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Peruvian Artisanal Products and the Effect of COVID-19 on Artisanal Enterprises

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Abstract:

The objective of this study was to identify the main artisanal products marketed by Peruvian artisanal enterprises and analyze the effects of COVID-19 on these enterprises. The research method is based on the literature review using Scopus, WoS, Emerald, EBSCO, and gray literature databases. The analysis items were: a) the supply of Peruvian handicraft products or handicrafts and b) the political, economic, social, technological, environmental, and legal factors (PESTEL) of these enterprises. The main results show that Peruvian artisans offer ceramic products, handmade textiles, souvenirs made from "*Lagenaria Vulgaris*", religious sculptures made of chalk and plaster, objects carved in wood, palm seeds, stone and bone, hats, leather, wax, and metal objects, paintings by popular painters, objects made from animal horns and modeled products from pasta or food which are consumed during religious festivals. The research highlights opportunities and challenges in the external environment that entrepreneurs and authorities need to consider. This study is novel because it disseminates the Peruvian classification of handicrafts 2021 internationally. This study is applicable in the face of the health and economic crisis that forces authorities and businessmen to reactivate the economy and employment. For this reason, it is important to analyze the external environment of artisanal enterprises and contribute to the open system of organizations.

Keywords: crafts, entrepreneurs, PESTEL analysis, strategic factors, rural tourism.

秘魯手工制品和新冠肺炎對手工企業的影響

摘要:

本研究的目的是確定秘魯手工企業銷售的主要手工產品，並分析新冠肺炎對這些企業的影響。研究方法基於使用斯科普斯、沃斯、翠、EBSCO和灰色文獻數據庫的文獻綜述。分析項目是：a) 秘魯手工藝品或手工藝品的供應；b) 這些企業的政治、經濟、社會、技術、環境和法律因素（佩斯泰爾）。主要結果表明，秘

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鲁工匠提供陶瓷产品、手工纺织品、用“紫薇”制成的纪念品、用粉笔和石膏制成的宗教雕塑、用木头、棕榈籽、石头和骨头、帽子、皮革、蜡和金属雕刻的物品物品、流行画家的画作、动物角制成的物品以及宗教节日期间食用的面食或食物的模型制品。该研究强调了企业家和当局需要考虑的外部环境中的机遇和挑战。这项研究是新颖的，因为它在国际上传播了秘鲁2021年手工艺品分类。这项研究适用于面对迫使当局和商人重新激活经济 and 就业的健康和经济危机。因此，分析手工业企业的外部环境并为组织的开放系统做出贡献是很重要的。

关键词：手工艺、企业家、佩斯泰尔分析、战略因素、乡村旅游。

1. Introduction

Globally, companies have been affected as a result of COVID-19 (Kuckertz, 2021). Many of them have been able to accommodate to the new context, benefiting from it, due to the resilience developed (Brown & Cowling, 2021), but others have been harmed. The downside of this new scenario has been job losses or reduced working hours (Yue & Cowling, 2021). In addition, the different governmental measures of social confinement implemented in each country affected the income of each family (Apaza et al., 2020), dissatisfaction and discomfort of employees were identified (Millán et al., 2013), but labor situations were adjusted to each business reality (Hamilton, 2000). In Peru, there were massive lay-offs, reduced working hours, and adaptation of face-to-face work to remote or virtual work.

The enterprises, which made it possible to visualize a shortage in a given sector and, therefore, new opportunities (Mollenkopf-Pigsley, 2021), achieved financial independence and eluded unemployment (Taylor, 1996). The new context has allowed many of these ventures to adapt and innovate, developing strategies (Antcliff et al., 2020), especially incorporating virtual platforms into the different activities of the logistics chain (Turkina, 2018), other ventures, however, have registered a drop in the commercialization of their products.

The handicraft sector is culturally important (Li et al., 2020; Meshram et al., 2021; Zhang et al., 2021) since it involves using knowledge of ancestral techniques and local material connecting generations (Sallum & Noelli, 2021). Furthermore, handicrafts are also related to ethnic communities (Keskitalo et al., 2021), which have suffered the effects of COVID-19. This sector, before the pandemic, provided work directly and indirectly to the population in the interior of the territory.

Peruvian handicrafts are diverse according to the localities and the inputs used to create the products. Such is the case of Peruvian ceramics, which, according to VanValkenburgh et al. (2017), reflects the "creativity of native potters who adapted indigenous firing technologies and experimented with different parameters in the process of forging a new decorative tradition." However, the inputs used by artisans to create their products have been ignored in national statistics. They receive little attention from authorities

and public policy managers to potentiate these ventures, especially in indigenous systems (Cotta, 2017).

In addition, the main difficulties in the handicraft sector are related to the scarce dissemination and lack of knowledge of the handicraft lines and sub-lines. It is not clear what main handicraft products are produced and offered in each territory within Peru and what effect of COVID-19 is on handicraft enterprises? There is no evidence in the scientific literature on the subject.

Although, as a result of the pandemic, the General Directorate of Handicrafts of the Peruvian Ministry of Foreign Trade and Tourism updated the national classification of handicraft lines. These regulations represent a step forward for handicraft entrepreneurs.

Our motivation was to identify Peruvian handicraft products to increase the awareness of the existing typology at the national level and reactivate these businesses. In short, this research also analyzed the environment of handicraft businesses with COVID-19 and opted for the application of PESTEL analysis, which is a qualitative tool used to analyze the macro-environment (Thakur, 2021) and especially to have a clear vision of how the external environment influences a business or a company (Song et al., 2017), and to characterize and segment it, by identifying opportunities and threats (Castañeda-Ayarza & Godoi, 2020). Moreover, this analysis is employed by several companies to analyze the changing external context (Jiang et al., 2018; Pan et al., 2019).

2. Literature Review

Artisans perform manual production, creating value from their products (Solomon & Mathias, 2020). They are the main actors who star in this study, in whose hands styles and gestures are adjusted for the love of vocation (Larrosa Bondía, 2020), becoming a "laboratory of sensory, emotional and symbolic experiences" (Guerrero et al., 2020). His work is characterized by considering beauty as the ultimate goal of his product, seeking to perfect his technique, to differentiate himself as a creator and producer (Millán et al., 2013), leaving a legacy to the cultural heritage by embodying customs and traditions of a particular region (Guerrero et al., 2020).

A previous study indicates that the largest number of artisans worldwide are female, whose enterprises seek export opportunities and expand into markets beyond their localities (Nest, 2019); likewise, it is women who finish the product, considering the detail and finishes of

fine work that certain pieces require (Morales Figueroa, 2019).

Previous studies have shown that traditional crafts are in low demand and that the knowledge passed down through generations could disappear due to the lack of interest of the new generations (Hurtado & Castillo, 2020; Tapia, 2013). In this context, it is necessary to use virtual platforms to promote the products, history, and importance of local crafts (Hurtado & Castillo, 2020). In addition, there are few Peruvian studies in the scientific literature about artisans, and it is pertinent to reevaluate their role and transfer the legacy that their enterprises have left as yet.

The contributions of entrepreneurship are very significant in the family economy and the country's development (Burbano et al., 2019). For this reason, strategies should be aimed to increase market participation (Domínguez & Vargas-Hernández, 2019). Some of them could be regulations in the national market and training to develop management skills, which would allow adequate strategic planning (Burbano et al., 2019), even non-refundable economic incentives (Ministry of Foreign Trade and Tourism, 2021b), which would favor economic reactivation. The formalization, nonetheless, of all businesses is necessary.

In opposition to the research conducted by (Solomon & Mathias, 2020), Peruvian artisanal enterprises consider the enterprise's cost-benefit so that the economic profit margins support the valorization of labor (Chappe & Lawson Jaramillo, 2020).

In a lot of South American countries such as Colombia, the handicraft sector is classified as; indigenous crafts that are transferred from generation to generation and conceptualize the ethnic essence, traditional popular crafts that represent the mixture of cultures and contemporary crafts or neo-crafts that are characterized by the use of modern technology and aesthetic principles (Artesanías de Colombia, S. A. - CENDAR, 2014).

According to Orefici (2017), in Peru, since the appearance of the first cultures and societies such as Nazca, important technological advances have been developed in the manufacture of ceramics and textiles, and this socio-cultural and economic development has expanded to other societies. Nevertheless, Underberg-Goode (2014) argues that the historical links established between ancient and modern societies have allowed the recovery of craft techniques and indigenous crops. Therefore, artisanal products show the cultural resources that emerge during market activities (Collaredo-Mansfeld, 2011).

Artisanal entrepreneurs have established a production and commercialization dynamic, even across borders from the department of Cuzco-Peru to Brazil (Izaguirre, 2019). Moreover, tourism has generated additional income for the indigenous and Amazonian population through the merchandising of handicrafts (Koutra, 2017). Also, handicraft weavings have

transformed the artisans' homes into textile exhibition centers for tourists (Garcia, 2018).

3. Materials and Methods

3.1. Research Design

The research is based on a qualitative approach. According to Kotková Strítešská and Sein (2021), the qualitative method allows understanding the activities from the academic source that are identified to explain and interpret, valuing real experiences. For their part, Agwu and Onwuegbuzie (2018) assert that the secondary sources method allows to describe, explain and validate the findings obtained and infer the findings that have been validated in a review study.

The analyzed items were: a) the supply of Peruvian artisanal products or handicrafts, and b) the political, economic, social, technological, environmental, and legal factors of the environment of these ventures. The PESTEL analysis contributes significantly to the systemic approach of organizations because it allows understanding the interactions that exist between social, political, economic, environmental, legal, and technological development (Estes, 2018). Studies by Agwu and Onwuegbuzie (2018), Jadan (2020), Nurmi and Niemelä (2018) substantiate its usefulness since the organization is constantly interacting with the environment. For this reason, this analysis allowed to meet the objectives of the study based on the literature review.

3.2. Data Collection

The research is based on secondary information. According to Gębczyńska and Brajer-Marczak (2020), the most commonly used databases are Scopus, Springer, WoS, EBSCO, and Emerald, and these databases were used for data collection in the research. In addition, information was collected from gray literature. According to Paez (2017), gray literature provides access to important information not found in commercial literature, although it has some downsides because sometimes, it generates duplicate documents. Nevertheless, we collected information from governmental websites, books, public regulatory documents, and journals relevant to the topic, the content of this information was analyzed and verified by the authors.

4. Results

4.1. Main Products Offered by Peruvian Artisans

According to the recent national classification of handicrafts led by the General Directorate of Handicrafts of the Ministry of Foreign Trade and Tourism, Peruvian handicrafts are divided into twenty craft lines and sixty craft sub-lines (Figure 1). This classification is based on: a) the production technique used by the artisan, b) the raw materials and inputs used by the artisan, and c) the use or function that identifies

the craft lines. However, the artisanal sub-lines correspond according to the homogeneity of the product with the artisanal line.

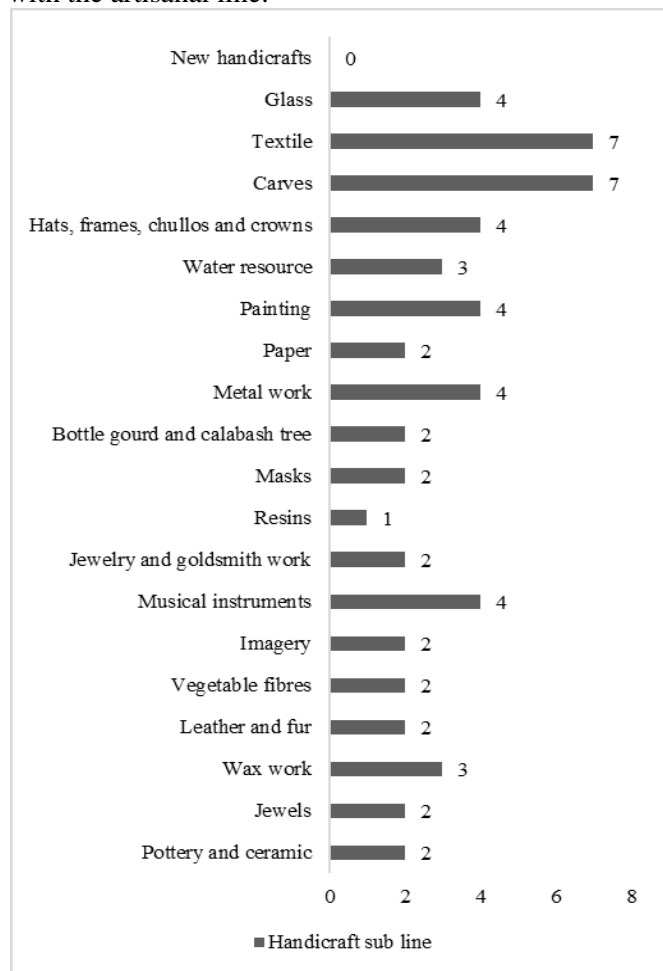


Figure 1. National classifier of handicrafts 2021

The handicraft companies have mainly offered ceramic products, handmade textiles, objects made with gourd "*Lagenaria Vulgaris*", religious sculptures made with chalk and plaster mixed or with other materials; objects carved in wood, palm seeds, stones, and bones; hats, leather, wax, and metal objects; paintings of traditional painters; objects made with cow or bull horns, but some companies diversify their marketing by offering products derived from the carob tree "*Ceratonia siliqua*" and bees "*Apis mellifera*".

Ceramics and handmade textiles are developed in different regions within the Peruvian territory, but religious images are modeled mainly in Ayacucho, Cusco, Junín, Lambayeque, and Puno. Carved products made of wood, stone, bone, metal, and folk painting are mainly developed in the Peruvian jungle (Table 1).

Table 1. Departments where the main Peruvian handicraft products are produced (Own elaboration based on (Tapia, 2013; Villegas Robles, 2016))

| Peruvian Department | A | B | C | D | E | F | G | H | I | J |
|---------------------|---|---|---|---|---|---|---|---|---|---|
| Amazonas* | | | | | | | | | | |
| Ancash | | | | | | | | | | |
| Apurímac | | | | | | | | | | |
| Arequipa | | | | | | | | | | |
| Ayacucho | | | | | | | | | | |

| | |
|----------------|--|
| Cajamarca | |
| Cusco | |
| Huancavelica | |
| Huánuco | |
| Ica | |
| Junín | |
| La Libertad | |
| Lambayeque | |
| Lima | |
| Loreto* | |
| Madre De Dios* | |
| Piura | |
| Puno | |
| San Martín* | |
| Tacna | |
| Ucayali* | |

Note: A: Textiles, B: Ceramic, C: Imaginary, D: Talla, E: Metallistry, Popular painting, G: Hat, H: Hides and skins, I: Waxes, J: Mates (*Lagenaria Vulgaris*).

* Territories that belong to the rainforest. In addition to mate (*Lagenaria Vulgaris*), tutumo (*Crescentia Cujete*) is used in these territories.

The scope of the results show that the territories of Amazonas, Ayacucho, Cusco, Junín, Lambayeque, Loreto, Madre de Dios, Puno, San Martín and Ucayali produce and offer 6 to more types of handicrafts.

4.2. Challenges of Artisanal Enterprises

From a general standpoint, the effects of COVID-19 on artisanal enterprises are detailed through the PESTEL analysis.

4.2.1. Political Challenges

Tourism programs and policies are important to promote businesses (Ede, 2021), especially those that arise from entrepreneurship, either through financing or training entrepreneurs to improve their business strategies. Many tourism-related enterprises have been affected by the current situation (Kuckertz, 2021). One of the most vulnerable sectors is the handicraft sector, given that restrictions have affected the movement of tourists or consumers to the physical sales stands or handicraft galleries. In addition, international trade was severely affected by the closing of borders, and it was not possible to export handicrafts. The level of government activity in the last year was focused on two aspects: on the one hand, the sanitary emergency and the confinement of the entire population and, on the other hand, the partial confinement and the gradual resumption of the economic activity (Blackman et al., 2020). The stability and political risks that each government faced due to the pandemic continue, generating tension due to the demand for vaccines, intensive care unit (ICU) beds, justice in terms of equality of opportunities, employment, tax reductions, basic food, citizen security, demanded by the population. Political instability was worsened by the pandemic and inadequate public management and government policy, as was the case in Peru, which had three presidents of the republic in less than a month. In general, social and economic policies in underdeveloped countries have been more affected than

in northern countries. In addition, public indebtedness continues to be a long-term fiscal mortgage and a rather poor level of tax collection (Central Reserve Bank of Peru, 2020). Not all artisanal enterprises are formalized and contribute to tax collection.

4.2.2. Economic Challenges

This factor is closely related to public policy on tourism and artisanal production. Purchasing power, confidence, and consumer behavior are associated with the processes of recession and global economic impact caused by the pandemic (Li et al., 2020), as well as widespread unemployment (Ali et al., 2021). In Peru, through Supreme Decree No. 044-2020-PCM, the Peruvian government established economic measures to mitigate the impact of the pandemic, halting business activity since March 16, 2020. The measures focused on reducing the cost of financing, reducing the long-term interest rate and exchange rate volatility, and providing liquidity to the financial system. Between the beginning of 2019 and the end of 2020, the inflation range oscillated between 1.57% and 1.68%, seeking an expectation similar to the economies of developed countries and a stable currency. Credit to the private sector behaved countercyclically with a year-on-year rate of 13.1%, with a higher growth rate related to micro, small and medium-sized companies with the "Reactive Peruvian program", to project the recovery of economic activity, and forecast a fiscal deficit of 9.2 to 8.6% of gross domestic product (GDP) for 2020 and 5.1 to 4.4% for 2021. However, the 2020 GDP registered a contraction of 11.5% regarding what was projected. In addition, the balance of payments registered a surplus of 0.7% due to the contraction of company profits and foreign investment in Peru and the reduction of exports (including ceramics) by 18.3% for January-September 2019 (Central Reserve Bank of Peru, 2020).

Furthermore, economic factors, such as per capita income, income growth, and trade balance, have been affected by the paralysis of the national and global economy (Ali et al., 2021). The most affected sectors were trade and services, including restaurants and the tourism industry (Parfenov et al., 2021), generating a loss of 3.2 million jobs during the forced encirclement in the Peruvian case (Central Reserve Bank of Peru, 2020). However, with Supreme Decree No. 080-2020-PCM started phase three to reactivate the activity of the tourism and artisanal sector gradually, this was extended to phase four as of September 26, 2020, increasing the capacity of shopping malls, cinemas, gyms, restaurants, international flights, museums, zoos, theme parks and so on. This relaxation of Phase four has favored artisanal businesses to reopen retail sales and exports.

4.2.3. Social Challenges

Factors that directly affect consumers' behavior, interests, and opinions also influence purchasing decisions on various handicraft products. In general,

social confinement caused high levels of stress and depression in consumers (Ali et al., 2021).

Demographic and cultural changes in certain regions according to population density evidenced unequal access to basic services. In Peru, during 2020, only 89.5% of the population consumed water from the public network, 81.5% had access to the sewerage network, increasing by 6.6% compared to the previous year. 95.3% of the population had access to electricity (National Institute of Statistics and Informatics, 2021), but the cost of this energy was disproportionate in some territories due to the lack of registration of meters because of social confinement.

The level of income was more limited for the poor and extremely poor segments of the country. The average monthly income of the urban population stood at S/1 414.7, decreasing by 11.3% compared to 2019. Income decreased by 15% for the population between 25 and 44 years of age and by 9% for the population over 45 years of age. The population with higher education had an income of S/2 007.7 soles, the population with secondary education reached an income of S/1 112.4 soles, while the income of the population with primary education registered S/778.1 soles (National Institute of Statistics and Informatics, 2021).

In Peru, it was observed that social confinement limited consumers of religious tourism or pilgrims from attending celebrations or rituals, reducing the sale of handicraft products such as souvenirs, ceramics, and engravings, among others. However, in other countries, religious mass gatherings or religious tourism were associated with the rapid spread of COVID-19 (Mubarak & Zin, 2020).

Social confinement forced the underprivileged population to become literate in using digital platforms for teaching and learning. Artistic and handicraft training centers also provided online classes in some locations in the interior of Peru. In addition, handicraft entrepreneurs had to learn how to use online payment tools with their suppliers to reduce the spread of COVID-19. On the other hand, 80.9% of urban adolescents and 73.9% of rural adolescents aged 12 to 16 received virtual classes (National Institute of Statistics and Informatics, 2021). However, it was observed that most entrepreneurs could not afford to pay for their children's private education, and their children moved to public schools.

4.2.4. Technological Challenges

The fourth industrial revolution incorporates ICTs in different areas, especially in commerce, thus ensuring the survival of businesses (Akpan, Udoh et al., 2020). Businesses in the cloud are available, offering different options for use, from social networks and paid domains like search engine marketing (SEM) or free domains like search engine optimization (SEO). SEO is affordable and requires minimal technical knowledge to set up and maintain the platforms.

Technology can be essential, especially in unanticipated and unusual situations, such as the

COVID-19 context (Akpan, Soopramanien et al., 2020); hence, 2D and 3D virtual realities, as well as platforms, are beneficial in processes and activities, improving presentation and providing better communication (Akpan & Shanker, 2019). Videoconferences conducted via Zoom have allowed maintaining social links. They have been used for business meetings, governmental discussions (Puddister & Small, 2020), and even the development of classes and trade of handcrafted products.

In a changing context such as the one we live in, those companies that incorporate technology in the marketing phase are companies that innovate (Cowling et al., 2020) and begin to be part of the new era of marketing, the famous e-commerce, whose marketing strategies should focus on exploiting the different opportunities and competitive advantages provided by the use of platforms (Chaston et al., 2001); where physical borders are left aside (Hughes et al., 2020), and allows visualizing products and services, competing in national and international markets. On the other hand, the usefulness of artificial intelligence and intelligent devices to mobilize the population during the pandemic was evidenced (Casado-Aranda et al., 2021). This is a key strategic factor in the mass communication of public products, especially in the tourism and creative industries, since the technological infrastructure in sectors such as mining has improved in recent years, but not in art and culture. However, it is possible to improve the quality and quantity of handicraft products (Paryanto et al., 2020).

4.2.5. Environmental Challenges

Consumers of handicraft products are increasingly aware and informed about the effects of economic activity on the environment (Nizaar et al., 2020). In addition, artisanal entrepreneurs use leftover products from the sea and plants to make specific handicrafts. These products are offered especially in sunny and beach tourism areas or in rural localities. Likewise, ecotourism businesses offer textile or straw handicrafts, ceramics, hats, and others; these businesses faced difficulties before the pandemic. They did not retain the youth labor force because they migrated to the city; however, with the pandemic, the influx of this population in rural areas increased (Poudel, 2021).

On the other hand, some conflicts associated with land grabbing in the Amazon were mitigated by the return of the city population to their villages due to the social enclosure and the expulsion of gold miners from their lands (Menton et al., 2021). The artisanal creative economy is underdeveloped in the Amazon, and new lines of research are important (Petry et al., 2020). Another favorable effect on the environment was reducing maritime traffic (Huveneers et al., 2021). Social enclosure improved environmental health, specifically dissolved oxygen parameters, phytoplankton, and fish density and reduced the concentration of macroplastics (Patterson Edward et al.,

2021). Macroplastics are wastes that affect not only flora and fauna but also sustainable tourism. Greenhouse gas emissions were temporarily reduced in the social enclosure (Caldevilla-Domínguez et al., 2021), positively impacting the air quality, wind speed, and ultraviolet radiation (Ali et al., 2021). These environmental factors are key in the sustainability of aquatic, terrestrial, and aerial tourism activities where a specific consumer is mobilized. Another important aspect was improvements in the environmental monitoring of wastewater that represented an early warning of COVID-19 transmission (Casado-Aranda et al., 2021). Many artisanal and tourism-related businesses were waiting for the results to reopen. Environmental changes are generating new climate awareness, and local governments are promoting a new way of coexisting and protecting cities and rural spaces (Caldevilla-Domínguez et al., 2021).

4.2.6. Legal Challenges

It is important to consider how a legal aspect can affect the development of economic activity, as in the case of handicraft businesses. During the pandemic, various practical implications of tourism policy and the contribution of academia were debated by business managers (Sobaih et al., 2021). Labor legislation was modified in some countries to establish new modalities for contracts, shifts, and fees for health care and service personnel. In the tourism industry, contracts were also modified, and several businesses were closed, including the handicraft sector. Likewise, tourism packages were not taken care of, reimbursement amounts were reduced, and several court cases on the subject may have appeared (Serohina et al., 2021). Exports of handicrafts were also affected by the legal devices of social encirclement and border closure. Policy guidelines were established to protect people at risk of COVID-19: people over 60 years old with obesity, arterial hypertension, cardiovascular disease, diabetes mellitus, chronic pulmonary disease, immunosuppressive disease, and cancer. Artisanal entrepreneurs are generally older and at higher risk of contracting the disease. In addition, legal guidelines for non-face-to-face training of teachers and operators were key to protecting those at the highest risk of contracting COVID-19, and virtual classes reduced the carbon footprint (Filimonau et al., 2021). On the other hand, the tax legislation helped several entrepreneurs, especially in the tourism and handicraft sectors, to face the crisis.

In Peru, legal provisions were created to import supplies to treat COVID-19 and serve the population. In the area of tourism and handicrafts, “the Tourism Emprende Program” was implemented to stimulate the economic reactivation of these sectors (Ministry of Foreign Trade and Tourism, 2021b). Sanitary guidelines for tourist destinations were approved for COVID-19 with Ministerial Resolution N 195-2020-MINCETUR (Ministry of Foreign Trade and Tourism, 2021a). In

addition, the sectoral sanitary protocol for implementing surveillance, prevention, and control measures against COVID-19 in the activities of exhibition, sale, creation, and presentations of visual and traditional arts was approved with Ministerial Resolution 242-2020-DM-MC (Ministry of Culture, 2020). On the other hand, the resumption of economic activities during the pandemic required the formalization of artisanal enterprises to receive economic incentives promoted by the government and adopt biosecurity measures in favor of consumers and the population (Ministry of Foreign Trade and Tourism, 2021b).

5. Discussion

The results were consistent about the effects of COVID-19 on artisanal enterprises; the analysis of the environment reinforces the key strategic factors of the market, the behavior of the potential consumer of these products, given the health crisis.

Consumption behavior has already changed, shifting to greener products and those helping the local economy. Thus, integration of public-private teamwork could perfectly join strategies and seek more positive results in the market area by incorporating technology and human resources. Therefore, in cooperation with more developed companies, entrepreneurs can improve the competitiveness and innovation of tourist destinations (Dias et al., 2021). An efficient organization together with social, economic, and political factors can diversify the economic activities developed in such a way that these territories are transformed from sites of "passage" to more important tourist attractions in the region, to sites capable of generating their synergies, with which employment prospects in the tourism sector are opened, which have been little developed so far (Vázquez Martínez & Vázquez Solís, 2017).

There are benefits of environmental protection standards to conserve biodiversity and marine ecosystems (Patterson Edward et al., 2021); this is key for promoting aquatic tourism and producing artisanal products based on waste from the sea. Villegas Robles (2016) pointed out that various artisanal objects are produced based on bones, stones, and waste. In this regard, coffee waste has also been used as an alternative raw material for the production of porous ceramics, which strongly affects the microstructure, porosity, and properties of baked products (Manni et al., 2019).

The public and private policy should support the development of entrepreneurs' capacities for the operational sustainability of transport (Škare et al., 2021). In the case of Peruvian enterprises, it was seen that some entrepreneurs needed more public guidance from the organizational units in charge of formalization and public transportation. Therefore, it is pertinent to strengthen businesses, increase their communication capacity to access new markets (Dias et al., 2021), and motivate that entrepreneurial passion for giving meaning to their daily effort (Anjum et al., 2021).

The technological factor is relevant for all sectors, especially for tourism and services. New technologies must be implemented in a cross-cutting manner to improve business productivity and competitiveness. After the crisis, the authorities must develop marketing campaigns to restore tourist destinations and encourage potential tourists to return to local attractions (Lee et al., 2021). Therefore, it is essential to ensure connectivity networks within a country so that entrepreneurs can permanently use electronic devices.

The study by Harrati et al. (2020) confirms the fundamental role that research and development (R&D) can play in ceramics companies, improving the quality of their finished products and correcting ordinary clays by adding expanded perlite to produce groundbreaking, lightweight, and insulating ceramics. On the one hand, this contributes to the development of local raw materials and the sustainable socio-economic development of the population, and on the other hand, to the innovation in construction materials that allow the development of the quality of buildings, especially in terms of energy. Therefore, it is key to develop new lines of research on the subject in Peruvian universities, especially those related to handicrafts and ceramics.

The economic activity worldwide and specifically in Peru is looking for its recovery, based on consumption and employment. At the end of 2020, the enclosure was relaxed, and monetary and fiscal stimuli were implemented to revive the economy. In the case of Peru, the economic contraction was the largest drop (-12.3%) in GDP since 1989 (Central Reserve Bank of Peru, 2020). For this reason, internal or domestic tourism and the various types of accommodation are an opportunity for the territories affected by the pandemic (Moreno-Luna et al., 2021). In addition, the various handicraft enterprises are sources of employment in rural or indigenous areas, and the displacement of the population to the country's interior is an opportunity.

Educational institutions seek to connect actors with opportunities so that they can apply their improved skills. In this sense, new business ideas associated with rural tourism could strengthen the economic activity in front of COVID-19 and empower the population about teaching and learning traditional art, sculpture, and ceramics. In addition, linking different actors allows the newly trained people to connect both socially and professionally, making them more effective. Therefore, social entrepreneurship starts with empowerment. It helps aspiring entrepreneurs with mentoring, uses bridging to connect them with resources, and finally applies connection to create a national venture ecosystem (Goduscheit et al., 2021).

According to the report by Vázquez Martínez and Vázquez Solís (2017), the material and cultural wealth of an area represent a potential for boosting the local and regional tourism economy through the recognition of geographic conditions that, until now, have been insufficiently exploited, such as the geographic location of specific territories or ventures in the municipalities that are part of a tourism corridor; this represents a task

for the tourism services of the local government and the university together with the population. However, companies should promote eco-efficient behavior because it positively affects nature and well-being (Galindo-Manrique et al., 2021).

Likewise, cultural heritage is changeable. It is constructed from selections of elements of the culture and social agreement, that is to say, from the feeling of the majority of the population as their own. It is often the authorities with power who propose, promote, and recognize the heritage. Heritage, therefore, is socially and culturally constructed. The initiative for the activation of heritage can come from official spheres, or it can arise directly from civil society; however, it must have the intervention of the authorities to generate heritage (Medina, 2017). Therefore, it is pertinent that the Ministry of Culture and the Ministry of Foreign Trade and Tourism of Peru implement sustainable policies that holistically integrate culture, local identity, and tourism.

In this regard, in certain territories, gastronomic activities have been developed, producing healthy food and beverages for all ages that strengthen the cultural visit (Koliopoulos et al., 2021). Craft products are also made from pasta or modeled foods to be consumed during religious festivities, religious rites, or on All Souls' Day.

Finally, environmental protection laws have been weak in terms of caring for the Amazon. Implementing infrastructure projects in Peruvian jungle territories affects sustainability, leaving an open the door to the burden of people, deforestation, illegal mining, displacement of indigenous communities, and loss of biodiversity (SPDA Actualidad Ambiental, 2019; Diringer et al., 2019; Weinhouse et al., 2020). This research opens new lines of research in Peruvian universities on artisanal businesses in the Amazon, consumer behavior in indigenous communities, among others.

6. Conclusions

The findings of this study show that the Peruvian territories of Amazonas, Ayacucho, Cusco, Junin, Lambayeque, Loreto, Madre de Dios, Puno, San Martin, and Ucayali produce and offer six more types of handicrafts, as well as national handicraft classification lines. There is potential to reactivate the local economy based on handicraft.

The Peruvian handicraft businesses offer mainly ceramic products, handmade textiles, souvenirs made with gourd "*Lagenaria Vulgaris*", religious sculptures made with chalk and plaster; objects carved in wood, palm seeds, stones, and bones; hats; objects made with leather, wax, metals; paintings by popular painters; objects made with cow or bull horns.

Craft enterprises can expand in e-commerce, innovation, and ICTs and expand with the right impetus. This expansion makes these enterprises more competitive. Also, digital marketing is a great tool that

allows promoting products and services on the network. SEO and SEM offer advantages that manage to position businesses on the web, reaching places far away from the business's current position, transcending physical boundaries.

Finally, formalization is seen as something negative that goes against the family economy. However, during the pandemic, it was evident that those formalized businesses could be creditors of tax and economic benefits, hence the importance of formalizing businesses, despite the negative perceptions that may exist.

7. Limitations and Further Study

This research has some limitations since it focuses mainly on Peruvian artisanal enterprises, and the results may not be generalized to other localities due to their culture and infrastructure. In addition, the analysis of the business environment was approached from the review of scientific literature, but no experiments or objective metrics were conducted. Systems theory was not explored in depth, nor were experimental or unconscious choice analyses conducted; however, this may be an opportunity for future research.

The authors are aware that this study has limitations as it reviews the literature on the effects of COVID-19 on Peruvian artisanal businesses. Still, its main strength is that it provides solid knowledge to public decision-makers and entrepreneurs to reactivate businesses by becoming aware of the reality of these organizations.

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Authors' Contributions

All authors participated in the conceptualization, methodology, formal analysis, investigation, resources, data curation. The preparation of the draft was carried out by Moreno-Quispe LA. All authors revised the original draft and wrote the final version. All authors have read and accepted the final version of the manuscript.

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