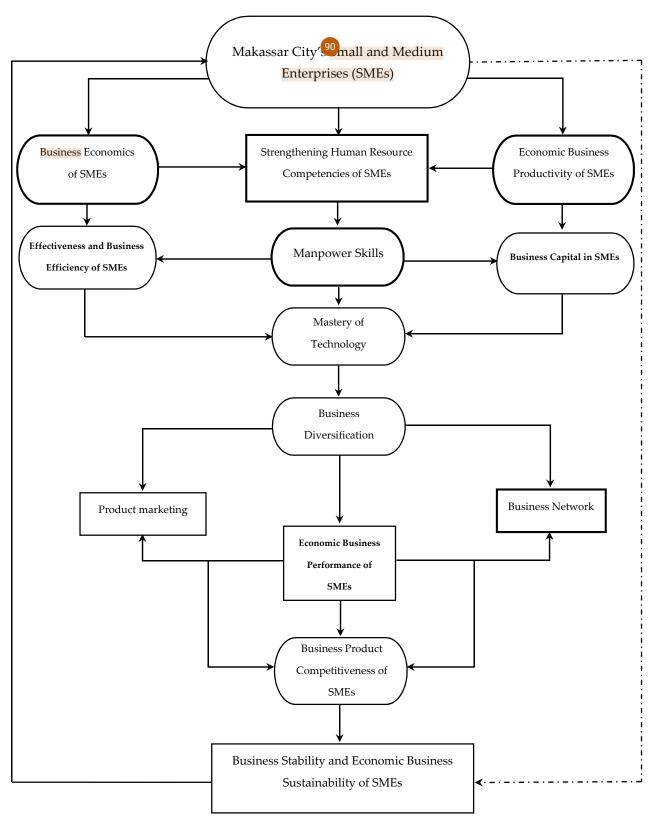


Figure 10. Business stability and economic sustainability of SMEs in Makassar City.

## 6. Conclusions

In general, the productivity of SMEs in Makassar City is still constrained by limited mastery of technology, product innovation, and product marketing. This condition occurs due to the low human resource capacity and due to limited access to business capital from formal financial institutions. As a result, the economic enterprises developed by SMEs do

Sustainability **2021**, 13, 3177 30 of 37

not experience significant changes. The capabilities and limitations of human resources and the inability of SMEs to utilize technology in relation to online-based product marketing and limited product innovation, in addition to traditional business management, are inhibiting factors in increasing the productivity and profitability of the business being developed. Thus, sovernment policy support is needed in the form of actions and strategies to encourage increased productivity of SMEs in Makassar City. The actions and strategies required include (1) evaluation of business processes developed by SME entrepreneurs toward business optimization and diversification of economic enterprises; (2) business governance fostering, which is carried out continuously; (3) increasing the capacity of SME resources, expertise, and skills of the workforce through training, followed by mastery of technology; (4,4) ptimizing the use of business capital toward the effectiveness and efficiency of production; (5) identifying consumer needs through developing innovation and creativity for SME actors to be able to reach a wider potential market; and (6) increasing business productivity, followed by an increase in the quality of SME products and their packaging in the direction of increasing product competitiveness. Furthermore, in order to optimize the strengthening of the capacity, capability, and competence of SME human resources toward increasing production competitiveness and potential market access, government policy support is needed, including (1) increasing access to finance facilitated by banks and non-banks; (2) building investment cooperation to support SME business development; (3) promotion of effective information technology-based businesses through partnerships with investors; and (4) assistance in financial management for SMEs in order to run their business effectively, efficiently, and accountably.

Increasing the productivity of SMEs in relation to strengthening the capacity of human resource a key factor for the success and performance of SME entrepreneurs. Thus, efforts are needed to empower SME business actors towards increasing productivity and business stability in a sustainable manner. Furthermore, the inability and weak mastery of technology, limitations in business management, and the lack of promotional activities carried out by SMEs have contributed positively to the weak consumer confidence in the products they produce. Thus, the strategic steps needed to support this include (1) building business independence through strengthening the capacity of the workforce, optimizing business management, and leadership; (2) building a cooperative network among SME entrepreneurs through mutually beneficial information exchange processes; (3) management of business finances to increase productivity, followed by business innovation; (4) technology-based financial management to utilize financial allocations effectively and efficiently; (5) support for additional venture capital through formal, non-formal, and government financial institutions; (6) increasing the managerial and personal capabilities of SMEs players, in addition to increasing the competence of the workforce in mastering online-based information technology; and (7) building business partnerships through government policy support to assist SMEs in accessing potential markets in a sustainable manner.

The sustainability <sup>8</sup> f small and medium enterprises (SMEs) in Makassar City will require assistance, including (1)<sup>16</sup> cooperation between the government and SMEs and the private sector to build and develop training and information centers based on joint production houses that are oriented toward research and development of products UKM that can be managed collectively; (2) assisting the management of SMEs toward the development of a work contract system that is oriented toward improving the quality of labor resources and ensuring work safety; (3) improving SME management through training in the industry to improve leadership quality; and (4) improving <sup>82</sup> ne quality of the workforce through performance appraisals based on reward and punishment. Thus, the new outcomes from this research emphasize that strengthening the capacity of the human resources of SMEs through the support of government policies, coupled with the ability to use technology, vill encourage increased business productivity, business diversification, and the economic sustainability of SME entrepreneurs.

Sustainability **2021**, 13, 3177 31 of 37

Because the study was carried out in a limited scope, only considered a few parameters and variables for testing, and was focused on strengthening the capacity of human resources to increase the productivity and sustainability small and medium enterprises (SMEs) in Makassar City, it is recommended that the next researchers conduct more studies on (1,2 MEs business development models based on the utilization of natural resources and (2) optimizing the role of SMEs in regional and urban economic growth. Both studies are intended to complement the results of this study.

<sup>59</sup> uthor Contributions: H.H. and B.S., conceptualization; H.H., B.S., and I.P., formulating research; HA <sup>10</sup> nd M.I., collecting data; H.H. and B.S., processing data; I.P., H.A., and M.I., contributed the materials / methods / analysis tools; H.H., B.S., and I.P., analyzed the data; HA. and M.I., <sup>10</sup> ontributed to data checking; H.H., B.S., I.P., H.A., <sup>10</sup> nd M.I., wrote and revised concepts. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was funded through a collaboration between STIM Lasharan Jaya and Bosowa 4 niversity through the Research Center for Economic and Business Research LPPM STIM Lasharan Jaya and 4 PPM Bosowa University Makassar City.

Institutional Review Board Statement: This research was carried out through the approval of the Institute for Research and Community Service (LPPM Bosowa University and LPPM STIM Lasaran Jay Iakassar) through Cooperation Contract Number 24 / LPPM / VI / 2020 dated July 28, 4 020. Furthermore, funding for this research is funded through Bosowa University and STIM Lasaran Jaya Makassar and the study results have been validated by both institutions.

Anformed Consent Statement: The results of this study were approved by the Review Board of the Institute for Research and Community Service at the University of Bosowa and STIM Lasaran Jaya Makassar as outlined in the approval Number 84 / LPPM / VIII 4020.

**Data Availability Statement:** We fully support open scientific exchange through MDPI in sharing and archiving research data from this study. We fully comply with the provisions that have been set by referring to the established journal guidelines.

Acknowledgments: We are grateful for the participation of stakeholders in contributing ideas during this study. We also thank STIM Lasharan Jaya and Bosowa Universit are their financial support and assistance.

<sup>18</sup>onflicts of Interest: The authors declare no conflict of interest.

#### References

- 1. Luo, Y.; Xiang, P.; Wang, Y. Investigate the Relationship between Urbanization and Industrialization using a Coordination Model: A Case Study of China. *Sustainability* **2020**, *12*, 916, doi:10.3390/su12030916.
- 2. Surya, B.; Hadijah, H.; Suriani, S.; Baharuddin, B.; Fitriyah, A.T.; Menne, F.; Rasyidi, E.S. Spatial Transformation of a New City in 2006–2020: Perspectives on the Spatial Dynamics, Environmental Quality Degradation, and Socio—Economic Sustainability of Local Communities in Makassar City, Indonesia. *Land* 2020, *9*, 324, doi:10.3390/land9090324.
- 3. Stoica, O.; Roman, A.; Rusu, V.D. The Nexus between Entrepreneurship and Economic Growth: A Comparative Analysis on Groups of Countries. *Sustainability* **2020**, *12*, 1186, doi:10.3390/su12031186.
- 4. Surya, B.; Syafri, S.; Hadijah, H.; Baharuddin, B.; Fitriyah, A.T.; Sakti, H.H. Management of Slum-Based Urban Farming and Economic Empowerment of the Community of Makassar City, South Sulawesi, Indonesia. *Sustainability* **2020**, *12*, 7324, doi:10.3390/su12187324.
- 5. Schuler, R.S. Human resource issues and activities in international joint ventures. *The Inter. J. Human. Res. Manag.***2001,** 12, 1–52, doi: 10.1080/713769586
- 6. Gherghina, S.C.; Botezatu, M.A., Hosszu, A.; Simionescu, L.N. Small and Medium-Sized Enterprises (SMEs): The Engine of Economic Growth through Investments and Innovation. *Sustainability* **2020**, *12*, 347, doi:10.3390/su12010347.
- 7. Surya, B.; Hamsina, H.; Ridwan, R.; Baharuddin, B.; Menne, F.; Fitriyah, A.T.; Rasyidi, E.S. The Complexity of Space Utilization and Environmental Pollution Control in the Main Corridor of Makassar City, South Sulawesi, Indonesia. *Sustainability* **2020**, 12, 9244, doi:10.3390/su12219244.
- 8. Badan Pusat Statistik. Statistik Indonesia. 2019. Available online: https://www.bps.go.id/publication/download.html?nrbvfeve=ZGFhYzFiYTE4Y2FlMWU5MDcwNmVlNThh&xzmn=aHR0cH M6Ly93d3cuYnBzLmdvLmlkL3B1YmxpY2F0aW9uLzIwMTkvMDcvMDQvZGFhYzFiYTE4Y2FlMWU5MDcwNmVlNThhL3 N0YXRpc3Rpay1pbmRvbmVzaWEtMjAxOS5odG1s&twoadfnoarfeauf=MjAyMC0xMi0zMCAxNjoxMzo0MQ%3D%3D (accessed on 4 April 2020).

Sustainability **2021**, 13, 3177 32 of 37

9. Eravia, D.; Handayani, T.; Julina. The Opportunities and Threats of Small and Medium Enterprises in Pekanbaru: Comparison between SMEs in Food and Restaurant Industries. *Procedia Soc. Behav. Sci.* **2015**, *169*, 88–97, doi:10.1016/j.sbspro.2015.01.289.

- 10. Surya, B.; Ahmad, D.N.A.; Sakti, H.H.; Sahban, H. Land Use Change, Spatial Interaction, and Sustainable Development in the Metropolitan Urban Areas, South Sulawesi Province, Indonesia. *Land* **2020**, *9*, 95, doi:10.3390/land9030095.
- 11. Maksum, I.R.; Sri Rahayu, A.Y.; Kusumawardhani, D. A Social Enterprise Approach to Empowering Micro, Small and Medium Enterprises (SMEs) in Indonesia. *J. Open Innov. Technol. Mark. Complex.* **2020**, *6*, 50, doi:10.3390/joitmc6030050.
- 12. ADB. This Annual Report Provides a Comprehensive Account of the Operational and Financial Results of the Asian Development Bank (ADB) in 2019. Available online: https://www.adb.org/sites/default/files/institutional-document/650011/adb-annual-report-2019.pdf (accessed on 20 September 2020).
- 13. Alleyne, A.; Zhang, Z.; Mu, Y. Sustaining International Trade with China: Does ACFTA Improve ASEAN Export Efficiency? *Sustainability* **2020**, *12*, 6159, doi:10.3390/su12156159.
- 14. Surya, B.; Saleh, H.; Suriani, S.; Sakti, H.H.; Hadijah, H.; Idris, M. Environmental Pollution Control and Sustainability Management of Slum Settlements in Makassar City, South Sulawesi, Indonesia. *Land* **2020**, *9*, 279, doi:10.3390/land9090279.
- 15. Bappenas. Laporan Analisis Daya Saing UMKM di Indonesia. Available online: https://www.bappenas.go.id/files/5914/4255/9402/Laporan\_Analisis\_Daya\_Saing\_UMKM\_di\_Indonesia.pdf (accessed on 5 November 2020).
- 16. Child, J.; Hsieh, L.H.Y. Decision mode, information, and network attachment in the internationalisation of SMEs: A configurational and contingency analysis. *J. World Bus.* **2014**, 49, 598–610, doi:10.1016/j.jwb.2013.12.012.
- Knight, G.A.; Liesch, P.W. Information internalization ininternationalising the firm. J. Bus. Res. 2002, 55, 981–995, doi:10.1016/S0148-296300375-2.
- 18. Basly, S. The internationalisation of family SME an Organisational learning and knowledge development perspective. *Balt. J. Manag.* **2007**, *2*, 154–180, doi:10.1108/17465260710750973.
- 19. Rodriguez, V.; Barcos, L.; Álvarez, J. Managing risk and knowledge in the internationalisation process. *Intang. Cap.* **2010**, *6*, 202–235, doi:10.3926/ic.162.
- 20. Castagna, F.; Centobelli, P.; Cerchione, R.; Oropallo, E.; Shashi.; Strazzullo, S. Assessing SMEs' Internationalisation Strategies in Action. *Appl. Sci.* **2020**, *10*, 4743, doi:10.3390/app10144743.
- 21. Badan Pusat Statistik Kota Makassar. Kota Makassar Dalam Angka. 2019. Available online: https://makassarkota.bps.go.id/publication/download.html?nrbvfeve=NGNhMDMzMDFiOGUyYjg0MTRlMzNmNmEz&xzm n=aHR0cHM6Ly9tYWthc3NhcmtvdGEuYnBzLmdvLmlkL3B1YmxpY2F0aW9uLzIwMTkvMDgvMTYvNGNhMDMzMDFiO GUyYjg0MTRlMzNmNmEzL2tvdGEtbWFrYXNzYXItZGFsYW0tYW5na2EtMjAxOS5odG1s&twoadfnoarfeauf=MjAyMC0xM i0zMSAxOTo1MDoyMA%3D%3D (accessed on 5 July 2020).
- 22. Ndiaye, N.; Razak, L.A.; Nagayev, R.; Adam, N. Demystifying small and medium enterprises' (SMEs) performance in emerging and developing economies. *Borsa Istanb. Rev.* **2018**, *18*, 269–281, doi:10.1016/j.bir.2018.04.003.
- Surya, B.; Ahmad, D.N.A.; Bahrun, R.S.; Saleh, H. Urban farming as a slum settlement solution (study on slum settlements in Tanjung Merdeka Village, Makassar City). IOP Conf. Ser. Earth Environ. Sci. 2020, 562, 012006, doi:10.1088/1755-1315/562/1/012006.
- Gamage, N.K.M.; Ekanayake, E.M.S.; Abeyrathne, G.A.K.N.J.; Prasanna, R.P.I.R.; Jayasundara, J.M.S.B.; Rajapakshe, P.S.K. A Review of Global Challenges and Survival Strategies of Small and Medium Enterprises (SMEs). *Economies* 2020, 8, 79, doi:10.3390/economies8040079.
- Prasanna, R.P.I.R.; Jayasundara, J.M.S.B.; Gamage, S.KN.; Ekanayake, E.M.S.; Rajapakshe, P.S.K.; Abeyrathne, G.A.K.N.J. Sustainability of SMEs in the Competition: A Systemic Review on Technological Challenges and SME Performance. J. Open Innov. Technol. Mark. Complex. 2019, 5, 100, doi:10.3390/joitmc5040100.
- Surya, B.; Saleh, H.; Remmang, H. Economic Gentrification and Socio-Cultural Transformation Metropolitan Suburban of Mamminasata. J. Eng. Appl. Sci. 2018, 13, 6072–6084, doi:10.36478/jeasci.2018.6072.6084.
- 27. Apanasovich, N.; Heras, H.A.; Parrilli, M.D. The impact of business innovation modes on SME innovation performance in post-Soviet transition economies: The case of Belarus. *Technovation* **2016**, 57, 30–40, doi:10.1016/j.technovation.2016.05.001.
- 28. Saydam, G. *Manajemen Sumber Daya Manusia: Suatu Pendekatan Mikro*; Penerbit: Djanbatan, Jakarta, 2000; ISBN 979-428-392-4. Available online: http://ailis.lib.unair.ac.id/opac/detail-opac?id=151681 (accessed on 26 October 2020).
- 29. Mangkunegara, A.A.A.P. *Manajemen Sumber Daya Manusia*; Cetakan Ke Tujuh PT. Remaja Rosdakarya, Bandung. 2007; ISBN 979-514-929-6. Available online: https://pustaka.pu.go.id/biblio/manajemen-sumber-daya-manusia-perusahaan/59BBE (accessed on 23 October 2020).
- 30. Prawirosentono, S. *Kebijakan Kinerja Karyawan*; BPFE: Yogyakarta, Indonesia, 1999; ISBN 979-503-365-4. Available online: https://opac.perpusnas.go.id/DetailOpac.aspx?id=449420 (accessed on 22 October 2020).
- 31. Pech, M.; Vrchota, J. Classification of Small- and Medium-Sized Enterprises Based on the Level of Industry 4.0 Implementation. *Appl. Sci.* **2020**, *10*, 5150, doi:10.3390/app10155150.
- Andalib, T.W.; Halim, H.A. Convergence of Conceptual Innovation Model to Reduce Challenges Faced by the Small and Medium Sized Enterprises' (SMEs) in Bangladesh. J. Open Innov. Technol. Mark. Complex. 2019, 5, 63, doi:10.3390/joitmc5030063.
- 33. Nigri, G.; Baldo, M.D. Sustainability Reporting and Performance Measurement Systems: How do Small- and MediumSized Benefit Corporations Manage Integration? *Sustainability* **2018**, *10*, 4499, doi:10.3390/su10124499.

Sustainability **2021**, 13, 3177 33 of 37

34. Diabate, A.; Sibiri, H.; Wang, L.; Yu, L. Assessing SMEs' Sustainable Growth through Entrepreneurs' Ability and Entrepreneurial Orientation: An Insight into SMEs in Côte d'Ivoire. *Sustainability* **2019**, *11*, 7149, doi:10.3390/su11247149.

- 35. Surya, B.; Saleh, H.; Ariyanto. Transformation of metropolitan suburban area (a study on new town development in Moncongloe-Pattalassang Metropolitan Maminasata). *IOP Conf. Ser. Earth Environ. Sci.* **2018**, 202, 012027, doi:10.1088/1755-1315/202/1/012027.
- 36. Tambunan, T.T.H. The impact of the economic crisis on micro, small, and medium enterprises and their crisis mitigation measures in Southeast Asia with reference to Indonesia. *Asia Pac. Policy Stud.* **2019**, 619–639, doi:10.1002/app5.264.
- 37. Surya, B.; Ruslan, M.; Abubakar, H. Inequility of Space Reproduction Control and Urban Slum Area Management Sustainability (Case Study: Slum Area of Buloa Urban Village in Makassar City). *J. Eng. Appl. Sci.* **2018**, 13, 6033–6042, doi:10.36478/jeasci.2018.6033.6042.
- 38. Bilan, Y.; Mishchuk, H.; Samoliuk, N.; Yurchyk, H. Impact of Income Distribution on Social and Economic Well-Being of the State. *Sustainability* **2020**, *12*, 429, doi:10.3390/su12010429.
- 39. Burger, N.; Chazali, C.; Gaduh, A.; Rothenberg, A.D.; Tjandraningsih, I.; Weilant, S. Reforming Policies for Small and Medium-Sized Enterprises in Indonesia. 2015. Available online: https://media.neliti.com/media/publications/456-EN-reforming-policies-for-small-and-medium-sized-enterprises-in-indonesia.pdf (accessed on 25 November 2020).
- 40. Manzoor, F.; Wei, L.; Nurunnabi, M.; Subhan, Q.A. Role of SME in Poverty Alleviation in SAARC Region via Panel Data Analysis. *Sustainability* **2019**, *11*, 6480, doi:10.3390/su11226480.
- 41. Ibarra, D.; Bigdeli, A.Z.; Igartua, J.I.; Ganzarain, J. Business Model Innovation in Established SMEs: A Configurational Approach. J. Open Innov. Technol. Mark. Complex. 2020, 6, 76, doi:10.3390/joitmc6030076.
- 42. Popescu, L.; Iancu, A.; Avram, M.; Avram, D.; Popescu, V. The Role of Managerial Skills in the Sustainable Development of SMEs in Mehedinti County, Romania. *Sustainability* **2020**, *12*, 1119, doi:10.3390/su12031119.
- Surya, B. Change Phenomena of Spatial Physical in the Dynamics of Development in Urban Fringe Area. *Indones. J. Geogr.* 2016, 48, 118–134, doi:10.22146/ijg.17631.
- 44. Coghlan, C.; Labrecque, J.A.; Ma, Y.; Dubé, L. A Biological Adaptability Approach to Innovation for Small and Medium Enterprises (SMEs): Strategic Insights from and for Health-Promoting Agri-Food Innovation. *Sustainability* **2020**, *12*, 4227, doi:10.3390/su12104227.
- 45. Schaefer, J.L.; Baierle, I.C.; Sellitto, M.A.; Siluk, J.C.M.; Furtado, J.C.; Nara, E.O.B. Competitiveness Scale as a Basis for Brazilian Small and Medium-Sized Enterprises. *Eng. Manag. J.* **2020**, doi:10.1080/10429247.2020.1800385.
- 46. Zhang, S.; Yang, D.; Qiu, S.; Bao, X.; Li, J.Open innovation and firm performance: Evidence from the Chinese mechanical manufacturing industry. *J. Eng. and Tech. Manag* 2018, 48, 76-86, doi:10.1016/j.jengtecman.2018.04.004.
- 47. Raymond, L.; Uwizeyemungu, S.; Fabi, B.; St-Pierre, J. IT capabilities for product innovation in SMEs: A configurational approach. *Inf. Technol. Manag.* **2018**, *19*, 75–87, doi:10.1007/s10799-017-0276-x.
- 48. Sellitto, M.A.; Luchese, J. Systemic Cooperative Actions among Competitors: The Case of a Furniture Cluster in Brazil. *J. Ind. Compet. Trade* **2018**, *18*, 513–528, doi:10.1007/s10842-018-0272-9.
- 49. Freixanet, J.; Renart, G.; Rialp-Criado, A. The Impact of Managers' Global Orientation on SME Export and Economic Performance. *Manag. Int. Rev.* **2018**, *58*, *571*–604, doi:10.1007/s11575-018-0358-y.
- 50. Mejri, K.; MacVaugh, J.A.; Tsagdis, D. Knowledge configurations of small and medium-sized knowledge-intensive firms in a developing economy: A knowledge-based view of business-to-business internationalization. *Ind. Mark. Manag.* **2018**, *71*, 160–170, doi:10.1016/j.indmarman.2017.12.018.
- 51. Miocevic, D.; Morgan, R.E. Operational capabilities, and entrepreneurial opportunities in emerging market firms: Explaining exporting SME growth. *Int. Mark. Rev.* **2018**, *35*, 320–341, doi:10.1108/IMR-12-2015-0270.
- 52. Carbone, J.C.; Rivers, N. The impacts of unilateral climate policy on competitiveness: Evidence from computable general equilibrium models. *Rev. Environ. Econ. Policy* **2017**, *11*, 24–42, doi:10.1093/reep/rew025.
- 53. Lan, J.; Chengjun, W.; Wei, Z. Investigation of the evaluation system of SMEs' industrial cluster management performance based on wireless network development. *Eurasip J. Wirel. Commun. Netw.* **2019**, doi:10.1186/s13638-018-1318-8.
- 54. Sellitto, M.A.; Camfield, C.G.; Buzuku, S. Green innovation and competitive advantages in a furniture industrial cluster: A survey and structural model. *Sustain. Prod. Consum.* **2020**, 23, 94–104, doi:10.1016/j.spc.2020.04.007.
- 55. Nara, E.O.B.; da Costa, M.B.; Baierle, I.C.; Schaefer, J.L.; Benitez, G.B.; do Santos, L.M.A.L.; Benitez, L.B. Expected Impact of Industry 4.0 Technologies on Sustainable Development: A study in the context of Brazil's Plastic Industry. *Sustain. Prod. Consum.* **2021**, 25, 102–122, doi:10.1016/j.spc.2020.07.018.
- 56. Surya, B. Spatial Interaction Pattern and the Process of City Activity Formation System (Case study, Ternate City, Tidore Archipelago City and Sofifi City of North Maluku, Indonesia)". Res. J. Appl. Sci. 2015, 10, 880–892. doi:10.3923/rjasci.2015.880.892
- 57. Sima, V.; Gheorghe, I.G.; Subi'c, J.; Nancu, D. Influences of the Industry 4.0 Revolution on the Human Capital Development and Consumer Behavior: A Systematic Review. *Sustainability* **2020**, *12*, 4035, doi:10.3390/su12104035.
- 58. Kuchar cíková, A.; Mi ciak, M. Human Capital Management in Transport Enterprises with the Acceptance of Sustainable Development in the Slovak Republic. *Sustainability* **2018**, *10*, 2530, doi:10.3390/su10072530.
- 59. Surya, B. The Dynamics of Spatial Structure and Spatial Pattern Changes at the Fringe Area of Makassar City. *Indones. J. Geogr.* **2015**, 47, 11–19, doi:10.22146/ijg.6926.
- Hamadamin, H.H.; Atan, T. The Impact of Strategic Human Resource Management Practices on Competitive Advantage Sustainability: The Mediation of Human Capital Development and Employee Commitment. Sustainability 2019, 11, 5782, doi:10.3390/su11205782.

Sustainability **2021**, 13, 3177 34 of 37

61. Surya, B. Spatial articulation, and co-existence of mode of production in the dynamics of development at the urban fringe of Makassar City. *J. Eng. Appl. Sci.* **2015**, *10*, 214–222, doi:10.3923/jeasci.2015.214.222

- 62. Tang, G.X.; Park, K.; Agarwal, A.; Liu, F. Impact of Innovation Culture, Organization Size and Technological Capability on the Performance of SMEs: The Case of China. *Sustainability* **2020**, *12*, 1355, doi:10.3390/su12041355.
- 63. Kuznets, S. *Economic Growth, and Income Inequality;* The American Economic Review; American Economic Association: Detroit, Michigan, U.S.A. 1995; Volume 45, pp. 1–28; Available online: https://www.jstor.org/stable/1811581?seq=1 (accessed on 20 October 2020).
- 64. Ketprapakorn, N.; Kantabutra, S. Culture Development for Sustainable SMEs: Toward a Behavioral Theory. *Sustainability* **2019**, 11, 2629, doi:10.3390/su11092629.
- 65. Saleh, H.; Surya, B.; Ahmad, D.N.A.; Manda, D. The Role of Natural and Human Resources on Economic Growth and Regional Development: With Discussion of Open Innovation Dynamics. *J. Open Innov. Technol. Mark. Complex.* **2020**, *6*, 103, doi:10.3390/joitmc6040103.
- 66. Šlaus, I.; Jacobs, G. Human Capital and Sustainability. Sustainability 2011, 3, 97–154, doi:10.3390/su3010097.
- 67. Surya, B.; Syafri, S.; Sahban, H.; Sakti, H.H. Natural Resource Conservation Based on Community Economic Empowerment: Perspectives on Watershed Management and Slum Settlements in Makassar City, South Sulawesi, Indonesia. *Land* 2020, 9, 104, doi:10.3390/land9040104.
- 68. Kijek, A.; Kijek, T. Nonlinear Effects of Human Capital and R&D on TFP: Evidence from European Regions. *Sustainability* **2020**, 12, 1808, doi:10.3390/su12051808.
- 69. Pavel, A.; Moldovan, O. Determining Local Economic Development in the Rural Areas of Romania. Exploring the Role of Exogenous Factors. *Sustainability* **2019**, *11*, 282, doi:10.3390/su11010282.
- 70. O'Reilly, C.A.; Chatman, J.A.; Caldwell, D.F. People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit. *Acad. Manag. J.* **1991**, *34*, 487–516, doi:10.2307/256404.
- 71. McKenna, E.; Beech, N. *Manajemen Sumber Daya Manusia*; Penerbit ANDI: Yogyakarta, Indonesia, 2000; ISBN 979-533-611-8. Available online: https://opac.perpusnas.go.id/DetailOpac.aspx?id=205088 (accessed on 2 November 2020).
- 72. Rowley, J. Knowledge management—The new librarianship? From custodians of history to gatekeepers to the future. *Lib. Manag.* **2003**, 24, 433–440, doi:10.1108/01435120310501112.
- 73. Simamora, H. *Manajemen Sumber Daya Manusia*; Penerbit. STIE YKPN: Yogyakarta, Indonesia, 2004; ISBN 9798146599. Available online: https://opac.perpusnas.go.id/DetailOpac.aspx?id=553197 (accessed on 7 November 2020).
- 74. Noe, R.; Hollenbeck, J.; Gerhart, B.; Wright, P. *Human Resources Management: Gaining a Competitive Advantage*, 4th ed.; McGraw-Hill/Irwin: New York, NY, USA, 2008; ISBN 1260076849. Available online: https://www.mheducation.com/highered/product/human-resource-management-noe-hollenbeck/M9781260076844.html (accessed on 12 November 2020).
- 75. Hasibuan, S.P.M. *Manajemen Dasar, Pengertian, dan Masalah*; Penerbit: Bumi Aksara, Jakarta, Indonesia, 2004; ISBN 9795265466. Available online: http://library.fis.uny.ac.id/opac/index.php?p=show\_detail&id=2068 (accessed on 12 November 2020).
- 76. Hariandja, M.T.E. Manajemen Sumber Daya Manusia: Pengadaan, Pengembangan, Pengkompesasian, dan Peningkatan Produktivitas Pegawai; PT Gramedia Widiasarana: Jakarta: Indonesia, 2002. Available online: http://repository.unpar.ac.id/bitstream/handle/123456789/1726/Marihot\_142383-p.pdf?sequence=1&isAllowed=y (accessed on 15 November 2020).
- 77. Bigné, E.; Moliner, M.A.; Sánchez, J. Perceived quality and satisfaction in multiservice organisations: The case of Spanish public services. *J. Serv. Mark.* **2003**, *17*, 420–442, doi:10.1108/08876040310482801.
- 78. Surya, B. Social Change, Spatial Articulation in the Dynamics of Boomtown Construction and Development (Case Satudy of Metro Tanjung Bunga Boomtown, Makassar). *Mod. Appl. Sci.* **2014**, *8*, 238–245, doi:10.5539/mas.v8n4p238.
- 79. Pakurár, M.; Haddad, H.; Nagy, J.; Popp, J.; Oláh, J. The Service Quality Dimensions that Affect Customer Satisfaction in the Jordanian Banking Sector. *Sustainability* **2019**, *11*, 1113, doi:10.3390/su11041113.
- 80. Fandy Tjiptono. Manajemen Jasa. Penerbit Andi Yogyakarta. 1996; ISBN 979-731-345-X. Available online: https://pustaka.pu.go.id/biblio/manajemen-jasa/54K8E (accessed on 15 November 2020).
- 81. Agarwal, A.; Kumar, G. Identify the Need for Developing a New Service Quality Model in Today's Scenario: A Review of Service Quality Models. *Arab. J. Bus. Manag. Rev.* **2016**, *6*, 1000193, doi:10.4172/2223-5833.1000193.
- 82. Syafri, S.; Surya, B.; Ridwan, R.; Bahri, S.; Rasyidi, E.S.; Sudarman, S. Water Quality Pollution Control and Watershed Management Based on Community Participation in Maros City, South Sulawesi, Indonesia. *Sustainability* **2020**, *12*, 10260, doi:10.3390/su122410260.
- 83. Clery, S.; dan Malleret, T. Berbisnis Dengan Osama Mengubah Risiko Global Menjadi Peluang Sukses. Jakarta: Serambi Ilmu Semesta. Penerbit: Serambi Ilmu Semesta, Jakarta. 2008. Available online: https://opac.perpusnas.go.id/DetailOpac.aspx?id=236596 (accessed on 25 November 2020).
- 84. Howard, J.A.; Sheth, J.N. *The Theory of Buyer Behaviour*; John Wiley: New York, NY, USA, 1979; ISBN 9788126555024; 528p. Available online: https://www.wileyindia.com/the-howard-sheth-theory-of-buyer-behavior.html (accessed on 2 October 2020).
- 85. Leber, M.; Ivaniševic, A.; Borocki, J.; Radišic, M.; Slusarczyk, B. Fostering Alliances with Customers for the Sustainable Product Creation. *Sustainability* **2018**, *10*, 3204, doi:10.3390/su10093204.
- 86. kyoung Ahn, S. Smart Consumers: A New Segment for Sustainable Digital Retailing in Korea. Sustainability 2020, 12, 7682, doi:10.3390/su12187682.

Sustainability **2021**, 13, 3177 35 of 37

87. Surya, B.; Saleh, H.; Hamsina, H.; Idris, M.; Ahmad, D.N.A. Rural Agribusiness-Based Agropolitan Area Development and Environmental Management Sustainability: Regional Economic Growth Perspectives. *Int. J. Energy Econ. Policy* **2021**, *11*, 42–157, doi:10.32479/ijeep.10184.

- 88. Cohen, B.; Winn, M. Market imperfections, opportunity, and sustainable entrepreneurship. *J. Bus. Ventur.* **2007**, 22, 29–49, doi:10.1016/j.jbusvent.2004.12.001.
- 89. Jansson, J.; Nilsson, J.; Modig, F.; Hed Vall, G. Commitment to sustainability in small and medium-sized enterprises: The influence of strategic orientations and management values. *Bus. Strategy Environ.* **2017**, *26*, 69–83, doi:10.1002/bse.1901.
- 90. Lawrence, S.; Collins, E.; Pavlovich, K.; Arunachalam, M. Sustainability practices of SMEs: The case of NZ. *Bus. Strategy Environ.* **2006**, *15* (4), 242 257, doi:10.1002/bse.533
- 91. Horak, S.; Arya, B.; Ismail, K.M. Organizational sustainability determinants in different cultural settings: A conceptual framework. *Bus. Strategy Environ.* **2018**, 27, 528–546, doi:10.1002/bse.2018.
- 92. Jamali, D.; Zanhour, M.; Keshishian, T. Peculiar strengths and relational attributes of SMEs in the context of CSR. *J. Bus. Ethics* **2009**, *87*, 355–377, doi:10.1007/s10551-008-9925-7.
- 93. Murillo, D.; Lozano, J.M. SMEs, and CSR: An Approach to CSR in their Own Words. J. Bus. Ethics 2006, 67, 227–240, doi:10.1007/s10551-006-9181-7.
- 94. Hoffman, K.D.; Bateson, J.E.G. Services Marketing: Concepts, Strategies, & Cases, 3rd ed.; Publisher: Cengage Learning: Mason, USA, 2006. Available online: https://www.amazon.com/Services-Marketing-Concepts-Strategies-Cases/dp/B0085APJSA (accessed on 8 October 2020).
- 95. Jaramillo, S.P.; Villamizar, A.M.; Osuna, I.; Roncancio, R. Mapping Research on Customer Centricity and Sustainable Organizations. *Sustainability* **2020**, *12*, 7908, doi:10.3390/su12197908.
- 96. Teece, D.J. Business Models, Business Strategy, and Innovation. Long Range Plan. 2010, 43, 172–194, doi:10.1016/j.lrp.2009.07.003.
- 97. Liang Pei, X.; Ning Guo, J.; Ju Wu, T.; Xin Zhou, W.; Pao Yeh, S. Does the Effect of Customer Experience on Customer Satisfaction Create a Sustainable Competitive Advantage? A Comparative Study of Different Shopping Situations. *Sustainability* **2020**, *12*, 7436, doi:10.3390/su12187436.
- 98. Kotler, P. Prinsip—Prinsip Pemasaran Manajemen, Penerbit: Erlangga, Jakarta. ISBN: 9789790331327. Available online: http://lib.ui.ac.id/detail?id=20363259 (accessed on 18 October 2020).
- Band, W.A. Creating Value for Customers: Designing and Implementing a Total Corporate Strategy Paperback, 1st ed.; Wiley: Hoboken, NJ, USA, 1991; ISBN-10: 0471525936. Available online: https://www.amazon.com/Creating-Value-Customers-Designing-Implementing/dp/0471525936 (accessed on 16 October 2020).
- 100. Griffin, J. Customer Loyalty: How to Earn It, How to Keep It; Simon and Chuster, Inc.: New York, NY, USA, 2002. Available online: https://www.amazon.com/Customer-Loyalty-How-Earn-Keep/dp/0787963887 (accessed on 20 October 2020).
- 101. Skowron, L.; Gasior, M.; Skowron, M.S. The Impact of a Time Gap on the Process of Building a Sustainable Relationship between Employee and Customer Satisfaction. *Sustainability* **2020**, *12*, 7446, doi:10.3390/su12187446.
- 102. Surya, B. Optimization of Function and Role of Traditional Markets in Urban Development System of Ketapang City (A Case Study: Range Sentap Market, Delta Pawan Subdistrict, Ketapang City). World Appl. Sci. J. 2015, 33, 1457–1471, doi:10.5829/idosi.wasj.2015.33.09.156111.
- 103. Moradi, Y.; Noori, S. Entrepreneurial Cooperation Model between University and SMEs: A Case Study in Iran. *Sustainability* **2020**, *12*, 9140, doi:10.3390/su12219140.
- 104. Boldureanu, G.; Ionescu, A.M.; Maria Bercu, A.; Grigorut, M.V.B.; Boldureanu, D. Entrepreneurship Education through Successful Entrepreneurial Models in Higher Education Institutions. *Sustainability* **2020**, *12*, 1267, doi:10.3390/su12031267.
- 105. Matzembacher, D.E.; Raudsaar, M.; de Barcellos, M.D.; Mets, T. Business Models' Innovations to Overcome Hybridity-Related Tensions in Sustainable Entrepreneurship. *Sustainability* **2020**, *12*, 4503, doi:10.3390/su12114503.
- 106. Schumpeter J. A. *The Theory of Economic Development*. *An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle;* Harvard University Press: Cambridge, MA, USA, 1934. Available online: https://www.hup.harvard.edu/catalog.php?isbn=9780674879904 (accessed on 2 October 2020).
- 107. Kim, D.; Lim, U. Social Enterprise as a Catalyst for Sustainable Local and Regional Development. *Sustainability* **2017**, *9*, 1427, doi:10.3390/su9081427.
- 108. Herr, H.; Nettekoven, Z.M. The Role of Small and Medium-sized Enterprises in Development What Can be Learned from the German Experience? The Views Expressed in This Publication Are Not Necessarily Those ISBN 978-3-96250-032-0 of the Friedrich–Ebert–Stiftung (FES). 2017. Available online: https://library.fes.de/pdf-files/iez/14056.pdf (accessed on 5 November 2020).
- 109. Eliakis, S.; Kotsopoulos, D.; Karagiannaki, A.; Pramatari, K. Survival and Growth in Innovative Technology Entrepreneurship: A Mixed-Methods Investigation. *Adm. Sci.* **2020**, *10*, 39, doi:10.3390/admsci10030039.
- 110. Bocken, N.M.P.; Short, S.W.; Rana, P.; Evans, S. A literature and practice review to develop sustainable business model archetypes. *J. Clean. Prod.* **2014**, *65*, 42–56, doi:10.1016/j.jclepro.2013.11.039.
- 111. Nocca, F. The Role of Cultural Heritage in Sustainable Development: Multidimensional Indicators as Decision-Making Tool. *Sustainability* **2017**, *9*, 1882, doi:10.3390/su9101882.
- 112. Segura, E.A.; de la Fuente, A.B.; González-Zamar, M.D.; Belmonte-Ureña, L.J. Effects of Circular Economy Policies on the Environment and Sustainable Growth: Worldwide Research. *Sustainability* **2020**, *12*, 5792, doi:10.3390/su12145792.

Sustainability **2021**, 13, 3177 36 of 37

113. Piwowar-Sulej, K. Human resources development as an element of sustainable HRM—with the focus on production engineers. *J. Clean. Prod.* **2021**, *278*, 124008, doi:10.1016/j.jclepro.2020.124008.

- 114. OECD. New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments. 2015. Available online: https://www.oecd.org/cfe/smes/New-Approaches-SME-full-report.pdf (accessed on 5 November 2020).
- 115. Kerr, S.P.; Kerr, W.R.; Xu, T. Personality Traits of Entrepreneurs: A Review of Recent Literature. 2017. Working Paper 18-047. Harvard Business School. Available online: https://www.hbs.edu/ris/Publication%20Files/18-047\_b0074a64-5428-479b-8c83-16f2a0e97eb6.pdf (accessed on 15 November 2020).
- 116. Denzin, N.K.; Lincoln, Y.S. Handbook of Qualitative Research. 2009. ISBN: 978-602-9033-51-9 Penerbit. Pustaka Pelajar.Yogyakarta. Available online: http://pustakapelajar.co.id/buku/handbook-of-qualitative-research/ (accessed on 18 November 2020).
- 117. Cochran, W.G. Teknik Penarikan Sampel. Edisi Ketiga. Penerbit Universitas Indonesia, Depok. 1991. Available online: http://lib.ui.ac.id/detail.jsp?id=20103076 (accessed on 16 February 2020).
- 118. Suryabrata, S. Metodologi Penelitian. Penerbit: RajaGrafindo. Jakarta. 2018. Available online: http://www.rajagrafindo.co.id/produk/metodologi-penelitian/ (accessed on 15 July 2020).
- 119. McMillan, J.H. and Schumacher, S. *Research in Education: A Conceptual Introduction*, 5th ed.; Longman, Inc.: New York, NY, USA, 2001; ISBN 9780321080875. Available online: https://www.pearson.com/us/higher-education/product/Mc-Millan-Research-in-Education-A-Conceptual-Introduction-5th-Edition/9780321080875.html/ (accessed on 20 July 2020).
- 120. Surya, B. The Processes Analysis of Urbanization, Spatial Articulation, Social Change and Social Capital Difference in the Dynamics of New Town Development in the Fringe Area of Makassar City (Case Study: In Metro Tanjung Bunga Area, Makassar City). *Procedia Soc. Behav. Sci.* **2016**, 227, 216–231, doi:10.1016/j.sbspro.2016.06.065.
- 121. Cantele, S.; Vernizzi, S.; Campedelli, B. Untangling the Origins of Sustainable Commitment: New Insights on the Small vs. Large Firms' Debate Untangling the Origins of Sustainable Commitment: New Insights on the Small vs. Large Firms' Debate. *Sustainability* **2020**, *12*, 671, doi:10.3390/su12020671.
- 122. Chowdhury, P.; Shumon, R. Minimizing the Gap between Expectation and Ability: Strategies for SMEs to Implement Social Sustainability Practices. *Sustainability* **2020**, *12*, 6408, doi:10.3390/su12166408.
- 123. Liu, L.; Wan, W.; Wu, Y.J. How Nonlocal Entrepreneurial Teams Achieve Sustainable Performance: The Interaction between Regional Entrepreneurial Ecosystems and Organizational Legitimacy. *Sustainability* **2020**, *12*, 9237, doi:10.3390/su12219237.
- 124. Surya, B. Globalization, Modernization, Mastery of Reproduction of Space, Spatial Articulation and Social Change in Developmental Dynamics in Suburb Area of Makassar City (A Study Concerning on Urban Spatial Sociology). *Asian Soc. Sci.* **2014**, *10*, 261-268, doi:10.5539/ass.v10n15p261.
- 125. Castela, B.M.S.; Ferreira, F.A.F.; Ferreira, J.J.M.; Marques, C.S.E. Assessing the innovation capability of small- and medium-sized enterprises using a non-parametric and integrative approach. *Manag. Decis.* **2018**, *56*, 1365–1383, doi:10.1108/MD-02-2017-0156.
- 126. Chang, H.-C.; Tsai, T.-M.; Tsai, C.-L. Complex organizational knowledge structures for new product development teams. *Knowl. Based Syst.* **2011**, 24, 652–661, doi:10.1016/j.knosys.2011.02.003.
- 127. Lee, K.B.; Wong, V. Identifying the moderating influences of external environments on new product development process. *Technovation* **2011**, *31*, 598–612, doi:10.1016/j.technovation.2011.06.007.
- 128. Prabowo, R.; Singgih, M.L.; Karningsih, P.D.; Widodo, E. New Product Development from Inactive Problem Perspective in Indonesian SMEs to Open Innovation. *J. Open Innov. Technol. Mark. Complex.* **2020**, *6*, 20, doi:10.3390/joitmc6010020.
- 129. Giang, M.H.; Trung, B.H.; Yoshida, Y.; Xuan, T.D.; Que, M.T. The Causal Effect of Access to Finance on Productivity of Small and Medium Enterprises in Vietnam. *Sustainability* **2019**, *11*, 5451, doi:10.3390/su11195451.
- 130. Battistella, C.; Cagnina, M.R.; Cicero, L.; Preghenella, N. Sustainable Business Models of SMEs: Challenges in Yacht Tourism Sector. *Sustainability* **2018**, *10*, 3437, doi:10.3390/su10103437.
- 131. Baierle, I.C.; Benitez.; Nara, E.O.B.; Schaefer, J.L.; Sellitto, M.A. Influence of Open Innovation Variables on the Competitive Edge of Small and Medium Enterprises. *J. Open Innov. Technol. Mark. Complex.* **2020**, *6*, 179, doi:10.3390/joitmc6040179.
- 132. Abbas, J.; Raza, S.; Nurunnabi, M.; Minai, M.S.; Bano, S. The Impact of Entrepreneurial Business Networks on Firms' Performance Through a Mediating Role of Dynamic Capabilities. *Sustainability* **2019**, *11*, 3006, doi:10.3390/su11113006.
- 133. Anjum, T.; Farrukh, M.; Heidler, P.; Tautiva, J.A.D. Entrepreneurial Intention: Creativity, Entrepreneurship, and University Support. *J. Open Innov. Technol. Mark. Complex.* **2021**, *7*, 11, doi:10.3390/joitmc7010011.
- 134. Kowalska, M. SME Managers' Perceptions of Sustainable Marketing Mix in Different Socioeconomic Conditions—A Comparative Analysis of Sri Lanka and Poland. *Sustainability* **2020**, *12*, 10659, doi:10.3390/su122410659.
- 135. Cevallos, D.M.; Alguacil, M.; Moreno, F.C. Influence of Brand Image of a Sports Event on the Recommendation of Its Participants. *Sustainability* **2020**, *12*, 5040, doi:10.3390/su12125040.
- 136. Yong Lee, J.; Hyun Jin, C. The Role of Ethical Marketing Issues in Consumer-Brand Relationship. *Sustainability* **2019**, *11*, 6536, doi:10.3390/su11236536.
- 137. Muhammad, F.; Ikram, A.; Jafri, S.K.; Naveed, K. Product Innovations through Ambidextrous Organizational Culture with Mediating Effect of Contextual Ambidexterity: An Empirical Study of IT and Telecom Firms. *J. Open Innov. Technol. Mark. Complex.* **2021**, *7*, *9*, doi:10.3390/joitmc7010009.
- 138. Mallinguh, E.; Wasike, C.; Zoltan, Z. Technology Acquisition and SMEs Performance, the Role of Innovation, Export, and the Perception of Owner-Managers. *J. Risk Financ. Manag.* **2020**, *13*, 258, doi:10.3390/jrfm13110258.

Sustainability **2021**, 13, 3177 37 of 37

139. Nguyen, Khanh T.P.; Yeung, T.; Castanier, B. Acquisition of New Technology Information for Maintenance and Replacement Policies. *Int. J. Prod. Res.* **2017**, *55*, 2212–2231, doi:10.1080/00207543.2016.1229069.

- 140. Sanderson, S.K. Makro Sosiologi: Sebuah Pendekatan Terhadap Realitas Sosial (terjemahan oleh: Wajidi F. dan Menno. Judul Asli: Macrosociology). Penerbit. Raja Grafindo Persada. 2003. Available online: http://lib.ui.ac.id/detail.jsp?id=20338353 (accessed on 28 July 2020).
- 141. Jia, C.; Tang, X.; Kan, Z. Does the Nation Innovation System in China Support the Sustainability of Small and Medium Enterprises (SMEs) Innovation? *Sustainability* **2020**, *12*, 2562, doi:10.3390/su12062562.
- 142. Surya, B. Rationalization of Community Actions, Public Spaces Privatization and Urban Informal Sector Economic Behavior (A Case: Hertasning Road Corridor of Makassar City). *Middle East J. Sci. Res.* **2015**, 23, 2219–2231, doi:10.5829/idosi.mejsr.2015.23.09.22706.
- 143. Qalati, S.A.; Li, W.; Ahmed, N.; Mirani, M.A.; Khan, A. Examining the Factors Affecting SME Performance: The Mediating Role of Social Media Adoption. *Sustainability* **2021**, *13*, 75, doi:10.3390/su13010075.
- 144. Kot, S. Sustainable Supply Chain Management in Small and Medium Enterprises. Sustainability 2018, 10, 1143, doi:10.3390/su10041143.
- Marczewska, M.; Jaskanis, A.; Kostrzewski, M. Knowledge, Competences and Competitive Advantage of the Green-Technology Companies in Poland. Sustainability 2020, 12, 8826, doi:10.3390/su12218826.
- 146. Ruchkina, G.; Melnichuk, M.; Frumina, S.; Mentel, G. Small and medium enterprises in regional development and innovations. *J. Int. Stud.* **2017**, *10*, 259–271, doi:10.14254/2071-8330.2017/10-4/20.
- 147. Tsvetkova, D.; Bengtsson, E.; Durst, S. Maintaining Sustainable Practices in SMEs: Insights from Sweden. *Sustainability* **2020**, *12*, 242, doi:10.3390/su122410242.
- 148. Horváthová, P.; Mikušová, M.; Kashi, K. Comparison of Human Resources Management in Non-Family and Family Businesses: Case Study of the Czech Republic. *Sustainability* **2020**, *12*, 5493, doi:10.3390/su12145493.
- 149. Surya, B.; Syafri, S.; Abubakar, H.; Sahban, H.; Sakti, H.H. Spatial Transformation of New City Area: Economic, Social, And Environmental Sustainability Perspective of Makassar City. *J. Southwest Jiaotong Univ.* **2020**, *55*, 1–29, doi:10.35741/issn.0258-2724.55.3.30.
- 150. Duygulu, E.; Ozeren, E.; I¸sıldar, P.; Appolloni, A. The Sustainable Strategy for Small and Medium Sized Enterprises: The Relationship between Mission Statements and Performance. *Sustainability* **2016**, *8*, 698, doi:10.3390/su8070698.
- 151. Birkel, H.S.; Veile, J.W.; Müller, J.M.; Hartmann, E.; Ingo Voigt, K. Development of a Risk Framework for Industry 4.0 in the Context of Sustainability for Established Manufacturers. *Sustainability* **2019**, *11*, 384, doi:10.3390/su11020384.
- 152. Dicuonzo, G.; Galeone, G.; Ranaldo, S.; Turco, M. The Key Drivers of Born-Sustainable Businesses: Evidence from the Italian Fashion Industry. *Sustainability* **2020**, *12*, 10237, doi:10.3390/su122410237.
- 153. Hamdani, J.; Wirawan, C. Open Innovation Implementation to Sustain Indonesian SMEs. *Procedia Econ. Financ.* **2012**, *4*, 223–233, doi:10.1016/S2212-567100337-1.
- 154. Surya, B.; Muhibuddin, A.; Suriani, S.; Rasyidi, E.S.; Baharuddin, B.; Fitriyah, A.T.; Abubakar, A. Economic Evaluation, Use of Renewable Energy, and Sustainable Urban Development Mamminasata Metropolitan, Indonesia. *Sustainability* **2021**, *13*, 1165, doi:10.3390/su13031165.
- 155. Davidescu, A.A.; Apostu, S.A.; Pantilie, A.M.; Amzuica, B.F. Romania's South-Muntenia Region, towards Sustainable Regional Development. Implications for Regional Development Strategies. *Sustainability* **2020**, *12*, 5799, doi:10.3390/su12145799.
- 156. Meré, J.O.; Remón, T.P.; Rubio, J. Digitalization: An Opportunity for Contributing to Sustainability from Knowledge Creation. *Sustainability* **2020**, *12*, 1460, doi:10.3390/su12041460.
- 157. Khalique, M.; dan bin Shaari, J.A.N. Impact of Intellectual Capital on the Organizational Performance of Islamic Banking Sector in Malaysia. *Asian J. Financ. Account.* **2013**, *5*, 75–83, doi:10.5296/ajfa.v5i2.4005.
- 158. Jayasundara, J.M.S.B.; Rajapakshe, P.S.K.; Prasanna, R.P.I.R.; Gamage, N.; Kumara, S.; Ekanayake, E.M.S.; Abeyrathne, G.A.K.N.J. The Nature of Sustainability Challenge in Small and Medium Enterprises and its Management. Munich Personal RePEc Archive (MPRA). 2019, Available online: https://mpra.ub.uni-muenchen.de/98418/ (accessed on 26 October 2020).



## 22% Overall Similarity

Top sources found in the following databases:

- 8% Internet database
- Crossref database
- 13% Submitted Works database
- 16% Publications database
- Crossref Posted Content database

## **TOP SOURCES**

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

Firman Menne, Batara Surya, Muhammad Yusuf, Seri Suriani, Muhlis R Crossref	2%
Adtalem Global Education, Inc. on 2023-01-09 Submitted works	2%
Batara Surya, Syafri Syafri, Hadijah Hadijah, Baharuddin Baharuddin, A  Crossref	1%
Batara Surya, Andi Muhibuddin, Seri Suriani, Emil Salim Rasyidi et al. "E  Crossref	1%
The University of Fiji on 2022-07-02 Submitted works	1%
Aristotle University of Thessaloniki on 2021-01-13 Submitted works	<1%
Syafri Syafri, Batara Surya, Ridwan Ridwan, Syamsul Bahri, Emil Salim  Crossref	<1%
academic-conferences.org	<1%



Batara Surya, Hae Crossref	eruddin Saleh, Seri Suriani, Harry Hardian Sakti, H	adija.
School of Busines Submitted works	ss and Management ITB on 2021-09-20	
Kisii University on Submitted works	2018-01-09	
scindeks-clanci.c	eon.rs	
Alba Manuaca Da	lilia Eagabar Divara "Evacllanas in Sustainable M	lana
Crossref	lilis Escobar Rivera. "Excellence in Sustainable M	
Crossref	ıkmawati Mardjuni, Muhammad Yusuf, Muhlis Ru	
Crossref Firman Menne, Su		
Crossref  Firman Menne, Su  Crossref  biorxiv.org	ıkmawati Mardjuni, Muhammad Yusuf, Muhlis Ru	
Firman Menne, Su Crossref  biorxiv.org Internet  semanticscholar.	ıkmawati Mardjuni, Muhammad Yusuf, Muhlis Ru org	



University Der Es Submitted works	Salaam on 2021-07-17
PSB Academy (A	CP eSolutions) on 2022-03-13
<b>Batara Surya, Ha</b> Crossref	msina Hamsina, Ridwan Ridwan, Baharuddin Baharud
<b>Batara Surya, Sy</b> Crossref	afri Syafri, Hernita Sahban, Harry Hardian Sakti. "Natur.
Northcentral on Submitted works	2022-10-17
Perguruan Tingg Submitted works	i Pelita Bangsa on 2020-08-19
Albukhary Intern Submitted works	ational University on 2023-04-13
RMIT University Submitted works	on 2021-06-02
University of Hul	on 2022-05-20
University of Stra	thclyde on 2022-08-10



journals.researchsynergypress.com Internet	<1%
Higher Education Commission Pakistan on 2022-10-20 Submitted works	<1%
Batara Surya, Agus Salim, Hernita Hernita, Seri Suriani, Herminawaty A	<1%
Batara Surya, Despry Nur Annisa Ahmad, Harry Hardian Sakti, Hernita  Crossref	<1%
Northcentral on 2021-10-17 Submitted works	<1%
University of Witwatersrand on 2022-01-04 Submitted works	<1%
Cardiff University on 2022-04-26 Submitted works	<1%
University of West London on 2021-10-20 Submitted works	<1%
jurnal.narotama.ac.id Internet	<1%
"Sustainable Education and Development - Sustainable Industrializatio  Crossref	<1%
Sheffield Hallam University on 2023-04-20 Submitted works	<1%
eudl.eu Internet	<1%



	UT University on 2021-04-16 bmitted works	<
	Perspectives and Trends in Education and Technology", Springer Scie	<
	niversitas Jenderal Soedirman on 2020-09-23 bmitted works	<
	di Wijaya, Jiuhardi Jiuhardi, Saida Zainurossalamia ZA, Nurjanana Nu	<
	kandar Ali Qalati, Wenyuan Li, Naveed Ahmed, Manzoor Ali Mirani, A	<
	niversiti Teknologi MARA on 2015-12-04 bmitted works	<
	uoXiang Tang, Kwangtae Park, Anurag Agarwal, Feng Liu. "Impact of I	<
	niversiti Sains Malaysia on 2012-12-10 bmitted works	<
	dtalem Global Education, Inc. on 2023-01-09	<
	ancosa on 2020-09-16 bmitted works	<
W	ini Fetia Wardhiani, Tuti Karyani, Iwan Setiawan, Ery Supriyadi Rustidj	<



Postgraduate Schools - Limkokwing University of Creative Technology Submitted works	<19
Guobiao Zhang, Tao Wang. "Financial Budgets of Technology-Based S  Crossref	<1%
Haeruddin Saleh, Batara Surya, Despry Nur Annisa Ahmad, Darmawati  Crossref	<1%
Loughborough University on 2020-09-25 Submitted works	<19
University of Central England in Birmingham on 2022-12-07 Submitted works	<19
Cheche Duan, Yicheng Zhou, Dehong Shen, Shengqiao Lin, Wei Gong, J	<19
Glasgow Caledonian University on 2022-04-25 Submitted works	<19
rfan Ridwan Maksum, Amy Yayuk Sri Rahayu, Dhian Kusumawardhani	<19
Laureate Higher Education Group on 2022-09-01 Submitted works	<1%
RPIR Prasanna, JMSB Jayasundara, Sisira Kumara Naradda Gamage, E	<1%
Shiyong Zheng, Xinsen Ye, Weili Guan, Yuping Yang, Jiaying Li, Biqing	<1%
Γarun Nanda, Himanshu Gupta, Tejinder P. Singh, Simonov Kusi-Sarpo  Crossref	<19



Universitas Hasanuddin o Submitted works	n 2021-04-05	<
Universitas Mataram on 2 Submitted works	2023-01-20	<
<b>Universiti Sains Malaysia</b> Submitted works	on 2012-08-17	<
University of Huddersfield	d on 2021-03-28	<
etd.uum.edu.my Internet		<
rsisinternational.org		<
<b>Alim Syariati. "SMEs' Perf</b> Crossref	formance in Indonesia: The Nexus of Notab	le <
CVC Nigeria Consortium (	on 2018-02-14	<
Intercollege on 2023-03-2 Submitted works	24	<
Krzysztof Ejsmont. "The I Crossref	mpact of Industry 4.0 on Employees—Insigh	nts <
Magdalena Kowalska. "Co	onceptualization of Sustainable Marketing T	Го <



Unicaf University on 20 Submitted works	22-07-07	
Universitas Negeri Jaka Submitted works	arta on 2020-07-13	
University of Derby on 2 Submitted works	2019-10-31	
University of Technolog	gy, Mauritius on 2023-0	2-10
University of Ulster on Submitted works	2022-06-06	
University of Warwick of Submitted works	on 2021-09-19	
"Complex, Intelligent ar	nd Software Intensive S	ystems", Springer Scienc
Mancosa on 2021-07-3 Submitted works	0	
<b>Asia e University on 20</b> Submitted works	23-02-07	
Mancosa on 2023-04-2 Submitted works	.5	
<b>Rana Taha, Noor Taha.</b> Crossref	"The role of human res	ources management in e
South Bank University (	on 2008-11-28	



93	University of Warwick on 2017-08-24 Submitted works	<1%
94	econpapers.repec.org	<1%



## Excluded from Similarity Report

- Bibliographic material
- Cited material

- Quoted material
- Manually excluded sources

## **EXCLUDED SOURCES**

repository.unibos.ac.id Internet	78%
researchgate.net Internet	78%
Hernita Hernita, Batara Surya, Iwan Perwira, Herminawaty Abubakar, Muham	74%
mdpi.com Internet	73%
mdpi-res.com Internet	73%
www2.mdpi.com Internet	73%
Batara Surya, Firman Menne, Hernita Sabhan, Seri Suriani, Herminawaty Abub	14%
res.mdpi.com Internet	10%
econstor.eu Internet	10%
Batara Surya, Seri Suriani, Firman Menne, Herminawaty Abubakar, Muhamma  Crossref	10%



Batara Surya, Hernita Hernita, Agus Salim, Seri Suriani, Iwan Perwira, Yulia Yul  Crossref	8%
Batara Surya, Agus Salim, Hernita Hernita, Seri Suriani, Firman Menne, Emil S	6%
zbw.eu Internet	6%
ideas.repec.org Internet	5%
doaj.org Internet	5%
ouci.dntb.gov.ua Internet	5%
scilit.net Internet	4%
Batara Surya, Hadijah Hadijah, Seri Suriani, Baharuddin Baharuddin, A. Tenri F	4%