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La cadena de valor como herramienta generadora de ventajas competitivas para la Industria Acuícola

The value chain as a tool for generating competitive advantages in the Aquaculture Industry

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RESUMEN

El objetivo de la investigación fue proponer sistemas de mejoras en cada uno de los eslabones de las actividades que realiza Industria Acuícola Vikas Cía. Ltda. Para la obtención de los datos se realizó una investigación bajo un diseño no experimental, el estudio tuvo un enfoque mixto y un alcance descriptivo. Se identificaron problemas en las diferentes áreas de la empresa como falta de capacitaciones, carencia de formatos para registro productivos, planes de bonificaciones salariales, registro para logística interna y externa; sin embargo, la empresa mantiene una eficiente estructura organizacional. Sobre la base de este estudio se propuso la implementación de

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diferentes actividades en la cadena de valor para generar ventaja competitiva que permita aumentar valor al producto y optimizar los procesos productivos, a lo largo de la cadena de valor.

Descriptores: Acuicultura marina; tasa de crecimiento; crecimiento económico; productividad. (Palabras tomadas del Tesauro UNESCO).

ABSTRACT

The objective of the research is to propose improvement systems in each link of the activities carried out by Vikas Aquaculture company. Inc. Ltd. Data was collected through an investigation under a non-experimental design, and the study had a mixed-methods approach with a descriptive scope. Problems were identified in the different areas of the company such as lack of training, lack of formats for production registration, salary bonus plans, registration for internal and external logistics; however, the company maintains an efficient organizational structure. Based on this study, the implementation of different activities in the value chain was proposed to generate a competitive advantage that would increase the value of the product and optimize production processes throughout the value chain.

Descriptors: Marine aquaculture; growth rate; economic growth; productivity. (Words taken from the UNESCO Thesaurus).

INTRODUCTION

Ecuador is considered the second largest country in shrimp production worldwide, ranking as the first export product that have reached approximately 165,000 metric tons of product per year, due to its innovative technologies of intensive systems that allow sowing more shrimp larvae per pools according to figures of the (Central Bank of Ecuador, 2020). Therefore, this productive sector of the country has a great weight in the trade balance of non-oil products and a strong impact in the economic and social sphere. The increase in shrimp production will help contribute to the country's GDP, so it is important to optimize the production matrix and seek state aids that benefit this important industry in Ecuador.

For this reason, (Piedrahita, 2018) indicates that the support of the Ecuadorian government is essential to develop a competitive improvement plan with the participation of the most important entities of the private and public sector. This is due to

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the costs generated by the entire production chain and the amount of jobs linked to this economic activity; in fact, the companies dedicated to this item currently must survive and be competitive internationally, which forces the vast majority of companies achieve the highest production with the resources they have at their disposal or that generate a relatively favorable position in the market in relation to their rivals in order to remain and expand. Consequently, it is very important that companies maintain a competitive advantage through the correct execution of the value chain.

Within El Oro province there are several companies dedicated to the exploitation and commercialization of shrimp, one of these being Vikas Aquaculture company. Inc. Ltd., which is located in the Arenillas canton. This organization has 10 field collaborators and 5 administrative employees, also, it generates employment for approximately 30 additional people every 2 months during the time that the harvest lasts. This is possible because of its intensive production system which allows obtaining an average of 16,000 lb for each half-hectare pool. Such technique consists of 3 stages, which are: sowing in raceways, pre-brooding and, finally, fattening until the final product is obtained.

The company maintains a structured system to produce shrimp that allows it to be efficient in its costs, however, the problem lies in the instability of prices at the international level and the decrease in liquidity in the companies to cover production costs, because they do not maintain a correct structure throughout the value chain. At present, businesses are increasingly competitive in the foreign market and this forces them to optimize the resources they have available and to generate competitive advantages compared to their competitors.

On the other hand, competitive advantage is built by providing value for buyers and it is manifested when costs are reduced and performance is increased (Presutti and Mawhinney, 2014). In this way, Porter (2015) affirms: "The structure of the industry shapes the value chain and reflects the competences" (p.144). Hence, the main objective is to identify the essential steps for the correct analysis of each of the links and establish the procedures for the activities that influence the production process with the

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purpose of getting cost optimization and competing in the international market. In this sense, the generation of costs in each stage of production has been a valuable tool for Vikas Aquaculture company. Inc. Ltd. that allows identifying the most relevant activities from a strategic vision, supported by differentiation and their prices.

METHOD

The study had a mixed-methods approach, under a non-experimental design, which is a process that collects, studies, links quantitative and qualitative data, in order to meet the objectives set, (Hernández, Fernández & Baptista, 2014). The technique was the survey with the objective of collecting all the information that can be covered and thus analyze the variables. The questionnaire was the instrument chosen for this investigation (Baena, 2017).

Universe of study and sample treatment

The universe that intervenes in the research is small so, it included all the people who are part of the Vikas aquaculture company which is made up of 15 people and is distributed by areas such as: Administrative Area: 2 people, Financial Area: 1 person, Supply and Warehouse Area: 1 person and Production Area: 11 people.

Statistical treatment of information

Data were obtained through questionnaires and through the forms made by Google (<https://docs.google.com/forms>). These were processed in data tables that collected the responses and the results in the Excel program version 2016.

RESULTS

The results obtained through the use of research instruments are presented in relation to the areas of the Vikas Aquaculture company. Inc. Ltd:

Administrative area:

This area is immersed in the most important decisions that the company makes. In this respect, a percentage of 50% affirmed that the objectives maintained by the company

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are quantifiable and measurable, while the other 50% indicated that they are not. Also, 100% coincided that there is an allocation of resources based on the planned objectives. It is important to mention that the company maintains a high degree of compliance with the needs of its suppliers, clients, employees and managers, which leads to a high level of customer loyalty because it knows the correct structure of the market in which the shrimp is sold. Besides, it knows the competitors and the type of company that each one of them manages.

Financial Area:

The results indicated that the company has a system for analyzing and monitoring the risk of clients that make up the most important part of the billing, in the same way, the profitability of its own resources is analyzed occasionally. Likewise, the organization does not frequently provide training on accounting, financial and tax updates. However, the company maintains tax preferences because it is immersed in the country's agricultural activity, which allows it to have more liquidity in its flow.

Production Area:

The productive area is one of the most important of the company since the final product is generated from this area. In this regard, 72% of the participants stated that new procedures have been developed in the last year and 27.3% affirmed that they have not. Furthermore, 90.90% of the collaborators in this area indicated that daily tasks are reported in writing and 9.1% said that they are reported verbally. Finally, 90.9% of them indicated that the supply area correctly provides the balance and inputs for production and 9.1% affirmed that it does not.

Supply Area:

This is one of the areas that would optimize costs, so questions were focused on the supply commission and the results were the following:

Do's

- The company knows the purchasing conditions that its usual supplier offers to other competing companies

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- The company uses different selection criteria (price, quality, service) to manage the purchase
- The company helps its suppliers by providing them with quarterly and monthly purchase forecasts according to production
- The company manages minimum and maximum stock to make purchases of inputs or balance
- The company manages order time, that is, days of delivery times since the order is placed until the products arrive to avoid shortages
- The company handles kardex in warehouses
- They have a procedure to receive the products and ensure their quality

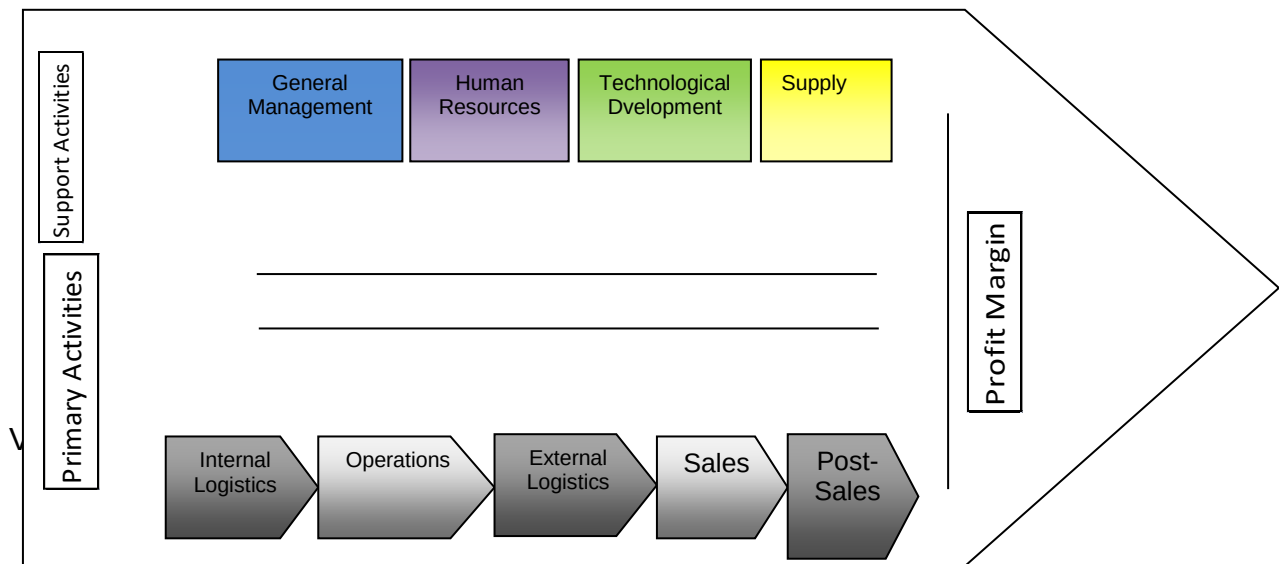
Don'ts

- The company has not evaluated the possibility of buying from alternative suppliers
- The company has not studied the possibility of manufacturing or making inputs or balancing by itself

PROPOSAL

A value chain is a set of activities that an organization carries out to create value for its customers. The way in which such activities are developed determines costs and affects profits, so this tool can help understand the sources of value for the organization, it also describes and relates the tasks within and around the company to make an analysis of the competitive strength, therefore, the value added to each particular activity is evaluated. The outline of the proposal of this research is established below:

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In this sense, (Porter, 1985) argues that the ability to perform particular activities and manage the links between these activities is a source of competitive advantage and distinguishes between primary activities and support activities. In this regard, the primary activities are directly related to the creation or delivery of a product or service. They are linked to support activities that help improve their effectiveness or efficiency, the more value an organization creates, the more profitable it is likely to be, and when providing more value to the customers, it develops a competitive advantage.

Value created and captured - cost of creating that value = margin

CONCLUSIONS

The company maintains a good organizational structure in all its areas, which allows it to have good management throughout the value chain from its primary and support activities; however, it is important that the organization has objectives and goals that may be quantifiable and measurable, since it will allow to achieve business success in a

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simpler way, in addition to managing the available resources based on strategies in a better way.

The organization currently has a manual of functions, but it does not have a salary scale which can discourage its employees, besides, it lacks training plans and performance evaluation procedures to assess its workers, which can cause a deficiency in productivity. Although the company maintains a correct analysis and monitoring of customer risks, the results indicate that it does not have a cost analysis system in the financial area. In respect to the profitability of its own resources, they are reviewed occasionally, which can cause problems in its cash flow.

In the productive area, the company maintains a correct flow of information, which is very important to optimize operations, however, they do not maintain complete formats for productive statistical data. In the supply store, order times, minimum and maximum stock and warehouse kardex are maintained, but as a shortcoming, it is highlighted that possibilities of looking for alternative suppliers to the current ones are not evaluated, which may have a consequence on production costs.

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