

Analysis and Proposal for Enhancing Logistics and Commercial Functions in a Pet Food Industry in Paraguay

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Abstract

In Paraguay, numerous companies engaged in the production and marketing of pet food strive for continual process improvement to remain competitive in a dynamic and globalized market. Therefore, the formulation of a set of strategies directed towards tackling the challenges encountered by a company specialized in the marketing of pet food. In this context, this project aims to propose enhancements to logistics and commercial processes within these companies. The methodology comprises three main phases. Firstly, interviews with business owners are conducted to comprehend their service expectations, identify perceived strengths and weaknesses, and pinpoint market opportunities and threats. In the second phase, historical company data is analyzed. In the third phase, data is examined through process observation and interviews with involved staff members. The processed information is then used to create process flowcharts, offering a detailed insight into their functionality. Finally, considering market demands, company policies, and efficient resource utilization, solutions are formulated to constitute a comprehensive improvement plan. With these enhancements, the company experienced a 200% increase in sales. The improvement plans involved reducing task interactions from 2 to 1 employee, enabling logistic planning for product delivery and sales representative visits. Additionally, eighteen distribution zones were established, each with an assigned sales representative.

Keywords

Logistic and Commercial Processes, Strategic Planning, Continuous Improvement, Lean Six Sigma Tools, Pet Food Industry.

1. Introduction

In an era characterized by globalization, rapid information flow, technological progress, customer-centric paradigms, and the perpetual evolution of markets, enterprises are confronted with an inexorable need to continuously bolster their competitive edge. Achieving this necessitates the establishment of streamlined processes that yield positive repercussions on productivity, cost efficiency, product quality, and punctual delivery.

A noteworthy characteristic of the subject company lies in its reliance on outsourcing as a linchpin of its production processes. This strategic orientation enables the organization to focus its energies on higher-level functions, encompassing administrative intricacies, supply chain orchestration, marketing strategies, logistics optimization, intellectual capital management, and more. By harnessing the inherent advantages of this approach, coupled with a well-structured synergy between the company and its outsourcing partners, there is an auspicious outlook for realizing substantial benefits (Smith and Johnson, 2021).

However, following an initial scrutiny of the logistical and commercial procedures in the pet food industry, discernible opportunities for refinement have surfaced, poised to augment the overall operational efficiency of the company.

These opportunities encapsulate:

- Internal processes exhibiting insufficient control, resulting in protracted wait times (Brown and White, 2020).
- Underdeveloped systems for order placement and processing (Jones and Smith, 2019).
- Limited mechanisms for tracking orders (Green and Davis, 2018).
- A dearth of tools for gauging process performance (Robinson and Clarke, 2017).
- Inadequate internal communication protocols (Johnson and Turner, 2020).

According to insights garnered through interviews with the company's proprietor, these issues may engender a notable degree of discontent with regard to order management and product delivery services, potentially eroding the company's reputation and competitive standing (Smith, 2021).

Furthermore, within the contemporary business milieu, companies are increasingly compelled to pursue efficiency in response to the competitive rigors imposed by the global marketplace. Consequently, the implementation of tools and strategic methodologies has become an organizational imperative, indispensable for effectively attaining predetermined objectives within the ambit of strategic planning (Davis and Taylor, 2019).

On the other hand, Paraguayan small and medium-sized enterprises (SMEs), mirroring their global counterparts, grapple with an array of challenges. These encompass competition within a diverse marketplace, technological limitations, and the imperative of expansion within a frequently constrained domestic market. These concerns have acquired significance not only in developing nations but also within the developed world, set against the backdrop of an increasingly open and integrated global economy (Porter, Ketels, and Delgado, 2006).

Tackling these multifaceted challenges demands resilient management strategies and a capacity for adaptability, prerequisites for thriving within a competitive and ever-evolving business landscape (Smith and Jones, 2018). In this connection, the imperative of continuous process enhancement has assumed paramount importance in establishing a robust foothold in the marketplace, with enhanced process efficiency translating into palpable gains in productivity and service quality (Robinson and Turner, 2019).

Hence, the significance of this study lies in its unique synthesis of theoretical constructs through a practical case study of an SME. Furthermore, it holds the potential to equip the company with the requisite preparedness to confront the dynamic challenges characteristic of the business environment, while capitalizing on opportunities for growth (Brown, 2020).

Indeed, by harnessing diagnostic and strategic planning tools, and judiciously considering the company's policies and the judicious allocation of available resources, this study proposes comprehensive solutions to address the identified pivotal issues (Green, 2018).

1.1 Objectives

The main objective is proposing improvements to logistics and commercial processes for a pet food trading company under the outsourced manufacturing system. To achieve this, the following specific objectives are considered:

To achieve this, the following specific objectives are considered:

- Analyze the current situation of the company's logistics and marketing system.
- Identify and evaluate the main problems of the logistics and marketing system.
- Propose solutions to reduce the negative impact of the identified problems.

2. Literature Review

In an increasingly globalized and competitive business environment, efficiency has become a critical factor for the sustainable success of organizations (Smith and Jones, 2018). The competition in the global market leaves no room for complacency, compelling companies to constantly strive for improving productivity, reducing costs, maintaining high-quality standards, and ensuring timely deliveries (Smith, 2021). These factors constitute the cornerstones of competitiveness in an ever-evolving business landscape.

In this context, outsourcing, commonly known as "outsourcing," emerges as a widely adopted strategy that enables companies to focus on their core competencies (Cook and Ali, 2012). By outsourcing certain tasks to external

providers, companies can allocate resources and energy to high-level functions such as supply chain management and logistics. However, to fully reap the benefits of this strategy, it is imperative to forge strong and well-defined partnerships with external providers (Smith and Johnson, 2021).

Furthermore, the pursuit of efficiency translates into a continuous commitment to improving operational processes (Robinson and Turner, 2019). Continuous improvement stands as an imperative in a rapidly changing market, resulting in tangible enhancements in productivity and service quality, which directly impact business efficiency.

In addition, the current business landscape demands efficiency, making strategies like outsourcing and continuous process improvement essential to achieve it (García, 2013; Durán., 2017). Strategic tools such as SWOT analysis, Porter's Five Forces, and Pareto analysis play a pivotal role in strategic decision-making (Camino Jaramillo, 2015).

Moreover, the integration of these tools with approaches like Lean Six Sigma provides a robust framework for continuous improvement and business efficiency (García, 2013). Thus, the application of tools such as Ishikawa's Cause and Effect Diagram and the Cause-and-Effect Diagram, along with Quality Function Deployment (QFD), assist in identifying and addressing the root causes of issues in business processes (Amelec and Alexander, 2015), making them crucial when conducting an analysis of the current situation to propose concrete improvements.

In the specific context of the pet food industry, these strategies acquire even greater significance due to the unique challenges imposed by market competition and demand. Business efficiency, strategic outsourcing, and continuous process improvement can be determining factors for success in the pet food industry.

Research, such as that conducted by Camino Jaramillo (2015), which specifically focused on the logistics aspect of an animal feed industry, underscores the importance of implementing a new logistics management model to enable animal feed companies to be highly competitive both domestically and internationally. This model should be based on a current business model, analyzed from a strategic perspective, and involve the creative innovation of new proposals through organizational tools.

Furthermore, the work presented by Amelec and Alexander (2015) highlights how, following improvements in the information system, the automatic distribution category of pet products increased attention to the total needs of branches and the number of daily dispatches generated automatically. It also improved the quality of proposals offered by the distribution system and the use of orders generated automatically in daily scheduling.

In this perspective, these strategies become even more significant due to the unique challenges imposed by market competition and demand. Business efficiency, strategic outsourcing, and continuous process improvement, supported by tools such as SWOT analysis, Porter's Five Forces, Pareto analysis, Ishikawa's Cause and Effect Diagram, the Cause-and-Effect Diagram, and Quality Function Deployment, can be determining factors for success in the pet food industry (Peterson and Smith, 2020; Johnson and Davis, 2019).

These strategic tools provide companies in the pet food sector with a solid framework for addressing the industry's unique challenges, such as growing competition and shifting consumer preferences. Furthermore, they enable more effective strategic planning and informed decision-making to adapt to market dynamics (Brown, 2018; Robinson, 2017).

3. Methods

This study employs a comprehensive methodology consisting of three main phases to investigate and address the challenges and opportunities within the selected business sector. The methodology integrates interviews, data analysis, process observation, and staff interviews to develop a holistic understanding of the business environment and formulate effective improvement strategies.

3.1. Phase 1: Interviews with Business Owners

The first phase of the methodology involves conducting structured interviews with business owners in the selected sector. The primary objectives of these interviews are to:

- Comprehend the service expectations of business owners within the sector.

Identify their perceived strengths and weaknesses in current operations.

- Pinpoint market opportunities and potential threats that affect their businesses.

These interviews provide qualitative insights into the experiences and perspectives of key stakeholders within the industry.

3.2. Phase 2: Analysis of Historical Company Data

In the second phase, historical data from companies operating within the selected sector is collected and analyzed. This data includes key performance indicators, financial records, and operational statistics. The aim of this phase is to:

- Gain a deeper understanding of the historical performance of businesses in the sector.
- Identify trends, patterns, and areas of improvement from past data.
- Establish a baseline for evaluating the impact of proposed improvements.

By analyzing historical data, this phase provides a quantitative foundation for assessing the effectiveness of future improvement strategies.

3.3. Phase 3: Process Observation and Staff Interviews

The third phase combines process observation and interviews with staff members involved in the day-to-day operations of businesses within the sector. The goals of this phase are as follows:

- Examine current operational processes and workflows.
- Identify bottlenecks, inefficiencies, and areas for optimization.
- Gather feedback and insights from staff members who interact with these processes.

This phase involves direct interaction with operational processes, allowing for a detailed understanding of their functionality.

3.4. Process Flowchart Development

Following the data collection and analysis phases, the processed information is used to create comprehensive process flowcharts. These flowcharts offer a visual representation of the current operational workflows within the sector, highlighting critical stages, dependencies, and potential areas for improvement.

3.5. Formulation of Improvement Solutions

In the final step, considering market demands, company policies, and the need for efficient resource utilization, this study formulates a comprehensive improvement plan. The plan integrates the findings from the interviews, data analysis, and process observation to propose tailored solutions for enhancing business operations within the selected sector.

By adopting this three-phase methodology, this study aims to provide a holistic assessment of the sector's challenges and opportunities, offering practical and data-driven solutions for sustainable improvement.

This methodology ensures that both qualitative and quantitative aspects of the business environment are thoroughly examined, leading to a robust and well-informed improvement plan.

4. Descriptive analysis

Currently, the company is located in Paraguay and has been in operation for 1 year and 8 months. It was established as a business segment of a well-known agro-veterinary company in the country. The company under study is dedicated to meeting the demand for premium animal feed and offers 4 main product lines.

4.1 General Description

4.1.1 Organizational Structure

The company has 16 employees, 2 women, and 14 men. Specific job functions are not established for each position, which leads to a workload imbalance for some employees, potentially affecting performance.

4.2 Commercial Context

4.2.1 Sales Behavior

In the Figure 1 it is observed that sales in 2021 showed an upward trend. This was due to the natural growth of the company. In 2022, sales increased compared to the previous year but gradually decreased. This was due to a decrease in the number of sales representatives.

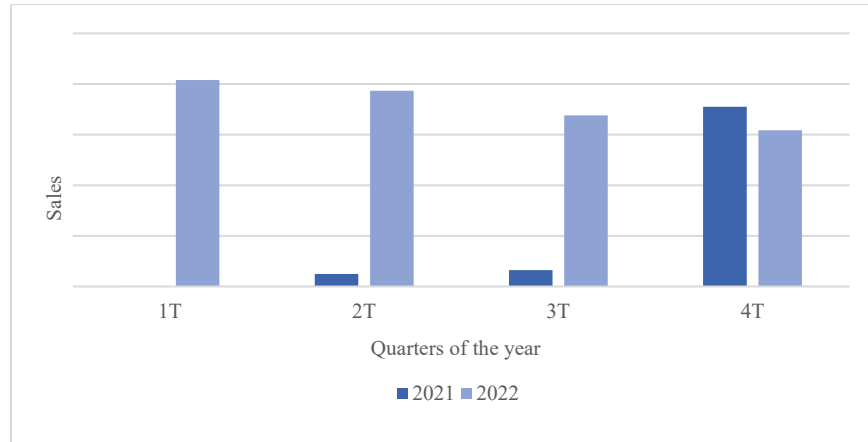


Figure 1. Sales behavior in 2021 and 2022

4.2.2 Target Markets

The commercial activity is focused on the following two target markets:

- Premium balanced for dogs: the company markets a range of balanced foods for adult dogs and puppies, which are classified according to their percentage of protein and/or a specific addition.
- Premium balanced for cats: it is sold in presentations of different sizes. This product promotes the digestibility and use of essential nutrients.

4.2.3 Sales channels

The company has two well differentiated sales channels:

- Distribution sales channel: serves veterinary clinics, pantries, supermarkets, minimarkets. It represents 83% of the company's turnover. It has a sales force made up of six salespeople who serve clients in the metropolitan area of the country.
- Direct sales channel: The company has a showroom located in the city of San Lorenzo, where direct sales are made to the final consumer and occasionally to clients of the distribution sales channel. It is characterized by presenting a highly variable demand for behavior.

4.3 Logistics context

4.3.1 Fleet availability

The company has its own fleet of trucks, it has 2 trucks for the delivery service. Truck 1 has a load capacity of 1200 kg and truck 2 has a load capacity of 2700 kg. Both of them cover the metropolitan area.

4.3.2 Management Software

The software used is called Faster, which is an Enterprise Resource Planning (ERP) package. It offers functionalities for inventory control, procurement of inputs, and sales invoicing. However, it does not include an integrated distribution management module.

4.3.3 Order Taking

The sales process ranges from the customer's product request to the order's dispatch through the WhatsApp group by the sales representative or, in some cases, the physical delivery of the order note. Two types of customers are identified: those with an assigned sales representative and those without. Depending on the case, they receive different treatment during order taking.

4.3.4 Uploading orders to the system

The order uploading process ranges from the uploading of orders to the system by the sales assistant to the registration of special discounts if any. The participants in this process are the sales assistant, sales manager, and commercial manager.

The sales assistant uploads the order to the system. When there are special offers on certain products, the assistant creates a form in which these special discounts are detailed. This document is sent to the sales manager for his approval, then it is sent to the commercial manager for final confirmation.

4.3.5 Order preparation

The order preparation process ranges from viewing the list of orders to be delivered to loading the products on the truck. The participants in this process are the sales manager, warehouse manager, order preparer and billing manager. The sales manager views the list of orders to be delivered with the following information: customer code and name, address, date, indication to pick up or send and observation and prints the Picking Sheet (HP).

The warehouse manager verifies the HP, gives instructions to the order preparer for the extraction of products, this task is carried out manually and they are separated into collection areas. Once the extraction is complete, the warehouse manager signs the HP. The billing manager receives the HP to print the associated invoices. It is sent to the sales manager for final verification, and a route sheet is made for delivery.

The warehouse manager receives the invoices to be sent, verifies the extractions from each collection area together with the delivery person. After this verification, the order picker proceeds to load the truck, once finished, the delivery person begins the distribution according to his route sheet, where the delivery points are specified, but the sequence of the route is not.

4.3.6 Order delivery

The order delivery process extends from the departure of the truck to the receipt of the customer's acknowledgments of receipt by the billing manager. The participants in this process are the delivery person, sales manager and billing manager. Deliveries are made three days a week, in order to accumulate a considerable number of orders.

Once the route is finished, the delivery person returns the route sheet and the invoices signed by the customers for later registration by the billing manager, who files and delivers to the sales manager.

4.4 Outsourcing modality

The outsourced company in charge of production is located in a near city that it is dedicated to manufacturing products from different companies.

The raw materials are provided by the company under study, the packages with the dosages made according to the proportions of each input are sent so that production can be carried out, thus ensuring that the formulation of each input is correct. In a batch, 10,000 kilograms of feed are generally produced. The estimated delivery time of the finished product is one week. The service of the outsourced company includes the production and packaging of the balances, according to each presentation of the product, it also includes the freight service to the warehouse.

4.5 Company diagnosis

From the consolidation of the data and the description of the company, the diagnosis is made using analysis tools such as: SWOT analysis, Pareto Diagram according to participation by product, by clients and by sellers, the QDF matrix, and the fishbone diagram, in order to determine the main problems with their causes.

4.5.1 SWOT Analysis

Strengths

- High quality products.
- Good relationship with clients.
- Support from a company with a long history in the country.

Weaknesses

- Impossibility of scheduling well in advance.
- Absence of specific software for sales operations.

- Lack of technical training for sellers.
- Distribution with delays.
- Non-standardized profile for hiring salespeople.
- Sellers and delivery people under control.
- Variation in product quality.

Opportunities

- Sector with sustained growth projections.
- Expansion of sales channels.
- Develop the cat product portfolio.
- Generate attractive content for greater visibility.

Threats

- Failure to comply with the production of the outsourced company.
- Plagiarism of the product formulation.
- Sudden closure of the outsourced company.
- Smuggling in the national market.

4.5.2 Pareto Diagram

The analysis was carried out with different types of historical data from the periods 2020 and 2021, to analyze whether the 80/20 rule is met for the company. First, sales were analyzed by the types of products marketed by the company; approximately 7 of the 18 product presentations available on the market, which represents 39%, generate 80% of the company's sales revenue. The products with the greatest acceptance by customers, which should be emphasized and made efforts, correspond to 7 products, the one with the greatest participation is the balanced dog category, in its standard presentation.

In this sense, approximately 13% of the company's clients generate 80% of the income, with category A and B being the main ones in client participation, considering the billing in the last two years. These 13% of customers are the most important for the company, special attention must be paid to satisfying their needs and maintaining a good relationship with them. On the other hand, this also indicates that the rest of the clients do not generate the income that they could according to the Pareto rule, it is necessary to focus on attracting these clients.

4.5.3 QFD matrix

It was determined that the most important requirement is efficient distribution service. Then, there are operating costs, adequate number of teams and collaborators, as well as key control over sellers. On the other hand, the company stands out in quality products. Among customer requirements, emphasis should be placed on improving availability in the channels and good service.

4.5.4 Ishikawa diagram

The main intermediate problems found in the causes and consequences diagram were analyzed, and which were frequently mentioned during the interviews. Which are, delivery delays, low market participation and quality variation.

The three Ishikawa diagrams that were made highlight the main causes of the most important problems found within the company:

- Sellers and delivery people under control.
- Inefficient routing when distributing products.
- Little strategic planning.
- Absence of integrated software for the different operations of the company.

Therefore, the improvement in the activities related to these main points makes up the improvement plan to apply to the logistics and distribution processes in the company.

5. Results

The opportunities for improvement are presented below, according to the most important processes.

5.1 Optimization of product distribution

5.1.1 Taking and loading orders.

For de order taking and uploading orders to the system the proposal es the implementation of an application to take and load orders directly through the system, under the exclusive responsibility of the seller.

5.1.2 Order preparation

The Table 1 presents the improvement proposals corresponding to order preparation, and then, the Figure 2 shows the proposed flowchart for the subprocess.

Table 1. Improvement proposals for order preparation.

Improvement points	Disadvantages	Proposals	Benefits
Consolidation charge	Customers are not classified by delivery areas.	Classification of customers in delivery areas.	Centralizes the survey of orders by delivery areas.
		Redistribution of customer portfolio between sellers according to delivery areas.	Optimization of truck consolidation time.
Routing.	Absence of a documented route and order delivery sequence criteria.	Implementation of routing by zones.	<ul style="list-style-type: none"> - Minimization of freight costs. - Savings in time associated with the delivery of orders.
Picking.	Loading of products is done manually.	Purchase a forklift for the movement of heavy loads.	Save time associated with physical travel.
	Absence of product batch records.	Implement a batching system, where registration is done in the application.	<ul style="list-style-type: none"> - Updated information on stock levels. - Saves time associated with manual registration.

5.1.3. Simplified flowchart

The proposal is summarized in the following simplified flowchart. In the Figure 2 it is visualize the optimization of the path of each order throughout its life cycle, reducing the number of collaborators involved, as well as their interactions.

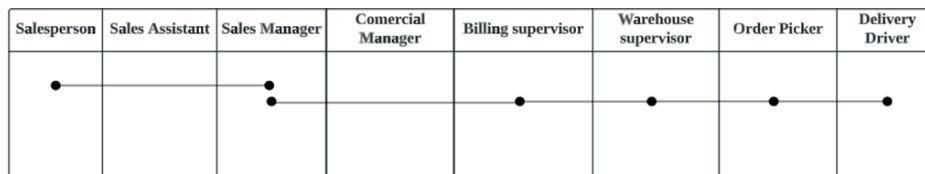


Figure 2. Interactions in the proposed distribution process

Based on this proposal, the sales assistant and the commercial manager are excluded from the process. In addition, the number of interactions of the sales manager is reduced, with the aim of making his functions more strategic than operational. Also, that of the warehouse manager, saving time due to the physical travel of the collaborator.

5.1.4 Redistribution of sellers' customer portfolio

When analyzing the portfolio assigned to each seller that serves the distribution sales channel in the metropolitan area, a large dispersion of clients in different geographical areas is identified. Given this, the following opportunities for improvement are described:

- Increase in the number of visits to clients per day.
- Increased efficiency in cargo consolidation for a certain geographic area.
- Decrease in delays in the delivery of orders. Currently there is a lack of coordination in the reception of these due to lack of visit planning.
- Reduction of possible conflicts of interest between sellers who serve clients within the same geographical area.

Geographic areas are defined within the metropolitan area with the company's historical clients throughout the years 2021 and 2022, then clients are classified according to their location within said areas. Areas are then assigned to each seller, mainly based on three fundamental criteria: the location of their main current clients, and the proximity of the areas. It is observed in Figure 3.

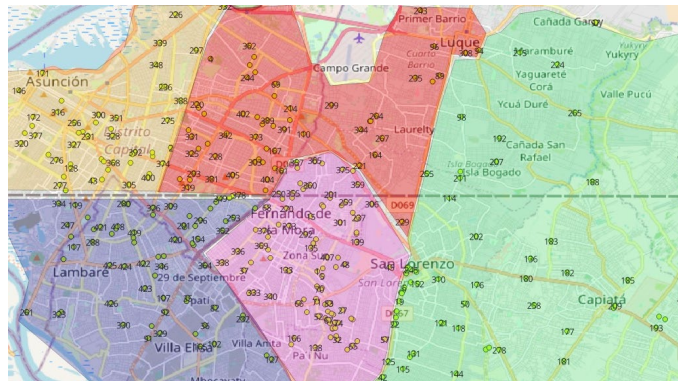


Figure 3. Proposed distribution of customers by salesperson

5.1.5. Order delivery planning

Based on the redistribution of the customer portfolio by geographical areas, they are grouped into small delivery areas based mainly on two criteria: their proximity and access routes, in order to take advantage of the following opportunities for improvement:

- Optimization of truck loading. Currently there is a high frequency of delivery to each area with a low volume of cargo.
- Optimization of truck routes through delivery areas. Currently there are cases of non-delivery of orders due to large distances between customers.
- Decrease in delays in the delivery of orders. Currently each truck hopes to achieve an adequate load level to leave.
- Preparation of a sales visit plan, aligning the volume of orders demanded with the available truck fleet.

Next, the metropolitan area is divided into 18 distribution zones. Once the zones are defined, each client is classified within them in order to determine the average weekly cargo volume per zone, regarding Figure 4.

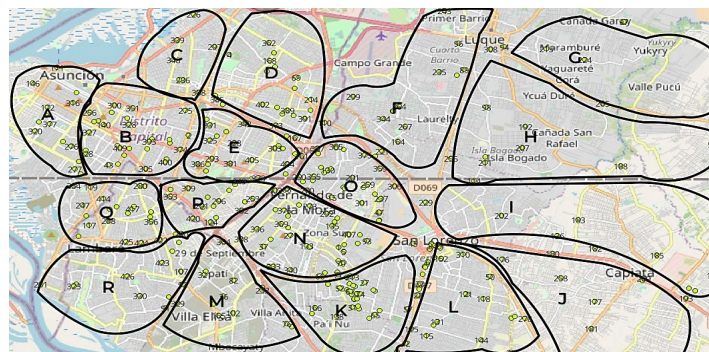


Figure 4. Proposed delivery areas

5.2. Sales team development

Table 2 shows the improvement proposals corresponding to the sales team.

Table 2. Improvement proposals regarding the sales team

Improvement points	Disadvantages	Proposal	Benefits
Redistribution of the client portfolio by area	Inefficient distribution of the client portfolio.	Implement a customer distribution strategy separated by zones.	<ul style="list-style-type: none"> - Improves attention to customer needs. - Reflects an order in terms of the management of sellers and customer service.
Planning visits to clients	Dissatisfaction with the service received by clients who are not visited periodically.	Provide a visit frequency plan, based on parameters by type of client.	<ul style="list-style-type: none"> - Improves the relationship with customers. - Save time and fuel. - Avoid unnecessary visits - Allows the acquisition of new clients.
Monitoring of performance compliance	Unmet goals, which leads to loss of potential clients.	Implement performance indicators for sellers. Implement visitor registration.	<ul style="list-style-type: none"> - Better control over sellers. - Helps with decision making in commercial management.

5.3. Implementation of planning and process monitoring tools

The proposal for optimization and planning of internal processes must be accompanied by systematized control and permanent monitoring that guarantees its effective implementation. From this premise, the need to divide the global process into more stages of shorter duration and with constant monitoring, currently not available, is determined, with the aim of managing the processes efficiently and taking corrective actions in a timely manner.

5.3.1. Application for sales and distribution management

The first basic function that the software should provide is direct uploading of orders through an application for sellers and synchronization with the system. To deliver orders, the program must have a customer location function with their location on the map, which allows information to be stored through geolocation, and sales routes can also be assigned for each seller, where can record the delivery zones and the zones assigned to each seller as detailed above in the distribution optimization proposal.

In addition to the basic functions, it must generate reports on inventories, product movements, visited customers, order tracking and sellers, above all it must have a friendly and easy-to-interpret interface. After analyzing these basic functions that must be included, a distribution software for medium-sized companies is proposed. It is recommended that it be connected to the company's Enterprise Resource Planning (ERP) to have centralization of management and administration.

5.3.2. Order Tracking

The implementation of an application that allows monitoring the status of orders registered by sellers is proposed. The advantages associated with this proposal can be summarized as:

- Customers with higher levels of satisfaction and loyalty towards the company.
- Reduction of possible product shortages due to undetermined causes, fraud and/or theft.

5.3.3. Quality control

The improvement proposals corresponding to the quality control of raw materials and the finished product produced by the outsourced company are presented. The quality control proposal focuses mainly on the standard production process, which initially occurs in the raw materials supplied by the company and the finished product in the outsourced company. It is shown in the Table 3.

For the reception of the raw material, the quality specifications must be defined, that is, the criteria that the raw material must meet in order for it to be acceptable for use in production. This may include characteristics such as appearance, odor, taste, size, texture, moisture, and chemical composition.

For finished product control, it would include criteria such as nutrient, protein, fat, carbohydrate, fiber, and vitamin content, as well as other important characteristics such as particle size, appearance, aroma, and taste.

Table 3. Proposal for quality control of raw materials and finished products

Improvement points	Disadvantages	Proposal	Benefits
Raw material quality control.	Variation in the quality of products due to not having a quality standard.	- Control the reception of raw materials by comparing quality parameters.	- Product that meets quality specifications. Satisfied Customer.
Quality control of the finished product.		- Assign a person in charge of production control in the outsourced company.	- Ensure the established formulation for the balanced products, and the use of the corresponding raw material.

6. Conclusion

The company experienced a remarkable 200% increase in sales due to a comprehensive strategy focused on enhancing operational efficiency and competitiveness. These improvements streamlined order-taking processes, optimized delivery logistics, and integrated a robust enterprise management system. Task interactions were reduced from two employees to one, allowing for better logistical planning, and eighteen distribution zones were established, each with an assigned sales representative.

Moreover, these changes significantly reduced operational costs and greatly improved customer service. Sales representative performance saw a substantial boost as they could allocate more time to effectively serve customers, strengthen client relationships, and promptly address their needs. This enhanced customer service resulted in increased customer satisfaction and loyalty.

Furthermore, the strategic enhancements led to more informed decision-making through the generation of detailed reports. Geographic categorization of customers enabled more efficient distribution and reduced transportation costs. Customized visit frequencies were implemented to cater to the unique requirements of each zone. Quality control measures were enforced for input materials, ensuring a higher-quality and more consistent final product.

The positive impact of these improvements extended beyond operational efficiency, positively affecting the company's market position and profitability. This case study highlights the transformative potential of strategic enhancements in driving efficiency and competitiveness in the pet food industry, making it a valuable reference for other companies facing similar challenges.

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