

Innovation and artisan small and medium businesses. The embroidery of San Antonino Castillo Velasco, Oaxaca, Mexico

Innovación y pequeñas y medianas empresas artesanas. Los bordados de San Antonino Castillo Velasco, Oaxaca, México

CRUZ-GARCIA, Leobardo Daniel†, CASTILLO-LEAL, Maricela*, PÉREZ-LARRAÑAGA, Héctor and MARTÍNEZ-MARTÍNEZ, Celeste

Tecnológico Nacional de México/Instituto Tecnológico de Oaxaca, División de Estudios de Posgrado e Investigación.

ID 1st Author: *Leobardo Daniel, Cruz-Garcia* / ORC ID: 0009-0001-7867-422X, CVU CONACYT ID: 756329 (Intern-SNP-CONACYT)

ID 1st Co-author: *Maricela, Castillo-Leal* / ORC ID: 0000-0002-3281-4135, CVU CONACYT ID: 147104 (SNI I CONACYT)

ID 2nd Co-author: *Héctor, Pérez-Larrañaga* / ORC ID: 0000-0003-0571-0354, CVU CONACYT ID: 927316 (Intern-SNP-CONACYT)

ID 3rd Co-author: *Celeste, Martínez-Martínez* / ORC ID: 0009-0007-3711-4983, CVU CONACYT ID: 950160 (Intern-SNP-CONACYT)

DOI: 10.35429/JFE.2022.11.6.8.17

Received July 15, 2022; Accepted December 30, 2022

Abstract

The artisan SMEs symbolize a set of values, history and identity of the communities, they offer products with high social and economic value, however, they face a large number of problems both operationally and in their commercialization. Innovation represents an opportunity for any type of company that seeks to maintain a position in the market and adapt to new consumer trends through new products or updating processes. This article aims to describe the way in which innovation manifests itself in the artisan SMEs of San Antonino Castillo Velasco, Oaxaca, Mexico, making use of a research process based on observation and unstructured interviews in order to recognize the reality and the context of the community, making a documentary review to know the perspectives and positions regarding the interrelation between the elements and in this way, contrast theory and practice.

Resumen

Las pequeñas y medianas empresas (PYMES) artesanas simbolizan un conjunto de valores, historia e identidad de las comunidades, ofrecen productos con alto valor social y económico, sin embargo, se enfrentan a una gran cantidad de problemáticas tanto de manera operativa como en su comercialización. La innovación representa una oportunidad para cualquier tipo de empresa que busca mantener una posición en el mercado y adaptarse a las nuevas tendencias de los consumidores mediante nuevos productos o actualización de procesos. Este artículo tiene por objetivo describir la forma en que la innovación se manifiesta en las PYMES artesanas de San Antonino Castillo Velasco, Oaxaca, México, haciendo uso de un proceso de investigación a partir de la observación y entrevistas no estructuradas, con el fin de reconocer la realidad y el contexto de la comunidad, haciendo una revisión documental para conocer las perspectivas y posturas referentes a la interrelación entre los elementos y de esta forma, contrastar la teoría y la práctica.

Innovation, SMEs, handicrafts

Innovación, PYMES, Artesanías

Citation: CRUZ-GARCIA, Leobardo Daniel, CASTILLO-LEAL, Maricela, PÉREZ-LARRAÑAGA, Héctor and MARTÍNEZ-MARTÍNEZ, Celeste. Innovation and artisan small and medium businesses. The embroidery of San Antonino Castillo Velasco, Oaxaca, Mexico. Journal-Financial Economy. 2022. 6-11: 8-17.

* Correspondence to Author (E-mail: cleal@itoaxaca.edu.mx)

† Researcher contributing first author.

Introduction

The concept of crafts can be viewed from different perspectives, for example, from a technological perspective it is understood as a manual element with an artistic sense; from an anthropological perspective it represents an activity that is not affected by specialisation or division of labour, and from a cultural perspective, which is transcendental, it is recognised as "popular art", as those productive activities of a manual nature elaborated by the individual or the family, transmitted through different generations by tradition (Rodríguez, et al., 2021).

Oaxaca is a Mexican state where the practice of handicrafts is one of the most important productive activities in the state; there is a great variety of handicraft objects derived from the wide geographic and climatic diversity.

San Antonino Castillo Velasco, Oaxaca is a municipality renowned for its textiles, the embroidery techniques of this community have for years been emblematic of its cultural heritage.

The handicrafts are recognised for their original handmade production with exclusivity of each product that is made, they are part of the culture of a community and carry with them history, identity and tradition. These elements have been studied from the social sciences and from different perspectives in order to understand the diversity of elements that contribute to the development of a community.

Handicraft products have evolved over time as they have acquired more value, not only in terms of economic value as an item to be bought and sold, but also in terms of social, historical and cultural value, which is increasingly sought after by consumers.

Innovation has been a toolkit that favours business development in different sectors, so artisan SMEs are not excluded from its potential benefits.

Implementing innovation in handicrafts would represent an opportunity that provides different types of positive impacts in both the economic and social sectors, with the perspective and objective of increasing the quality of life of artisans.

The context of artisan SMEs

In Mexico, SMEs are relevant for economic growth, supported by data from INEGI (2020) which mentions that they represent 99.8% of the country's economic units, and particularly those focused on generating handicraft business models are a priority for Mexican culture and economy (Yta-Castillo and Sánchez-Medina, 2022).

It is visible that the Mexican economy is largely sustained by SMEs, as there are more small businesses than large industries, and it is worth noting that in states with indigenous peoples, the presence of small artisan enterprises is intensified, as is the case in Oaxaca, Mexico.

Thus, micro, small and medium-sized artisan enterprises represent a high value for Oaxaca, not only in economic terms, as they sometimes represent the main source of family income, but also in cultural and social aspects by preserving historical values, processes and products.

Oaxaca is a state rich in its cultural diversity and in its production of handicrafts; even the most remote Oaxacan municipality has its own unique products, designed and generated as a result of its history, culture, tradition and experience. These products are not involved in any industrial process, that is to say, they are made with the hands of the producers themselves, who are called artisans, emphasising that handicrafts commonly carry a character of exclusivity, since they are unique and unrepeatable pieces.

The production of handicrafts symbolises a family economic activity of great relevance and importance, mainly in rural areas, since for these families it often represents the main source of income, which has sustained generations. Creating handicrafts is a process that is linked to various categories of human development: culture, economy, social development, education, even science; this activity is seen as "art" but it is also considered "business" which must have quality, innovation, among many other factors to make it competitive and achieve market positioning (Hernández, et al., 2002).

Although the production and marketing of handicrafts is one of the main economic activities in the state, it also presents a wide range of problems, starting with the lack of information about the sector, the low levels of production due to the time invested, the difficulties of distribution and marketing of products, the complications in obtaining inputs or raw materials, among many other problems that are not only of an economic nature, such as the low recognition and social prestige of the products (Rojas, et al., 2017).

These companies are characterised by being a space where the creation of handicrafts is linked to beliefs, expectations and strategies that are generated from past experiences and where generating a change represents an extremely complex process. In order to implement new alternatives, artisans must recognise that these are "valuable" and that they generate a tangible benefit, not only for themselves, but also for their families, and that they lead to an improvement in their quality of life (Hernández, et al., 2007).

Change represents a determining factor for the growth and development of artisan SMEs, as it must be accepted by the people who make them in order to transcend to new forms or alternatives for both production and marketing that can cover the problems they face.

Business innovation

Innovation began to be reflected in the works of Adam Smith (1776) and David Ricardo (1817), although as such it was not explicitly mentioned, but its concept was immersed in their writings; in the same way, Karl Marx (1867), in assuring that technological change implies the understanding of economic dynamics and the development of productivity, was also close to the definition of innovation (Formichella, 2005).

As such, innovation was not a concept certainly identified and clarified almost two hundred and fifty years ago, however, great pioneering economic theorists already indirectly considered the importance of updating, modifying and creating for the improvement of economic systems.

It was at the beginning of the 20th century when Joseph Schumpeter became the first economist to directly consider the term innovation, marking the conceptual difference between invention, innovation and diffusion, delimiting the first to a product or process of a scientific-technical nature, the second to a change in the economic environment and the third as a means for innovation to become an economic-social phenomenon (Medina and Espinosa, 1994, apud Formichella, 2005).

It took about a century from the first signs of innovation to the full use of the term, which was born within economic science and is limited to being considered within that same environment, linking it to other variables and effects of economic systems.

For Schumpeter, innovation implies novelty and change and would be responsible for the phenomenon of capitalism, introducing changes in productive processes. He recognised those employers of innovation as businessmen or entrepreneurs who seek to place companies in a high competitive position (Albornoz, 2009).

Innovation emerges as a business tool that improves levels of competition and has an impact on productivity and market positioning. From this perspective, it is understood that innovation pursues an economic purpose that promotes consumerism within the capitalist system.

In the beginning, the term "innovation" only alluded to technological and process innovation, centred directly on the productive-industrial sector. The Oslo Manual being a fundamental reference for innovation in its first edition (1992) contained a series of indicators for its measurement. In the second version (1997) it considered the use of innovation in the service sector. In 2005, in the third edition, it expanded and redefined the concepts, considering two new modalities: innovation in marketing and organisational innovation (Echeverría, 2008).

Until then, everything related to innovation in the Oslo Manual was directly linked to the market and from an economic perspective, although progress had been made in the diversification and typification of innovation, it was still considered a tool for business use.

The Oslo Manual visualises innovation as a means for production and productivity that contributes to competitiveness, in all this conception innovation is a reference for economic and business values (Echeverria, 2008).

Undoubtedly, innovation became a pillar for the business and economic sector due to the expected effects that its implementation provides, but the constant change in the environment and global dynamics led to evolve towards a new concept, applied innovation.

In order to talk about applied innovation, it is necessary to identify a method for it, several authors have established a series of steps and stages for its implementation, for example, a practical and effective methodology to carry out innovation processes is design thinking.

This innovation methodology dates back to the 1980s when Peter Rowe (1987), who is considered to be the person who coined the term design thinking, established its foundations and since then it has evolved. Design thinking can be visualised as a process of problem solving through decision making based on the use of abductive thinking and the use of non-verbal modelling supports, but also as a collaborative innovation management process where it is considered a methodology that fills design-based innovation activities that are completely human-centred (Cordoba, 2015).

Design thinking compiles a series of innovation tools that used for business purposes are completely focused on satisfying and fulfilling the needs and expectations of the user, i.e. the customers.

This innovation methodology is inspired by the need to solve problems or take opportunities by devising solutions through creative processes. Within this context, it is relevant to note that in 2012 the Stanford University Institute of Design designed a procedure for the implementation of this methodology consisting of five steps: empathise, define, ideate, prototype and evaluate (Ovalle, Hernández and Apodaca, 2013).

Within each of the five stages of design thinking are housed a series of innovation tools and techniques such as: the CANVAS model, the SCAMPER, the six thinking hats technique, story telling, inspiration walls and empathy maps, among many others.

These tools are designed to be used by any type of company regardless of its size, line of business, location or any other attribute, since their ultimate goal is to meet the needs that are pursued when acquiring a product or service.

Innovation in artisan enterprises

Now that the two basic concepts of this work have been visualised: crafts and innovation, it is important to carry out an analysis of the theoretical approaches to both elements as a whole.

Understanding crafts as a handmade product without industrial processes that transmit in each of its elements and forms, the identity and culture of a community and innovation as a compilation of actions to update products or processes for the continuous improvement of companies, the question arises: is it possible to implement innovation in craft companies without causing the loss of their essence?

To answer this question, Turok (1988, apud Hernández, et al., 2005) mentions that handicrafts, from the fact that they are pieces that are different from one another and that carry spiritual, symbolic and creative elements, involve innovation from the moment they are made.

One of the determining factors for innovation has been creativity, which can be seen in each of the handicrafts that are made due to their exclusivity criteria.

In a study carried out by Hernández Girón (2007), it was identified that artisan companies have implemented innovation processes, manifesting themselves in elements such as:

- Innovation in new products.
- Innovation in designs, moulds and models.
- Innovation with new elements.

- Innovation in terms of product shape and size.
- Innovation through the imitation of production and marketing techniques from other communities.
- Innovation in eventual production for regional festivities.

This author argues that these and other activities have a direct impact on the effectiveness and efficiency of handicraft production and marketing.

Visualising under the conception of the previous authors, it is inferred that innovation in artisan SMEs is mainly manifested in attributes of the product or for the product, promoting its competitiveness and differentiation in the markets.

Jiménez Castañeda, et al. (2009) mention that innovation in handicrafts is a slow process that has been truncated by the lack of technological development within their production processes, preventing them from keeping pace with market changes.

Some consider technological advances indispensable for the existence of innovation, and when this is lacking in an industry such as the one in which handicrafts are developed, the application of innovation is considered null and void.

In contrast, Chimal Ta (2019) mentions that innovation is a tool immersed within economic organisations regardless of their line of business or size, which is why introducing it into handicrafts as a cultural product generates significant changes, increasing their value and boosting their sales during commercialisation.

For this reason, innovation is not only developed when organisations meet certain criteria; there are diverse and infinite ways of applying it, from the smallest to the largest company, through different techniques and tools that promote new products or new processes.

As a result of an in-depth study of the factors that determine success in artisan enterprises, it was found that one of them is innovation because of the possibility it provides to meet and understand the needs of the markets (Hernández, et al., 2007).

Several studies have been carried out in totally different sectors analysing the incidence of innovation in them and it has generally been found that this variable represents a success factor for their growth and development, and therefore, artisan SMEs are no exception.

Another position mentions that implementing innovation in the sector where crafts are developed, which is the creative industry, is potentially attractive for the future with high growth at a global level, although it is currently a topic that is little addressed since some artisans try to keep their techniques and products of their culture intact (Pineda Vergara, et al., 2017).

This perspective determines that boosting innovation in crafts will provide diverse future benefits, emphasising that some artisans resist certain changes in their activity.

As such, theory shows that there are different positions on innovation in craft enterprises, so it is important to conduct local studies that determine the relationship between these elements.

Mainly in rural communities, innovation requires a new type of thinking, the greater or lesser urgency of social needs and the degree of acceptance of changes, since in order for innovation to be accepted, it must coincide with the needs and interests of society, matching the social structure of these communities (Pérez, 2007).

In this order, implementing innovation practices will result, in some cases, in a complex process in the communities, since it will require changes in the way of thinking and acting, so the first thing to do is to identify the need for new alternatives so that they can later be recognised and accepted by the population or group that will be impacted.

In addition, it should be noted that artisan SMEs represent a fundamental part of the cultural heritage, contributing directly to the identity and representativeness of the mainly indigenous communities; these economic units drive the regional economy and are a point of attraction for tourism (Yta-Castillo and Sánchez-Medina, 2022); However, like any product, their existence does not guarantee their sustainability in the markets, which is why Ferro (2017) mentions that handicrafts must promote "innovation in value" seen from the production system and the value chain, which will be achieved through the formation of interdisciplinary teams that contribute to the production process.

Markets and the world are changing and artisan SMEs must also evolve to ensure their permanence and growth in the economic sector, so it is important that artisans employ the use of innovation to generate new strategies that make them more competitive.

Unit of analysis

San Antonino Castillo Velasco is a municipality in the state of Oaxaca, belonging to the Valles Centrales region; it is bordered to the north by Santa Ana Zegache, San Martín Tilcajete and Ocotlán de Morelos; to the south by Ocotlán de Morelos and Santiago Apóstol; to the east with Ocotlán de Morelos and to the west with Santiago Apóstol and Santa Ana Zegache, it is located approximately thirty-five kilometres from the capital city of Oaxaca de Juárez (Honorable Ayuntamiento Constitucional de San Antonino Castillo Velasco [HACSACV], 2022). See Figure 1.



Figure 1 Macro location of the municipality of San Antonino Castillo Velasco, Oaxaca, Mexico
Source: Adapted from *Plan Municipal de Desarrollo Sostenible de San Antonino Castillo Velasco 2022-2024*, (HACSACV, 2022, p.26)

The cultural heritage of San Antonino Castillo Velasco is made up of:

- Original textile handicrafts and outstanding for their embroidery techniques passed down from generation to generation with international recognition and whose garments can take up to six months of work or more, depending on the complexity of the article.
- Gastronomy based on and recognised mainly for its yellow chicken, pork or beef empanadas, made with firewood on a clay griddle, accompanied by lettuce and onion with lemon and chilli.
- Traditions and festivities where music and dances are elements of enhancement of the community, among the main festivities are: the fifth Friday of Lent, Palm Sunday, Mondays on the hill, Day of the Dead festivities, sacadas and fandango and the traditional mayordomías (Idem). See Figure 2.

San Antonino Castillo Velasco is an attractive community for locals as well as national and international tourists for its fiestas, textiles and gastronomy, and its proximity to the city of Oaxaca makes it accessible to the public.



Figure 2 Cultural heritage of San Antonino Castillo Velasco

Source: Own elaboration adapted from the *Municipal Plan for Sustainable Development of San Antonino Castillo Velasco 2022-2024 [Photographs]*, (HACSACV, 2022)

The handicraft activity of San Antonino Castillo Velasco has promoted that the Secretary of Tourism of the Government of the State of Oaxaca considers the municipality part of the "Magical Route of Handicrafts", recognised for its embroidery and one of the most distinguished regional costumes of Oaxaca (HACSACV, 2022).

Within the textile handicrafts of the municipality one can find a great diversity of blouses, dresses and now other types of garments such as shirts of different shapes and colours. These products carry within themselves history and a part of the life of the hands that create them, that is to say, of the craftsmen and women who take months to make each garment, using their own techniques shared throughout history for the creation of the embroidery and always trying to make unique and exclusive pieces for the clients, who are mainly national and international tourists.

Using linen of different colours, a series of textiles are designed and developed with multicoloured silk thread embroidery based on the various types and styles of embroidery: frayed, thought embroidery and the round, seed weaving and star weaving and the technique known as "do me if you can" (Idem).

"Hazme si puedes" embroidery is one of the most valued and prized skills in the community due to the complexity it represents for the artisans, even in the community itself not all embroiderers know how to use this technique.



Figure 3 Typical embroidered blouse from San Antonino Castillo Velasco, Oaxaca, Mexico
 Source: HACSA CV 2022, p. 115.

Method

For the development of this research, a qualitative ethnographic research process was carried out using the techniques of participant observation and unstructured interviews in order to obtain information from a natural and fluid dialogue that would allow the identification of the necessary information, knowing the reality of the community and its context.

In addition, documentary research was used to provide theoretical support on innovation processes in artisan SMEs by reviewing, comparing and discussing different positions on the subject and thus contrasting theory and practice in the community of San Antonino Castillo Velasco, Oaxaca, Mexico.

The research is descriptive-explanatory in nature as it seeks to characterise the forms and ways in which the artisan enterprises of San Antonino Castillo Velasco, Oaxaca, Mexico, have implemented innovation. It is non-experimental in that the study categories are not manipulated at any time, but are observed in their reality and specifically has a cross-sectional design in which data collection is carried out at a specific moment in time.

Results

After analysing the information collected mainly from observation and interviews, some of the artisan SMEs in San Antonino Castillo Velasco, Oaxaca, Mexico develop innovation processes in their products in order to adapt to market demands and remain positioned in a highly competitive environment.

Currently, the use of embroidery in San Antonino Castillo Velasco, Oaxaca, Mexico has transcended from traditional clothing to other and diverse types of innovative products, as can be seen in the following figures.



Figure 4 Embroidered backpack from San Antonino Castillo Velasco, Oaxaca, Mexico
 Source: Silver Needle (2021)



Figure 5 Chair with embroidery from San Antonino Castillo Velasco, Oaxaca, Mexico

Source: *Silver Needle* (2021)

Innovation is present in the handicrafts of San Antonino Castillo Velasco because, although the representative product of embroidery was the blouse and the typical dress of the community, now they also offer the market backpacks, bags, wallets, key rings, and even furniture decorated with the emblematic embroidery of the community.

This innovation drives continuous improvement for companies in response to the needs of customers and the expectations they have about it, where quality is incorporated in the product and service, in the processes and in the business model for the improvement of the value chain (supply, manufacturing and marketing), in the internal and external environment of the company.

In relation to the above, innovation focuses on achieving product improvement, diversifying production lines and, therefore, expanding market niches, as well as optimising human, material and technological resources, products and services, so that this can lead to the improvement of economic activity and the satisfaction of customer needs.

One aspect of interest is that some artisans commented that they have been part of training processes in order to acquire tools to become more competitive, addressing different topics such as the CANVAS business model, which as mentioned above is a tool for innovation and design thinking, with the intention of diversifying their offer and acquiring added value for their business.

These innovation processes have also led the artisan companies to link up and form alliances with other companies and/or organisations in such a way that they have also diversified their procedures, such is the case of furniture with embroidery, since, although the artisans do not produce the furniture, with a strategic alliance they have generated a line of innovative products that benefit the parties involved equally.

Conclusions

Artisan SMEs, like many other enterprises, have begun to look for new ways to meet the needs and expectations of customers.

Globalisation is a phenomenon that influences the habits, tastes and preferences of customers, often setting fashions or trends, and artisans in San Antonino Castillo Velasco, Oaxaca, Mexico have modified their product lines in order to position themselves in a highly competitive market.

Although handicrafts are widely recognised for their cultural and social value, preserving the identity and history of the communities, market demands are increasing, remembering that these products are purchased by local customers, but also by national and foreign tourists.

Innovation thus becomes an important tool that has already been considered by some artisan SMEs in San Antonino Castillo Velasco, Oaxaca, Mexico in order to maintain or increase their market share.

Artisans in San Antonino Castillo Velasco, Oaxaca, Mexico are beginning to show interest in new market trends and have identified the need to receive training to enhance their business skills and above all to put them into practice by applying them to their products and/or marketing and production processes.

Innovation practices are not only limited to providing benefits in the creation of new product lines, but also foster public relations and knowledge in artisan SMEs.

Consequently, it represents an opportunity to carry out in-depth studies on the factors that drive innovation, the forms and manifestations of innovation, the impacts it generates in artisan SMEs, as well as to carry out comparative studies between communities, in order to identify similarities and differences that allow the discovery of good practices in terms of innovation in handicrafts.

References

- Aguja de Plata (2021). La evolución del arte. [Fotos subidas con el móvil] [Imagen]. Disponible en: <https://www.facebook.com/photo/?fbid=3492114034225599&set=a.222241120126120>
- Albornoz, M. (2009). Indicadores de innovación: las dificultades de un concepto en evolución. *Revista iberoamericana de ciencia tecnología y sociedad*, 5(13), 9-25. ISSN 1850-0013. Disponible en: http://www.scielo.org.ar/scielo.php?script=sci_arttext&pid=S1850-00132009000200002
- Chimal Tah, E. (2019). *Innovación en mercadotecnia, una aplicación a las artesanías del municipio de Bacalar* [Tesis de maestría]. Universidad de Quintana Roo. Disponible en: <http://risisbi.uqroo.mx/handle/20.500.12249/2697>
- Córdoba, C. (2015). Fundamentos del pensamiento en diseño. *Revista Investigium IRE Ciencias Sociales y Humanas*, 6(2), 38-50. ISSN:2357-5239. Disponible en: <https://investigiumire.unicesmag.edu.co/index.php/ire/article/view/191>
- Echevarría, J. (2008). El manual de Oslo y la innovación social. *Arbor*, 184(732), 609-618. DOI: 10.3989/arbor. ISSN: 0210-1963. Disponible en: <https://arbor.revistas.csic.es/index.php/arbor/article/view/210>
- Ferro, D. (2017). Identidad, cultura e innovación en las artesanías: un camino para el desarrollo sustentable y el Buen Vivir. *Estudios de la gestión* (1). 96-116. ISSN: 2550-6641. Disponible en: <https://repositorio.uasb.edu.ec/handle/10644/5477>
- Formichella, M. (2005). La evolución del concepto de innovación y su relación con el desarrollo. Argentina: INTA. Disponible en: <https://core.ac.uk/download/pdf/48031881.pdf>
- Hernández Girón, J. D. L. P., Domínguez Hernández, M. L., & Caballero Caballero, M. (2007). Factores de innovación en negocios de artesanía de México. *Gestión y política pública*, 16(2), 353-379. ISSN 1405-1079. Disponible en: https://www.scielo.org.mx/scielo.php?pid=S1405-10792007000200353&script=sci_abstract
- Hernández J., Domínguez, M. y Ramos A. (2002). Canales de distribución y competitividad en artesanías. *Espiral*, 9(25). ISSN: 1665-0565. Disponible en: <https://www.redalyc.org/articulo.oa?id=13802505>
- Hernández, J., de la Paz, J., Domínguez Hernández, M. L., & Caballero Caballero, M. (2005). Innovación de producto y aprendizaje dirigido en alfarería en Oaxaca, México. *Revista de Ciencias Sociales*, 11(2), 213-228. ISSN 1315-9518. Disponible en: http://ve.scielo.org/scielo.php?script=sci_arttext&pid=S1315-95182005000200002
- Hernández, J., Yescas, M. y Domínguez M. (2007). Factores de éxito en los negocios de artesanía en México. *Estudios gerenciales*, 23(104), 77-99. [https://doi.org/10.1016/S0123-5923\(07\)70018-9](https://doi.org/10.1016/S0123-5923(07)70018-9). Disponible en: <https://www.sciencedirect.com/science/article/pii/S0123592307700189#:~:text=Como%20resultado%20se%20obtuvieron%20nueve,del%20empaque%20C%20diferenciaci%C3%B3n%20e%20informaci%C3%B3n>
- Honorable Ayuntamiento Constitucional de San Antonino Castillo Velasco (HACSACV), 2022. *Plan Municipal de Desarrollo Sostenible de San Antonino Castillo Velasco 2022-2024*. [Archivo PDF]. Disponible en: http://sisplade.oaxaca.gob.mx/bm_sim_services//PlanesMunicipales//2022_2024_/103.pdf

Instituto Nacional de Estadística y Geografía. (2022). *Encuesta Nacional de Ocupación y Empleo Nueva Edición (ENOEN) Oaxaca primer trimestre de 2022* [Archivo PDF]. Disponible en: https://www.inegi.org.mx/contenidos/saladeprensa/boletines/2022/enoent/enoe_ie2022_05_Oax.pdf

Jiménez Castañeda, J. C., Domínguez Hernández, M. L., & Martínez Castro, C. J. (2009). Estrategias y competitividad de los negocios de artesanía en México. *Pensamiento & Gestión*, (26), 165-190. ISSN 2145-941X. Disponible en: http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S1657-62762009000100008

Ovalle, O., Hernández, S. y Apodaca, L. (2013) *Aproximación teórica al pensamiento de diseño centrado en la innovación y diseño de negocios*. XVII Congreso Internacional en Ciencias Sociales. Universidad del Valle de Atemajac. [Archivo PDF].

Pérez, J. (2007). *Sociología y desarrollo. El reto del desarrollo sostenible*. Ministerio de Agricultura, Pesca y Alimentación. [Archivo PDF].

Pineda Vergara, J. F., & Arraut Camargo, L. C. (2017). *Estudio de innovación en la fabricación de productos artesanales derivados de la caña flecha*. [Tesis de maestría]. Universidad Tecnológica de Bolívar. Disponible en: <https://repositorio.utb.edu.co/handle/20.500.12585/356>

Rodríguez, X., Chancay, C., y Regalado, M. (2021). La comercialización de artesanías como un medio de generación de ingresos: Caso comerciantes de la parroquia la Pila del cantón Montecristi. *Revista Publicando*, 8(31), 338-350. <https://doi.org/10.51528/rp.vol8.id2254>. Disponible en: <https://revistapublicando.org/revista/index.php/crv/article/view/2254>

Rojas, et al., (2017). Dificultades en torno a la producción artesanal. *JÓVENES EN LA CIENCIA*, 3(2), 1200-1204. ISSN 2395-9797. Disponible en: <https://www.jovenesenlaciencia.ugto.mx/index.php/jovenesenlaciencia/article/view/1959>

Yta-Castillo, D., y Sánchez-Medina, P. (2022). Un estudio exploratorio sobre los valores y actitudes ambientales de pequeños negocios de artesanías de Oaxaca, México. *Sociedad y Ambiente*, (25), 1-31. <https://doi.org/10.31840/sya.vi25.2573>. Disponible en: <https://revistas.ecosur.mx/sociedadyambiente/index.php/sya/article/view/2573>