

SYSTEMATIZATION AND PRODUCTIVITY OF CLAY HANDICRAFTS IN THE COMMUNITY OF SANTA MARIA CUQUILA, TLAXIACO, OAXACA

SYSTEMATIZATION AND PRODUCTIVITY OF CLAY HANDICRAFTS IN THE COMMUNITY OF SANTA MARIA CUQUILA IN THE COMMUNITY OF SANTA MARIA CUQUILA, TLAXIACO, OAXACA

Santiago Ortiz Diana¹, Barrios Miguel Neydi², Jiménez Velasco Gabriela³

¹Student. Instituto Tecnológico de Tlaxiaco, Department of Basic Sciences. saordi3701@gmail.com, 9531160016 and 69802.

²Student. Instituto Tecnológico de Tlaxiaco, Department of Basic Sciences. n9531743319@gmail.com, tel. 9531743319, c.p. 71003.

³Ph. Instituto Tecnológico de Tlaxiaco, Department of Basic Sciences. gabriela_dta@hotmail.com tel. 9512854782, c.p. 69800.

Abstract- This research focused on the analysis of the problem of clay handicrafts. The objective of this research was to determine the impact of systematization on the productivity of clay handicrafts in the community of Santa María Cuquila, Tlaxiaco, Oaxaca. For this purpose, a search and analysis of different documentary research of primary and secondary sources was carried out, in this way information was obtained to have a clear and precise idea of how the factors behave in the handicraft sector of this community.

The research had a non-experimental, descriptive, documentary, correlational and cross-sectional design, because each of the designs provides information that complemented the research.

For the collection of quantitative information, a questionnaire was applied by visiting the artisans who made up the sample. The instrument integrated the measurement of two variables, each with three dimensions: efficiency, effectiveness and production; resources, efficiency and economy.

A reliability analysis was performed for the instrument by means of the sum of variances. The results showed a Cronbach's alpha with a coefficient of: 0.7505, which shows a good reliability of the measurement instrument. In conclusion, the regression and correlation analyses obtained coefficients of 0.568 and 0.754 respectively, the regression analysis showed the relationship between the variables, and the correlation analysis determined if there is an association between them, the coefficients can take values between -1 and +1 and this value indicates the correlation between the variables.

Key words: productivity, systematization, handicrafts.

Abstract - The present investigation was based on the problem of clay crafts. The objective of this research was to determine the impact of systematization on the productivity of clay handicrafts in the community of Santa María Cuquila, Tlaxiaco, Oaxaca.

For this purpose, different documentary research was carried out in primary and secondary sources, in order to obtain the information to have an idea of how the factors behave in the artisan sector of this community.

The research had a non-experimental, descriptive, documentary, correlational and transversal design, because each of the designs provides information, that complemented the research.

For the collection of quantitative information, a questionnaire was applied, visiting the artisans that made up the exhibition, which measured two variables each with 3 dimensions, which were: efficiency, effectiveness and production, resources, efficiency and economy.

A sum of variances was also applied, relating the dimensions with the items of the research.

The results showed a Cronbach's alpha with a coefficient of 0.7505, which shows the reliability of the measurement instrument.

In conclusion, the regression and correlation analyses obtained coefficients of 0.568 and 0.754, respectively. The regression analysis shows the relationship between the variables, and the correlation analysis determined whether there is an association between them; the coefficients can take values between -1 and +1 and this value indicates the correlation between the variables.

Key words - productivity, systematization, crafts.

INTRODUCTION

The purpose of this research was to learn about the productivity of clay handicrafts in the community of Santa María Cuquila, Tlaxiaco, Oaxaca. Therefore, we analyzed the factors that determine or favor the degree of productivity of these crafts among the artisans who are dedicated to their elaboration. On the one hand, to know the strategies, of the causes that generate a decrease in productivity in this craft.

And, on the other hand, to systematize the production process of handicrafts, since it contributes to the improvement of the processes and to make the production process more efficient.

The production of handicrafts is an indispensable activity for the conservation of biodiversity.

country's cultural heritage, however, is limited by various conditions (Mejía et al., 2018).

Specific objectives were integrated with the following points: to identify the importance of systematizing the production process of clay handicrafts, to analyze and determine the measurement of the productivity of the handicraft processes and finally to establish the incorporation of systematization in the handicraft sector. The justification for this research arises from the need to analyze and identify the links in the production chain in order to make time, costs and human resources more efficient, identifying the advantages that this brings with it. The reason for this research has to do with the low productivity of clay handicrafts that has been observed in the community of Santa María Cuquila, Tlaxiaco, Oaxaca, in recent years.

Santa María Cuquila is a community in the State of Oaxaca that is characterized by the production of pottery, the families that live in this town develop the activity as one of their sources of income, so each of the members intervene to form small businesses, in which there are traditional characteristics of production and marketing of their products that have allowed them to remain in the market, and compete.

As mentioned by Rivas (2018) handicrafts can be defined as a set of traditional and manual techniques that have a cultural heritage value, currently threatened or disappearing.

The price, product and market strategies of each of were analyzed, thus determining the reason for the decrease in productivity in these handicrafts. Handicrafts have been studied from several points of view, as plastic and art works elaborated by indigenous people, historically, organizationally, culturally, as a symbol of identity, economically, as objects elaborated in pre-Hispanic times, whose study implies knowing their definition first.

In addition, it is believed that craftsmanship recalls a basic power that humans do: that of know-how and handcrafting. It is considered as the human ability to design and designate a function for an object or a tool, to build it by oneself local knowledge and raw materials.

As Suckaer, I. (2008) mentions, sculptors who expressed themselves with clay as raw material abhorred being "confused" with ceramists; the latter viewed the former with great suspicion. Fortunately, these positions are becoming increasingly diluted. After all, each one inhabits his own destiny; each one's work reveals his creative level.

Craft production has become a tradition (Duarte & Prieto, n.d.), with a peculiar dynamic that, from generation to generation, continues to show the benefits of the transformation of the raw material, in almost rudimentary conditions, but in the same way, it has become a way of life.

with great marketing potential both internally and externally. Without forgetting that its commitment

The main purpose is to satisfy a formal or functional need.

This implies that, for the implementation of a productive project, the most important thing is to have clearly defined the product (handicraft) to be developed or the reason for the production.

Productivity is the amount of work done per unit of time, i.e. the effectiveness of the work done and is measured by the time taken to do it. With this we can say that the more time it takes to produce a product, the less efficient it is.

Productivity is considered as the basis of economic development, since it allows to increase production with the optimization of the resources involved in it; therefore, the increase in productivity is the only way that leads to a higher standard of living of the population in the long term and can result in a better competitive position of the product in the market. Each artisan must concentrate on the work and the task, eliminating all those that distract his performance; in this way he will manage to increase his productivity.

During this research it is also possible to identify two types of handicrafts that can be found in a town: a) Traditional handicrafts, which are produced since ancient times and in which the techniques, designs and even the original colors are preserved without much variation; and identify the place of origin of the product. b) Contemporary handicrafts, consisting of products that retain much of the process of elaboration than the traditional ones, but undergo modifications to meet new material and spiritual needs.

Alonso, M. G. Á. (2020) mentions that craftsmanship has always been present in utilitarian objects of Mexican popular culture and there are few Mexican and foreign creators who have highlighted this relationship within the world of design.

With respect to handicrafts Novelo (1993), in 1921, the Mexican state publicly acknowledged its admiration for indigenous handicrafts, which at that time were called "typical industries" (*industria típica*).

In this way, in our country, from the second decade of the last century the state apparatus took interest in handicrafts after nationalism in Mexico, the new state publicly recognized its admiration for the new Indian handicrafts as part of Mexican popular art, which today is a symbol of Mexican identity, since Mexico is a country of handicrafts. Artisans seek to produce more or earn more to obtain more income, as a complement to their peasant activity, thus improving their family economy. Therefore, it introduces changes in the design, in the form and in the original use of the handicrafts so that far from disappearing the handicraft activity, it adapts to the conditions imposed by the current market and to the needs that the artisan has and intends to satisfy with the commercialization of his or her products.

products, hence the relevance of knowing and studying handicrafts.

With regard to research, it can be assured that crafts can also be defined as a set of traditional and manual techniques that have a cultural heritage value, currently threatened or in danger disappearing, in particular because it is based on an "oral tradition".

As Sevilla, Vásquez (2009) concluded, clay handicrafts are a product mainly demanded by foreign tourists visiting our country. The characteristics of this product, such as its color, its brightness, its manual elaboration process and its limited production make this handicraft unique in the country, with a significant participation in the national market.

Santa María Cuquila, is a community in the state of Oaxaca that is characterized by the production of pottery, the families living in these populations develop the activity as one of their sources of income, so each of the members intervene, to form small businesses, in which there are traditional characteristics of production and marketing of their products that have allowed them to remain in the market, and compete.

The craftsmanship of Santa Maria Cuquila demonstrates the great mastery of the artisans in the elaboration of utensils that dates back to ancient times, proof of this has been found remains of pottery in the archaeological zone and in other parts of this community, was the people gifted in their craft as men and women acquired through a long apprenticeship that was observe carefully and with practice gain experience to later teach their children and thus preserve this culture.

Santa Maria Cuquila was a very prominent town in the region because it sold its crafts to the people around it until reaching the coast of the state, were very popular different kinds of ceramics, among these is the jar that was used for the preparation of tepache in ceremonial events, the pitcher for carrying water to faraway places, pots for cooking food, dishes, pots, etc.. The potter was very skilled in his trade, he got up very early every day to go to travel a distance of 6 to 7 km. and extract the sand in areas of tepetate, using a stick to crush the material to obtain the fine, gathering 25 to 30 kg. Afterwards, they carried it on their backs until they reached their homes, and in the same way, the clay was extracted in special fields; once they had both materials, the potter began to mix them until they were ready and began to make a large amount of pottery of different kinds made with their own hands, these for domestic use and for the market. (INEGI, 2020 cited Mexico in figures et al., 2022).

Handicrafts began in prehistoric times as personal and/or daily use utensils. The characteristic feature was their production process, since, being elaborated

totally handmade, each article had its personal, regional, cultural or simply artistic touch. It was the arrival of the industrial revolution and its advances in terms of production, which caused the loss of that touch that artisan producers used to capture in their works. However, due to these new technological advances, it was now possible to produce at relatively large scales and lower costs so that handmade or individual production would lose its value (Cortés, Medina and Treviño, 2016).

These crafts are very important for the people where they come from. Many carry a very strong history and tradition with their origins going back years, decades, and even centuries. The towns try to maintain the traditions to preserve their heritage. Another thing that is very interesting for these villages, apart from preserving their traditions, is the commercialization of the products (Pariseau, 2009).

DEVELOPMENT

Methodology

In this research, a deductive approach was used, because it is a procedure of

research that uses a type of thinking that goes from a more general and logical reasoning, based on laws or principles, to a concrete fact. In other words, it is a logical method that serves to draw conclusions from a series of principles. In short, it goes from the general to the particular.

The mixed method of nested type was also used, where the qualitative approach is inserted in the quantitative one. Similarly, a non-experimental design was used, because this type of design is based on categories, concepts, variables, events, communities or contexts that occur without the direct intervention of the researcher, that is, without the researcher altering the object of research, observing the phenomena as they occurred in their natural context, and then analyzing them. The descriptive type of design was also used, since throughout the research the clay handicrafts in the community of Santa María Cuquila, Tlaxiaco, were observed, described and identified, but without influencing the circumstances in any way, in the same way the documentary and field type of design was used, since in order to have information, a previous research was done in primary and secondary sources.

Table 1. Operationality of the VI (Systematization)

Source: Prepared by the authors.

VI (Systematization)	Dimensions	Indicators
	Efficiency	- Time of manufacture - Level of responsibility - Number of persons hired - Years of experience

		Number of incidents in the production
	Effectiveness	- Level of customer satisfaction - Time for improvement - Process planning - Number of defective products - Availability of suppliers
	Production	- Quantity of material - Average time from reach to the objective - Number of units produced - Production man-hours

Source: Prepared by the company.

In addition, the correlational design was included, since we have the relationship of two variables on the one hand the productivity of clay handicrafts and on the other hand the systematization of the production process was also explanatory because it seeks to identify the causes of low productivity and its consequences. Finally, it was also transversal because it had a single moment of evaluation.

The hypothesis was formulated as follows: Bivariate causal hypothesis: The implementation of systematization of the productive process influences the increase in the productivity of clay handicrafts.

The conceptualization of the independent variable is systematization which is defined as the arrangement and continuous organization of industrial processes, interactions and their associated information, requiring various components according to the part of the production process to which it is focused such as: controlling and ensuring product quality; automation equipment, which allow consistency in the quality of work, leading to stricter controls, as well as implementing improvement actions, to achieve greater productivity, cost reduction and the possibility of lowering costs (Espino, 2012).

Productivity is an indicator that defines how many products or services have been produced for each of the resources used in their production (, time and capital, among others) within a given period of time.

When outputs increase with respect to a constant level of inputs, or when the quantity of inputs decreases with respect to a constant level of outputs, the

productivity increases. Thus, a productivity measure describes how well an organization's resources are used to generate outputs (Allen and Evans, 2019).

Table 2. DV Operationality (Productivity).

VD (Productivity)	Dimensions	Indicators
	Resources	- Quantity of raw material used - Frequency of material change - Performance of the resources used - Frequency of raw material procurement - Labor availability
	Efficiency	- Rate of loyal customers - Complaints - Number of products sold - Return on investment - Average time to closing
	Economy	- Cost of contracting - Debt to GDP - Rate of activity - Rate of occupancy rate - Rate in interest rate

Source: Prepared by the company.

The population is made up of 42 artisans who are totally dedicated to the elaboration of clay handicrafts in the community of Santa María Cuquila, Tlaxiaco, Oaxaca. This research used a non-probabilistic technique which was the intentional sampling technique, since for research it was more useful to survey the artisans, knowing their opinion more closely, so 20% of the population was surveyed, which is equal to 8 artisans of this community. The measurement instrument chosen was a questionnaire with specific polytomous questions to obtain data collection. The questionnaire has 31 questions, of which 15 were for the independent variable that would be systematization with its

The last 16 for the dependent variable, which is productivity with the dimensions: resources, efficiency and economy.

DISCUSSION AND ANALYSIS OF RESULTS

As mentioned by Pariseau (2009), these crafts are very important for the people where they come from. Many carry a very strong history and tradition with their origins for years, decades, and even centuries. Villages try to maintain traditions in order to preserve their heritage. Another thing that is very interesting for these villages, apart from preserving their traditions, is the commercialization of the products.

During the field research, we shared the opinion of Sevilla, Vásquez (2009), because he mentions that clay handicrafts are a product mainly demanded by foreign tourists who visit our country. Although clay handicrafts are consumed in the region, foreign consumption stands out for the characteristics of the products and mainly for their manual elaboration, which is what attracts the most attention. Similarly, throughout the research, some areas for improvement in the production process were identified, therefore, we share the point of view of Espino (2012) where he mentions that, the quality of the work carrying stricter controls, as well as implementing improvement actions would achieve greater productivity, cost reduction and the possibility of lowering costs.

There was an association between productivity and systematization, with respect to what was stated in the research hypothesis, most of the surveys showed an identical pattern, suggesting that the community of Santa Maria Cuquila, Tlaxiaco was the original area where more artisans are found.

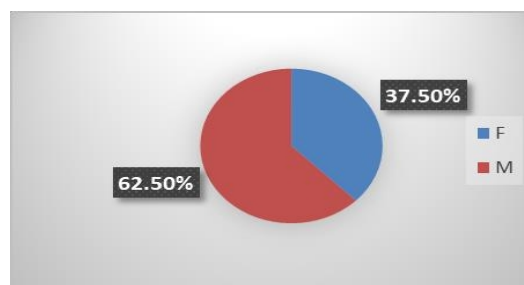
In this respect, an analysis of the subjects of the study was carried out, so that the sample consisted of 8 artisans surveyed, 3 respondents were female and the other 5 were male, so that our study reported that 37.50% of respondents were women, stating that most of them were women, and that the majority were women.

62.50% of the men surveyed, it was also possible to identify the place of origin to which they belong or where they are established, likewise, it was possible to obtain the frequency of ages in which each of them are classified by gender, noting that the youngest woman is 38 years old and the oldest is 48 years old on the contrary, the youngest man surveyed is 38 and the oldest is 68 years old, with this last information it can be interpreted that the male gender has greater involvement in the production of clay handicrafts.

The reliability analysis is an analysis that was carried out with the sum of the variances of the respondents and the respective items, and the total variance of the sum of the responses of each respondent, from these data we obtained the Cronbach's alpha, thus giving reliability to the measurement instrument, during the reliability analysis a coefficient of 0.7505 was obtained, this coefficient indicates that the instrument is reliable.

The measurement was of reliability, since the closer the coefficient value is to 1, the more reliable it is.

Figure 3. Percentage of gender surveyed.



Source. own elaboration in Excel.

For hypothesis testing, a correlation analysis was performed and used to measure the degree of association between the independent and dependent variables and thus, approve the research hypotheses.

Correlation between dimensions.

		NCIA EFFICI ENCY	EFFECTI VENESS	PRODUC TION	RECU RSOS	EFICA CIA	ECON OMY
EFFICIEN CY	Pearso Correl ation n	1					
EFFECTI VENESS	Pearso Correl ation n	0.462	1				
PRODUC TION	Correl ation of Pearso n n	0.42	0.672	1			
RESOUR CES	Pearso Correl ation n	0.655	.787*	0.36	1		
EFFICIE NCY	Pearso Correl ation n	0.65	0.6	.770*	0.378	1	
ECONO MIA	Correl ation of Pearso n n	-.726*	-0.144	-0.332	-0.475	-0.225	1

* Correlation is significant at the 0.05 level (bilateral).

Source: own elaboration in SPSS 25.

It was also important to analyze the relationship between dimensions, since it allowed us to identify those with the greatest impact on the processes described. Table 3 shows the results of the VI and DV dimensions, where it was found that the Effectiveness dimension has the strongest correlation with the Resources dimension ($r=0.787^{**}$). The Efficiency dimension is positively related to the Effectiveness dimension ($r=0.462^{**}$), to Production ($r=0.42^{**}$), to the Resources dimension ($r=0.655^{**}$) and to Effectiveness ($r=0.65^{**}$).

The Effectiveness dimension is related to the Production dimension ($r=0.672^{**}$) and to Efficiency ($r=0.6^{**}$). Likewise, Production has a positive relationship with the Resources dimension ($r=0.36^{**}$) and with the Resources dimension ($r=0.36^{**}$).

Effectiveness ($r=0.770^{**}$). Similarly, the Resources dimension is related to Effectiveness ($r=0.378^{**}$).

Table 4. Correlation between variables.

		SYSTEMATIZATION	PRODUCTIVITY
SYSTEMATIZATION	Correlation of Pearson	1	.754*
	Sig. (bilateral)		0.031
	Sum of squares and vector products	87.5	47.75
	Covariance	12.5	6.821
PRODUCTIVITY	N	8	8
	Pearson correlation	.754*	1
	Sig. (bilateral)	0.031	
	Sum of squares and products vector	47.75	45.875
	Covariance	6.821	6.554
	N	8	8
* The correlation is significant at the 0.05 level (bilateral).			

Source: own elaboration in SPSS 25.

The results obtained show a correlation between variables, which we define as a measure that helped us to express the extent to which the two variables are related, specifically the trend, whether increasing or decreasing.

Table 4 shows the results of the variables, where it can be observed that the Systematization and Productivity variable have a positive and significant relationship ($r=0.754^{**}$) at the 0.05 level.

Table 5. Linear regression.

Summary of the model						
Model	R	R square	R square or adjusted	Standard error of the estimation	Statistician s of change	
1	.754 ^a	0.568	0.496	1.81738	Change in R-squared	Change in F
a Predictors: (Constant), Systematization: (Constant), SISTEMATIZATION						here
b Variable dependent: PRODUCTIVITY						

Source: own elaboration in SPSS 25.

It was also necessary to perform a linear regression to determine the extent to which one variable affects the other and thus test the research hypothesis.

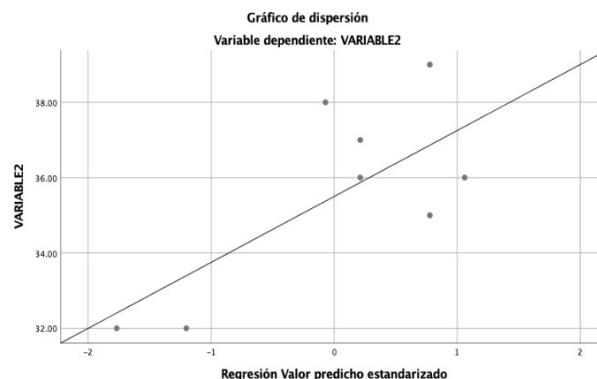
With the results of the questionnaire, it was possible to perform a simple regression analysis, which calculated the relationship between productivity and systematization; this analysis yielded a relationship coefficient of 0.568, therefore, the variable is explained by 56%. Therefore, the hypothesis is accepted.

The linear regression analysis that was used had as objective to know the incidence of the variable

(Systematization) on the dependent variable (Productivity) of the research.

A scatter plot was also obtained which shows the relationship between the variables and their corresponding dimensions.

Figure 1. Scatter plot.



Source: based on regression in SPSS 25.

CONCLUSIONS

The general objective was to determine the impact of systematization on the productivity of clay handicrafts in the community of Santa María Cuquila, Tlaxiaco, Oaxaca. As well as those specific objectives that were based on identifying the importance of systematizing the production process of clay, analyzing and determining the measurement of the productivity of the handicraft processes as well as establishing the incorporation of systematization in the handicraft sector.

Therefore, a documentary type research was carried out in which the sociodemographic data and economic activity data stand out, with this data it was possible to have a broad overview of how the artisans of this community live.

A statistical analysis of correlation and linear regression was also carried out, obtaining that these two variables are positively correlated with a Pearson coefficient of 0.568, in the dependency relationship where the dependent variable explains the independent variable and this percentage was 56%. It was possible to prove that productivity (DV) is an element that is present in the community; its historical character historical nature

allows that its its historical character allows its accumulation to transcend stages and remain in force neighboring communities. Its use is scarce, but it has symbolized a viable way to face the processes of change.

It is concluded that the elements of productivity in productive activities of artisans are closely related, and can therefore be analyzed together.

In handicraft production, it was found that the dimensions of productivity, resources, efficiency and

The economic situation develops differently in the community and that these social differences are conditioned, to a certain extent, by the culture and levels of community identity.

Also, the statistical analysis was used with a determined sample to observe the relationship between the research variables, from this analysis we were able to obtain data such as: gender, place of origin and age, although these data only represent a small sample of artisans, we can conclude that most of the artisans of Santa Maria Cuquila are male and that young people are now interested in other things; therefore, they leave aside the making of handicrafts for older people.

For future lines of research, we propose the study of clay as a material and its most important qualities, among which the capacity to regulate environmental humidity stands out, since it can absorb and desorb humidity more quickly.

Conduct interdisciplinary and multidisciplinary research that focuses on the knowledge, practices and concerns that can to improvement actions at work.

ACKNOWLEDGMENTS

This project was possible thanks to the support of the artisans, who agreed to stay completely out of the process of elaboration of the guides that we carried out, with the only exception of continuing to contribute and recognize the handicrafts during the evidence stage.

BIBLIOGRAPHY .

- [1] Mejía, S. E. et al, (2018). Artisans and their entrepreneurial potential. Valles centrales Del estado DE Oaxaca, 6,11. Doi: <https://www.uv.mx/iic/files/2020/08/Num11-Art06.pdf>
- [2] Rivas, R.D (2018) La Artesanía: Patrimonio e Identidad Cultural, n°9, Págs.,8096. DOI: <http://dx.doi.org/10.5377/koot.v0i9.5908>
- [3] Suckaer, I. (2008). Mud and word. Contemporary artistic ceramics in Mexico. Doi: <https://cdigital.uv.mx/bitstream/handle/123456789/33182/47a49ph2008n3.pdf;sequence=1>
- [4] Alonso, M. G. Á. (2020). For a horizontal collaboration between Mexican designers and artisans. Economía Creativa, (14), 222-255. Doi: <https://scholar.archive.org/work/o2cdly7i7jbb3lwtjeq76fklm/access/wayback/https://rhd.uchile.cl/index.php/RChDCP/article/download/53823/61702>
- [5] Sevilla and Vásquez (2009) Estudio de Mercado para la Comercialización de Artesanía de Barro Negro [Thesis for the Degree in Agribusiness, Universidad Nacional Agraria]. Institutional Repository. UNA, Doi: <https://repositorio.una.edu.ni/id/eprint/804>
- [6] Inegi. (2020, March 4). Mexico in figures. DOI: <https://www.inegi.org.mx/app/areasgeograficas/?ag=203970025#collapse-Summary>.

- [7] Saligan, R. I. et al, (2017) Difficulties around craft production. young people. In Science, 3 Doi:

<https://www.jovenesenlaciencia.ugto.mx/index.php/jovenesenlaciencia/article/view/1959>

- [8] Cortés, F., Luna, M., Medina, A., & Treviño, S. (2016). International trade.

of the Mexican handicraft sector: an application of the product life cycle model. *Student Journal of Economics*, 3(2), 67-86. Doi: <http://ree.economiatic.com/A8N2/240478.pdf>

- [9] Pariseau, J. (2009). Tradición Para Sobrevivir: Comercialización de la Cerámica de Barro Negro de San Bartolo Coyotepec, Oaxaca, México. Doi: <https://cache.kzoo.edu/items/77b2f6b5-04a9-4866-9561-133fcae78357>

- [10] Allen and Evans (2019) Definition of productivity according to authors. Smart Entrepreneur. Doi: <https://www.emprendedorinteligente.com/definicion-de-productividad-acordando-a-los-autores/>

- [11] Armijos, V.K.A (2016) Identification of Handicrafts in Loja Canton; case Asociación de Artesanos [Tesis Título de Ingeniero en Administración de Empresas, Universidad Técnica Particular de Loja] Institutional Repository. Doi: <http://dspace.utpl.edu.ec/handle/20.500.11962/21930>

- [12] Girón, H. J. et al, (2002). DISTRIBUTION CHANNELS AND COMPETITIVENESS IN CRAFTS. Espiral, IX (25). Doi: <https://www.redalyc.org/articulo.oa?id=13802505>

- [13] Hernández, M. V. (2005). Estudio de las estrategias de mercadotecnia y competitividad del Sector alfarero en el estado de Oaxaca [Tesis de licenciatura. Universidad Tecnológica de la Mixteca]. UTM institutional repository. Doi: http://jupiter.utm.mx/~tesis_dig/9431.pdf

- [14] - López, N.L.R. (n.d.). Techniques of qualitative methodology. Learning Support Units- CUAIEES- UNAM.

- [15] Espino (2012) Systematization. Your Business Interface, n°7. Doi: <https://tuinterfaz.mx/articulos/7/56/sistematizacion/>

CONTRIBUTION ROLE TABLE

Role	Author(s)
Conceptualization	Neydi Barrios Miguel
Methodology	Diana Santiago Ortiz
Supervision	Gabriela Jiménez Velasco



This work is licensed under an international license Creative Commons Attribution 4.0.