

## Business model for a catfish fish processor

### Modelo de negocio para una procesadora de pescado bagre

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#### Abstract

In the Mixteca Poblana, there are aquaculture farms producing catfish (*Ictalurus punctatus*), which is a freshwater fish and its international trade is relatively recent. The producers have found in this activity an opportunity for economic development, since it represents an additional source of income in the face of the lack of jobs in the same area. The commercialization of the carcass meat of this type of fish, is difficult due to the ignorance of the same in the market, in addition to the date there has not been an added value that allows to introduce this meat in points of sale with greater demand of aquaculture products. Currently, food products were developed, with catfish meat. The objective is to formulate a proposal of agribusiness processing company of catfish meat in value-added products, that allow to increase the consumption and therefore the production of this fish, bringing with it greater economic benefits for the aquaculture farms of the aforementioned region. The business plan for this processing plant is structured based on the Canvas model methodology, which is a tool for shaping business ideas and allows finding key factors for the success of the project.

En la Mixteca Poblana, existen granjas acuícolas productoras de bagre (*Ictalurus punctatus*), que es un pez de agua dulce y su comercio a nivel internacional es relativamente reciente. Los productores han hallado en esta actividad una oportunidad de desarrollo económico, pues representa una fuente de ingresos adicional ante la carencia de empleos que presenta la misma zona. La comercialización de la carne en canal de este tipo de pez, se dificulta debido al desconocimiento de la misma en el mercado, además que a la fecha no se ha dado un valor agregado que permita introducir esta carne en puntos de venta con mayor demanda de productos acuícolas. Actualmente se han desarrollado productos alimenticios con valor agregado, con la carne de este pescado. Se formuló una propuesta de modelo de negocio para una planta procesadora de carne de bagre en productos con valor agregado, que permitan incrementar el consumo y por ende la producción de este pez, trayendo consigo mayores beneficios económicos para las granjas acuícolas de la región antes mencionada. El modelo de negocios se estructura con la metodología Canvas, que es una herramienta para dar forma a ideas de negocio y permite hallar factores clave para el éxito del proyecto.

**Agroindustry, Catfish, Canvas Model  
Resumen**

**Agroindustria, Bagre, Modelo Canvas**

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## Introduction

Creativity and innovation are undoubtedly two factors that must be present in the day to day of organizations to be competitive in the market. According to Edward de Bono, creativity consists of bringing something new into existence that has value (De Bono, 2007). Regarding innovation, one of the greatest exponents of this term is the economist Schumpeter, who cited by Medellín points out that innovation is the introduction of a new good in the market (Medellín Cabrera, 2013).

In the OSLO innovation manual, innovation is defined as the introduction of a new product, process, method or organizational form, assuming that innovation does not only focus on the modification or creation of goods. An important aspect that this manual points out is that newly created goods must be introduced to the market (Organization for Economic Cooperation and Development, 2005).

When talking about innovation, we speak of value generation, added value arises when a product is modified or transformed that gives rise to a new product, which will therefore increase its economic value. (Granados, 1998).

For the creation of companies, a business idea must be proposed that bets on an element different from what already exists in the market, therefore it is necessary to formulate a business model that allows guiding the way to start up and operate a business.

## Problem

In this project, new products were developed from catfish fish meat, we talked about the elaboration of foods such as: nuggets, hamburgers, ham and chorizo, catfish, which is a fish grown in aquaculture farms located in the Mixtec region of Puebla.

Channel catfish marketing has presented difficulties to be marketed in the local market, primarily due to the low popularity of the species among consumers who are more used to species such as tilapia and trout. The not so common appearance of catfish, and the ignorance of the advantages of consuming its meat, because there is little demand and aquaculture producers are faced with the dilemma of continuing with their cultivation or not.

## Hypothesis

By creating a catfish fish processing company, it will be possible to add value and obtain a line of products with good nutritional content, good taste and appearance for the consumer. What will allow increasing the cultivation of this species.

## Objectives

### General Objective

Design the business model for the creation of an agro-industrial company, processing aquaculture products in the Mixteca Puebla. Taking as a reference the methodology of the Canvas Model for the generation of business models.

### Specific objective

- Define the value proposition that makes it possible to differentiate the company in the market

## Theoretical framework

An idea is a mental representation of a fact that we want to bring to reality, when an idea begins to generate economic value, we then speak of a business idea or business idea.

The business idea must define and explain the concept of the business to be developed, but for a business idea to become a reality, tools are needed to help shape and evaluate it to determine its viability. One of those tools is the business plan.

A business plan, or business plan, is a guide to the process of creating a business. According to Enrique Zorita, the business plan is a document that identifies, describes and analyzes a business opportunity, where the viability of the same is also examined and the strategies for how to develop the business are proposed (Zorita Lloreada, 2015).

In the business plan a description of the business idea is made, it is planned how to operate and develop said idea (Thomsen).

The parts that make up the business plan document are mainly 4 studies: market study, technical study, administrative study and financial study. Some authors add other sections or divide those already mentioned, for example the authors Naveros and Cabrerizo, in addition to the previous studies, it includes a marketing plan and a legal plan (Naveros Arrabal & Cabrerizo Dumont, 2009).

Pedraza points out that it is also important to analyze the possible risks to which the project is exposed, in order to define strategies to overcome these barriers (Pedraza Rendón, 2014).

To formulate business plans it is necessary to define the central idea, the business idea, building a business model. There are methodologies that facilitate the identification of the model, one of these tools is the Canvas Model, which is a tool that facilitates the identification of important factors in the development of a business model to follow.

The Canvas Model is proposed by Alexander Osterwalder (Osterwalder & Pigneur, 2010) its methodology consists of a board composed of nine essential modules to plan a business plan, these modules are: a) value proposition; where the product or idea to be launched on the market is described, b) market segmentation; describes the characteristics of the potential consumer, c) channels; This section indicates the manner in which the product will be delivered to the customer, d) customer relations; customer loyalty strategies are proposed, e) key resources; are the resources necessary to operate the business, f) key activities; are the fundamental actions for the operation of the business, g) key associations; are the relationships with other entities to strengthen the business, h) Income; shows how to obtain the company's income, i) costs; shows the structure of the main business expenses.

### **Research Methodology**

First, work was done on defining the business idea, this derives from previous research carried out on the production of products with catfish meat.

Once the development of a line of 4 products was successfully obtained, the design of the business plan began based on the canvas model.

### **Results**

Taking the quadrants of the CANVAS board as a reference, the business model has been designed for a processing plant for products derived from catfish.

### **Value proposition**

A line of products derived from catfish meat, with high nutritional value, easy to prepare and with properties to prevent cardiovascular diseases.

The differentiation against the rest of sausage products is based on the ease with which the dishes are prepared and the amount of benefits that the products provide to the body. The consumer will have the confidence and security of acquiring a food that, in addition to being tasty, is healthy.

### **Market segmentation**

The products are designed for families of socioeconomic level C and C+, according to the classification of socioeconomic levels of the Mexican Association of Research Agencies (AMAI), these households spend 35% on average of their income to purchase food, have access to telephony and internet services, which represents an opportunity to promote the brand through digital media. They are the segment that has the necessary conditions to be able to acquire the products, which are goods with a slightly high price compared to the substitute products, they are gourmet products. Geographically the products will be introduced in cities with more than 80,000 inhabitants. Currently in the Mexican market there are no products equal to those offered in this company, so there is no direct competition, however there are many substitute products, with lower prices that represent our indirect competition. Faced with this situation of high presence of substitutes, it was decided to attract customers of medium-high socioeconomic level, who are willing to pay more for a differentiated product.

**Channels**

To get the products to the consumer, it was determined that the appropriate channel is level two or intermediaries. You will not establish your own point of sale as this raises the fixed costs of the company. As a strategy, it is intended to manage the products under the consignment scheme, the product will be left in different commercial establishments that are currently dedicated to the retail sale of products of the basic basket, as is the case of grocery stores and supermarkets, the price given to these is lower than the public price so that they have a profit margin, the intermediary will only pay for the units sold, those that do not move will be collected and their final destination will be evaluated. It will also be offered in restaurants and food establishments, since the products work as ingredients to prepare other dishes.

**Relationship with clients**

An open communication channel will be maintained with the client and with intermediaries. The behavior of sales and the opinions of the final consumer will be monitored on time.

**Key resources**

Equipment and machinery that meets technical specifications. Special care must be taken with the acquisition of equipment, as they must have the necessary conditions to take care of the quality and safety of food products.

**Key activities**

Product manufacturing processes must be clearly defined, clear and specific. The degree of quality and the acceptance of the products depend on it.

**Key associations**

The main and close relationship will be maintained with the catfish producers in the region, as they are the main suppliers of the raw material. Failure to strengthen this relationship implies that the catfish have to be acquired from distant aquaculture farms, which would increase the costs of the products.

**Source of income**

The main source of income lies in the sale of the product line, the prices are higher than those of the closest competition since they are gourmet products that are aimed at a market sector with the ability to purchase.

**Cost structure**

The main cost to consider is that of the raw material, it is the main cost of production. Within the fixed costs, one of the most important to consider within the stage of introduction of the products to the market, is the pertinent to advertising and diffusion.

**Conclusions**

With this business modeling, you have the basis to later integrate a business plan and evaluate the profitability of the project. Strategies are formulated in aspects such as marketing and business operation.

Innovation will be a constant, through research new products will be developed that allow reaching various market segments, positioning the company as a benchmark in the Mixtec region of Puebla.

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