

Web site layout for the sale of handicrafts from the municipality of Naupan, Puebla**Maquetado de sitio web para la venta de artesanías del municipio de Naupan, Puebla**

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Abstract

Currently the artisans of the municipality of Naupan, Puebla sell their handicrafts directly in their homes and little has been done for the use of information technology to increase sales, profits and reduce costs. This paper describes the research methodology that was followed with a qualitative process to present the layout of the website for the sale of handicrafts in the municipality of Naupan, Puebla. With this layout, a new form of commercialization or market niche is created that allows the reduction of the abandonment of the elaboration of products in the handicraft sector and contributes to preserve the culture and identity of the municipality.

Handicrafts, Methodology, E-Commerce

Resumen

Actualmente los artesanos del municipio de Naupan, Puebla realizan la venta de sus artesanías directamente en sus viviendas y poco se ha hecho por la utilización de las Tecnologías de la Información para aumentar sus ventas, ganancias y reducir costos. En este documento se describe la metodología de investigación que se siguió con un proceso cualitativo para presentar el maquetado del sitio web para la venta de artesanías del municipio de Naupan, Puebla. Con este maquetado se crea una nueva forma de comercialización o nicho de mercado que permite la disminución del abandono de la elaboración de productos en el sector artesanal y se contribuye en preservar la cultura e identidad del municipio.

Artesanías, Metodología, Comercio Electrónico

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Introduction

Rather than concentrating on the preservation of craft objects, safeguarding efforts should focus on encouraging artisans to continue making their products and passing on their knowledge and skills to others, particularly within their communities (Organización de las Naciones Unidas para la Educación la Ciencia y la Cultura, [UNESCO], 2022).

As a definition of handicraft products it is said that: they are those produced by artisans, either entirely by hand, or with the help of hand tools or even mechanical means, provided that the direct manual contribution of the artisan remains the most important component of the finished product. They are produced without limitation in terms of quantity and using raw materials from sustainable resources. The special nature of handicraft products is based on their distinctive characteristics, which may be utilitarian, aesthetic, artistic, creative, culturally linked, decorative, functional, traditional, symbolic, religiously and socially significant (Manila, Philippines, 1997). The artisan was also identified as an enterprising individual whose marketed handicrafts convey the values and teachings of his or her community (Rodrigues, A.O.A., Marques, C.S. and Ramadani, V., 2023).

With the ENCCUM (National Survey of Cultural Consumption in Mexico) conducted in 2012 by the National Institute of Statistics and Geography (INEGI) with the support of the then National Council for Culture and the Arts (now the Ministry of Culture) along with data from FONART and CONAPO, it was projected that by 2017 in Mexico the number of people who made some crafts aged 12 years and older would be 12,054,309, a figure that would correspond to 10.44% of the total population of the country (FONART, 2018).

According to INEGI, in the Culture Satellite Account of (CSCM), the culture sector generated 724,453 million current pesos in 2019, of which, crafts contributed 138,291 million pesos representing 19.1% of the cultural sector. And in that same year, handicrafts employed 489 890 paid occupied jobs; this represented 35.1% of the jobs employed by the culture sector as a whole (Instituto Nacional de Geografía e Historia [INEGI], 2021).

E-commerce is defined as: the process of buying, selling or exchanging goods, services and information through computer networks, for which payment may or may not be made online (Instituto Nacional de Geografía e Historia [INEGI], 2022).

The importance of this is that it is attractive for doing business because, in short, it can help increase profits; this is so because it increases sales and reduces business costs. Well managed advertising on the web can communicate the promotional message even of companies for potential customers in all countries (Schneider, Gary P, 2013).

Defining ICT, it can be stated that this term refers to the multiple technological tools dedicated to store, process and transmit information, making it manifest in its three known forms: text, images and audio (Zambrano, F., 2009).

In this era of constant technological advances the development of web applications is increasingly demanded, this is due to the increase of online activities including e-commerce of companies, so that nowadays professional developers are a very important factor in organizations (Basantes Suñiga, Á. J., 2022).

The design of websites presents important challenges such as the selection of an appropriate tool, the use of a development methodology to close the project with a delivery according to the requirements of the users and in the specific case of the Santo Domingo de Guzmán Foundation had to adapt to the needs of the idiosyncrasy that surrounds it. The use of a content manager brought with it the coupling to the characteristics of the WordPress tool that was selected and the subsequent training to end users to use it properly when managing future changes to the content of the site. Research techniques and methods were used to meet the prerequisite knowledge by taking into account both the internal staff of the institution and the patients of the medical center (Yacelga, A. R. L., Espinoza, J. L. A., & Cabrera, M. A. C., 2022).

A content management system is an application that allows the creation and administration of content, mainly in web pages (Rodríguez, M., 2021).

According to the analytics company W3Tech, approximately 43% of the websites in the world are managed by the WordPress CMS because it is the fastest and cheapest way to publish web content followed by Shopify, Wix, Squarespace, Joomla, Drupal, Adobe Systems, Google Systems, Bitrix and WebFlow, who are placed among the 10 most used CMS worldwide (W3Techs, 2022).

WordPress is a content management system based on the creation of blogs or weblogs, it is divided into two services, one is wordpress.com and the other is wordpress.org. Wordpress.com is a service focused on blog creation, which allows free or paid hosting offered by Automattic, developer of WordPress, allowing you to host your blog on their servers. Wordpress.org is an application that has to be installed on a host and linked to a database. This second service is more complete, so much so that it not only allows the creation of a blog, but Wordpress.org has evolved in such a way that it allows the creation of corporate pages, virtual stores, and much more (Rodríguez, M., 2021).

This article is intended to present the phases carried out to collect the contents for the construction of the layout of a website for the sale of handicrafts in the municipality of Naupan, Puebla.

It is presented in the methodology to develop an approach with data on population, location and marketing of crafts on the municipality of Naupan, Puebla and describes the activities by phases that were carried out to collect the information obtained from the different groups of artisans of the Municipality of Naupan, Puebla to make the layout of the website, in the results shows the distribution of the site with multimedia material generated, then it is found with the acknowledgements, conclusions and finally with the references used.

Methodology to be developed

Speaking of the population of the municipality of Naupan, Puebla this is composed of a total of 9,310 people, of which 4,320 are men and 4,990 women (Instituto Nacional de Geografía e Historia [INEGI], 2020). Its name comes from the Nahuatl voices: "nahui", four; "atl", water, and "pan", over; it means "Over four rivers or waters".

To this place, through which four rivers flow, Totonac groups arrived to settle and found the town that was formerly called Nexpan; "Over the ashes". In 1750 it was under the ecclesiastical jurisdiction of Huauchinango. In 1895 it was constituted as a free municipality. The parish church dedicated to San Marcos was built in the XVII century and is located in the head of the town. On April 25, the patron saint's day of San Marcos, which lasts eight days with wind bands, fireworks, masses, prayers, processions, popular dances, jaripeo and different dances such as "Los Negritos", "Los Santiangueros", "Los Tejoneros" and "Los Quetzales" (H. Ayuntamiento de Naupan, 2022).

It is bordered to the north by the municipalities of Pahuatlán and Tlacuilotepec; to the east by the municipalities of Tlacuilotepec and Huauchinango; to the south by the municipality of Huauchinango and the state of Hidalgo; to the west by the state of Hidalgo and the municipality of Pahuatlán (Instituto Nacional de Geografía e Historia. [INEGI], 2010, p. 1-3). It occupies a territorial space in which the differences in altitude are very marked, ranging from 560 meters above sea level to 2,240 meters, showing an ecological diversity that makes it possible for its inhabitants to have several simultaneous crops, in relatively close spaces but with notorious altitudinal diversity (Broda, J. & Good, C., 2004).

Naupan is located in one of the mountain ranges that cross the national territory from north to south, in the Sierra Madre Oriental. The region of which this municipality is a part is characterized by its ethnic and linguistic heterogeneity, which for centuries has been shared by Nahuatl (who are the majority in the state), Totonaca, Otomi and Tepewá groups in very close and sometimes almost imperceptible borders. This region was the seat of one of the most important cultures of pre-Hispanic Mexico, the Totonacapan, whose main center of power was El Tajín (Broda, J. & Good, C., 2004).

It is located in the northwestern part of the region called Sierra Norte de Puebla and whose majority of the population is indigenous Nahuatl or Mexican speakers (Broda, J. & Good, C., 2004), according to the bank of indicators of INEGI of the year 2020 the population of 5 years and more Nahuatl speaker (people) in Mexico was 1,622,170.

Of these 445,012 are from the state of Puebla and 7,042 live in the municipality of Naupan (INEGI, 2020), where the most important cultural practice of the region is the elaboration of textiles, made manually by most women over twelve years old. Likewise, it is one of the most important economic activities in the region, in addition to agriculture and commerce (Bernáldez, T., 2021).

The research methodology was followed with a qualitative process (Sampieri, R., 2018).

Figure 1 shows the phases for the research methodology employed:



Figure 1 Phases of the research methodology
Source: Own elaboration

The following is a description of the phases developed:

Phase 1. Idea

The objective was to design a website for the sale of handicrafts from the municipality of Naupan, Puebla with multimedia content.

Phase 2. Problem statement

In this municipality and as a product of their crafts are made embroidery, reed weaving, basketry and traditional costumes where the woman wears long black skirt, white blouse, shawl or shawl; the man wears underpants and shirt blanket, palm hat, huaraches strap and machete tape (INEGI, 2010, p. 1-3), plus handmade coffee, coffee liquor, panela as food sweetener and finally the development of clay pots. The marketing of handicraft products generated in the municipality of Naupan, Puebla is mostly done in the artisans' own homes since they lack commercial places or premises where they can sell their handicrafts.

They also go to regional markets, fairs and craft exhibitions, which means that they have to pay for their own transportation, food and lodging expenses, which results in an expense that significantly reduces their profits. As another way to market their handicrafts, the artisans have tried to use information technology tools such as social networks, in this case Facebook, but due to their lack of knowledge in the use of these, they have lost interest and have stopped updating their content, which included some photos of garments of their handicraft production.

Phase 3. Immersion in the field

Meetings, surveys and interviews were conducted with groups of artisans and all the multimedia material from the municipality of Naupan, Puebla was captured.

Phase 4. Conception of the design or main approach of the study

A directory of artisans was prepared, a product catalog was prepared, multimedia material was obtained for the promotion and identification of tourist and cultural sites, and the site was designed.

Phase 5. Definition of and access to the study sample

Work was done with the different artisans and groups of artisans who make crafts in the municipality of Naupan, Puebla.

Phase 6. Data collection

For the elaboration of the directory of artisans, meetings were held with the groups of artisans; Figure 2 shows the meetings with artisans.



Figure 2 Meetings with artisans
Source: Own Elaboration

A questionnaire was used to find out if they would like to promote and sell their handicrafts on a website.

Multimedia material was captured in order to define and elaborate the product catalog of the artisans and groups of artisans where their origins are described, the elaboration process is portrayed along with the techniques and tools used for the elaboration of their handicrafts through interviews, photos, video and drone shots. Figure 3 shows images of artisans' products.



Figure 3 Artisan products
Source: Own Elaboration

Multimedia content that promotes and identifies the culture was captured. Figure 4 shows a video of a tourist site.



Figure 4 Tourist site video
Source: Own Elaboration

Figure 5 shows a drone shot of a tourist site.



Figure 5 Drone shot of a tourist site
Source: Own Elaboration

Figure 6 shows an image of a cultural site in Naupan, Puebla.



Figure 6 Church of Naupan, Puebla
Source: Own Elaboration

Figure 7 shows 360° photos of tourist sites in the municipality of Naupan, Puebla.



Figure 7 360° shots of cultural sites
Source: Own Elaboration

Phase 7. Data analysis

A directory of artisans was created from the results of the questionnaire. Figure 8 shows the directory of artisans.



Figure 8 Directory of artisans of Naupan, Puebla
Source: Own Elaboration

With the multimedia material, the catalog of the different groups of artisans was created. Figure 9 shows the catalog of groups of artisans.



Figure 9 Catalog of artisans. Naupan, Puebla
Source: Own Elaboration

Results

With information obtained from the immersion in the field and the capture of multimedia material and interviews conducted, the layout of the website for the sale of handicrafts in the municipality of Naupan, Puebla is presented.

Phase 8. Interpretation of results

Figure 10 shows the home page of the website layout for the sale of handicrafts in which, through 360° images, video and drone images and text, information about the origin, culture and traditions and handicrafts as attractions to promote and publicize the municipality of Naupan, Puebla can be seen.



Figure 10 Website layout home page
Source: Own Elaboration

Figure 11 shows the artisans' catalog page of the website layout that allows to know the groups of artisans and the different crafts they manufacture.

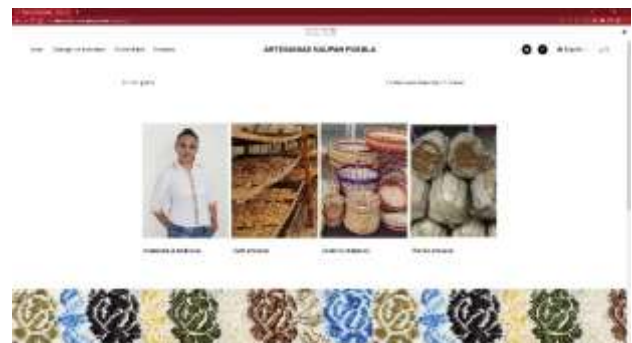


Figure 11 Artisans catalog page of the website layout
Source: Own Elaboration

Figure 12 shows the layout page of the apparel handicrafts catalog website.

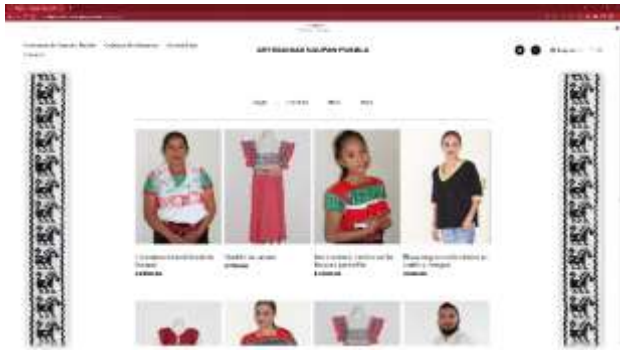


Figure 12 Catalog of handicrafts of clothing web site page
Source: Own Elaboration

Figure 13 shows the page of the description of the specific handicraft product of a group of artisans where the selection of the handicraft is made and added to the sales cart.



Figure 13 Page of the description of the specific handicraft product of a group of artisans
Source: Own Elaboration

Figure 14 shows the page that displays the description of the handicraft product or products selected by the customer for payment.

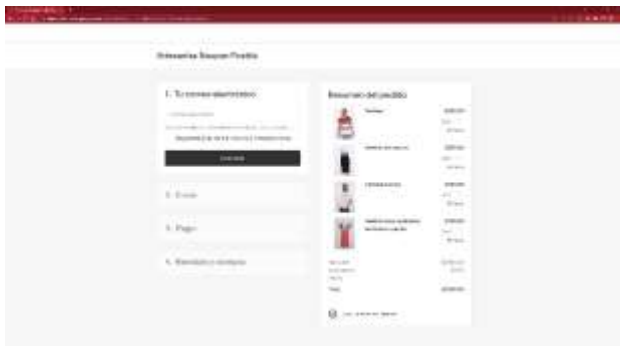


Figure 14 Page of products selected to make the payment
Source: Own Elaboration

Phase 9. Elaboration of the report of results

As results, we present the website layout that allows the promotion of handicrafts through e-commerce as a new form of marketing, to improve the economic growth of artisans and preserve the development of handicraft products, this layout was achieved with the participation of artisans in the region and the support of the H. Ayuntamiento de Naupan, Puebla 2021-2024.

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Conclusions

With the use of information and communication technologies, a multilanguage website (Spanish, English and Nahuatl) is configured and implemented in which the handicraft products of the native peoples of the municipality of Naupan, Puebla can be promoted and sold online to a local, national and international market with easy customer access to its product catalog.

With this multilingual website (Spanish, English and Nahuatl) the purchase operations are automated 24 hours a day, 365 days a year through e-commerce, allowing the customer to know the product catalog at a fair price and who and how it was made and encouraging them to purchase the product, creating new market niches for the artisans of the municipality of Naupan, Puebla, boosting the sale of their crafts locally, nationally and internationally, It also eliminates intermediaries and preserves their culture, traditions and customs, reduces inequality.

The digital divide and the abandonment of the elaboration of products in the artisan sector that would result in the loss of Mexico's cultural heritage since they are handmade with techniques in the process of extinction that if not followed up could disappear.

It also promotes the preservation, revitalization and transmission to future generations of their tangible and intangible cultural heritage, traditional knowledge and traditional cultural expressions, as well as all the elements that constitute the culture and identity of these peoples.

This project also promotes economic growth, employment, cultural work and local products of the native peoples of the municipality of Naupan, Puebla. In addition to promoting the recognition of indigenous communities and fostering equal opportunities, eliminating any discriminatory practices and promoting the development of indigenous communities in order to strengthen local economies.

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