



Characterization of production and organization of mezcaleros, Malinalco, Mexico

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Resumen

Mezcal production in the study region, ranchería “El Zapote”, Malinalco, Mexico, is growing rapidly. The process includes selection and cutting of raw material, cooking the agave, grinding the must, fermentation of the fructosed juice, distillation, rectification and maturation of the distillate. Mezcal producer organizations are heterogeneous, with different sizes, characteristics, structures and objectives. In this study, we analyzed the mezcal production method and the organization of producers. Both aspects led to the proposal of optimal production processes according to the requirements of the Mezcal Denomination of Origin regulations, proposing organizational schemes throughout the agave-mezcal production chain. The paradigm used was qualitative, with a holistic perspective, interacting with the informants in a natural way, where the perspectives provided by the mezcal experts, apprentices, magueyeros, intermediaries, packers and marketers were determinants. The instrument used in this research was of an ethnographic and narrative nature, complemented with the application of 50 in-depth interviews, during August to November of the initial year of research. The organizational system is informal, satisfying local consumption; pretending to face the regional demand, reflecting improvisation in all members of the value chain, lack of evaluation, lack of process monitoring and no quality system. An efficient organization is required, with pertinent management to encourage, facilitate and favor the fulfillment of systematic requirements aimed at improving, disseminating, promoting and offering what a protected product means and its implicit and explicit scopes derived from its implementation.

► **Palabras clave:** Artisan production, Denomination of origin, Informal organization, Organizational change, Plant shortage.

Introduction

Mezcal is an alcoholic beverage, classified as a “spirituous liquors”, originating in Mexico, with high demand in domestic and international markets. Its production is duly protected by the Mezcal Denomination of Origin (DOM in Spanish), represented by Mexican municipalities in the states of Oaxaca, Guerrero, Durango, San Luis Potosí, Zacatecas, Tamaulipas, Guanajuato, Michoacán, Puebla, as well as those of the last expansion, Estado de México, Aguascalientes and Morelos.

There are at least three types of mezcal production: artisanal, traditional and modern production (Blomberg, 2000). Artisanal production is the predominant one in the mezcal

region of Estado de México, therefore, in the study site of this study, located in the ranchería “El Zapote”, municipality of Malinalco, whose population carries out primary sector activities. However, mezcal production is booming. The production stages begin with the selection and cutting of raw material, cooking the agave, grinding of the must, fermentation of the fructosed juice, distillation, rectification and maturation of the distillate (Pérez et al, 2016). Organizations producing mezcal are extremely heterogeneous and diverse, with different sizes, characteristics, structures and objectives (Chiavenato, 2006). These characteristics also prevail in the mezcal factories considered, so the central theme consisted of analyzing the way mezcal is produced, describing each of the particular phases carried out on the site. Likewise, the grouping of producers was reviewed, and both topics led to

the proposal of optimal production processes according to the requirements of DOM regulations, also proposing organizational schemes throughout the production chain.

Materials and Methods

The paradigm used was qualitative. Since it was a research that produced descriptive data, we used people's own words, spoken or written, and the behavior for the realization of their productive activities, complemented with the development of a theoretical and humanistic foundation, with the purpose of understanding the social reality of the idealistic position that highlights an evolutionary and negotiated conception of the social and inductive order, but with a holistic perspective that allowed interacting with the informants in a natural way, with an integrated process, regarding as valuable the perspectives provided by the mezcaleros, factory employees (apprentices), magueyeros, intermediaries, packers and marketers (Guardián-Fernández, 2010). The instrument used in the research was ethnographic and narrative in nature, complemented by the application of 50 in-depth interviews, during August to November 2018, which together facilitated the participants' expression of emotions, feelings, thoughts and knowledge about the

topic and the region of study, managing to understand the general context, but, above all, the specific context of the productive activity (Robles, 2011).

Results and Discussion

In the study area, the plant is between six and eight years old. The production stages are shown in Figure 1, beginning with the selection and cutting of raw material. The agave is then cooked in conical ovens at ground level, with volcanic rocks and a combination of dry and green firewood, covering the pineapples with earth and palm, which lasts up to four days. Afterwards, the cooked pineapples are crushed with a wooden mallet, typical of the study area. The crushed pineapples are then placed in plastic containers to start the fermentation of the fructose juice. Finally, distillation and packaging are carried out (Pérez et al., 2016).

The way organizations handle interdependencies can be seen in Figure 2. One way is to contain residual interdependencies at the next higher level in the hierarchy. The next is to deal with them in staff units, with a dual structure with a line with the formal authority to decide



Figure 1. Process description.

Source: Compiled by the author; author's photo album.

which residual interdependencies contain the main interdependencies. Another is to use one of the binding devices preserving the organization, with traditional authority structure effect, but imposing task forces to deal with the residual interdependencies. Each of these solutions favors one basis for clustering over another. Sometimes, however, the organization needs two (or even three) equilibrium clustering bases. In the simplest terms, the matrix structure represents the effort, organizationally speaking, of having your cake and eating it too (Mintzberg, 1991). However, by doing so, the organization establishes a dual authority structure. As a result, the matrix structure sacrifices the principle of unity of command and, as seen in Figure 2, formal authority moves down the hierarchy and then divides, creating joint responsibilities and leaving the notion of an integrated chain of authority, i.e., different mezcaltos are jointly responsible for the same decisions

and are thus forced to reconcile among themselves the differences that arise. A delicate balance of power is created and this is what distinguishes the organization from other means of managing residual interdependencies.

We can distinguish two types, a permanent form, where the interdependencies remain more or less stable and so, as a result, do the units and the people in them; and a changing form, applied to project work, where the interdependencies, the market units and the people in them shift frequently. A feature of the permanent matrix structure is that the chain of authority, once divided, can be rejoined, so that while one mezcaltor is ranked above another, his own subordinates report only to him, as shown in Figure 3.

The changing matrix structure is used for work on projects, where productions change frequently. An organiza-

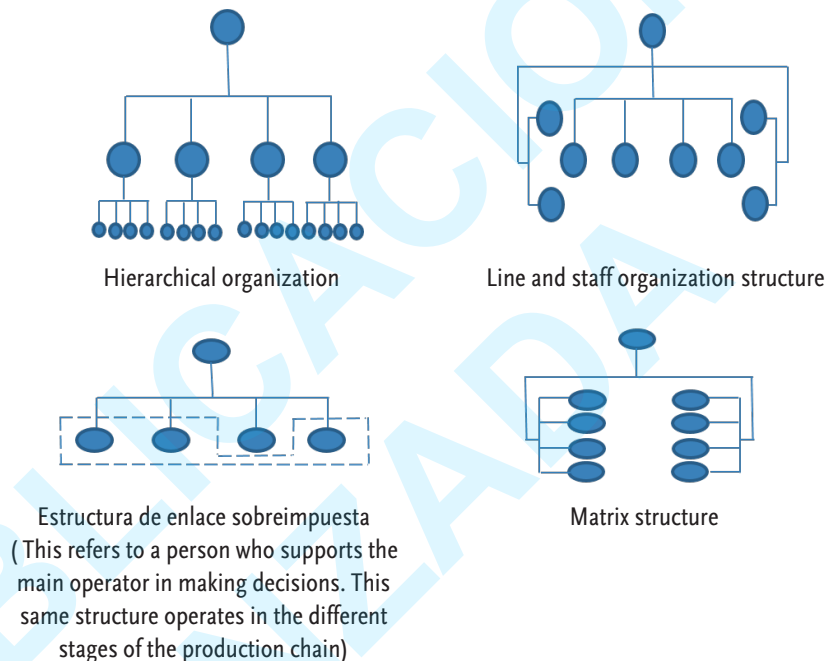


Figure 2. Design of efficient organizations (Mintzberg, 1991).

Source: Mintzberg H. (1991). Diseño de Organizaciones Eficientes.

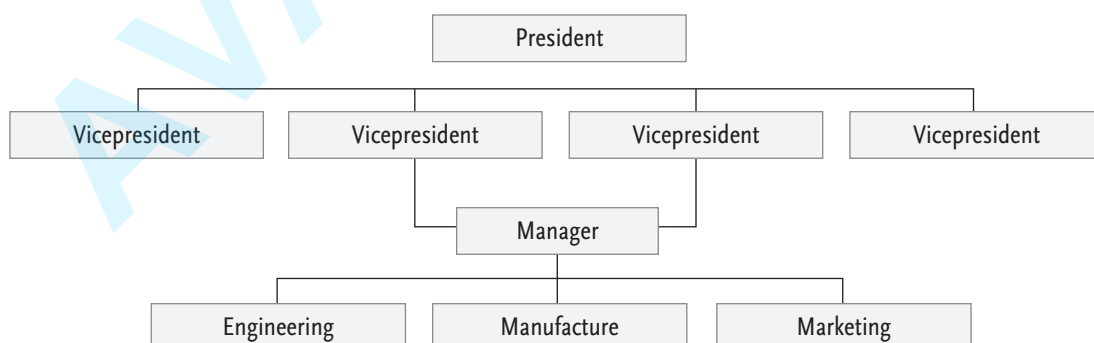


Figure 3. Permanent matrix structure.

tion usually operates as a set of project groups (market-based temporary units), which gain their members from functional departments, serving different “home-economy” purposes. A fundamental characteristic of the groups used in the changing matrix structure is that their directors are full leaders (of the production factories), with formal authority (shared with mezcaleros of the functional units) over their members. It is a matrix structure because the task force managers take their place simultaneously with the functional managers, sharing power equally among them.

In the locality, not all mezcaleros know how the DOM was earned, although they do know that producing standard quantities of agave distillate is not the same, compared to the quality of mezcal that is now demanded in the market, because of the recognition perceived by the consumer. The scarcity of economic resources is the main limiting factor for adapting, transforming, and improving facilities and equipment based on the processes required by the standard. There is very little maguey planted, which causes a shortage of plants, and most producers have to buy and bring them from the states of Morelos and Oaxaca.

Mezcal activity is concentrated in the months of September to November. The rest of the year the mezcaleros cultivate maize and beans, among other activities, although for others, the production of mezcal will extend throughout the year, except for the very cold months. On the other hand, there are no brands or very few that are in the process of being registered. There is also a lack of adequate marketing channels to link with strategic markets, both national and international.

The predominant organizational system of mezcal producers in the study area is informal and is based more on satisfying local consumption. Sometimes it is intended to meet regional demand, reflecting improvisation in the members of the agave-mezcal value chain, due to the lack of evaluation and follow-up in their processes and of a rigorous quality system according to the demands of the mezcal market at the national and international level in the current context of the DOM.

In this study area, mezcal producers face a series of economic, social and technological disadvantages that have been limiting their actions towards the Mezcal Denomination of Origin, combined with their lack of organization and generation of scale economies and adequate commercialization channels to facilitate their inclusion in the national and international markets.

Conclusions

Most producers know the mezcal production processes well. However, an efficient organization is required, together with pertinent management to encourage, facilitate

and favor the fulfillment of homogeneous or systematic requirements within the productive sector, aimed at improving, disseminating, promoting and offering what a protected product means. For the purposes of this study, four organizational schemes were considered to address the current DOM process: liaison positions, task forces and permanent commissions, integrating managers and matrix structure.

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