

The impact of the marketing information system on marketing decision making

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Abstract:

Most of the subsystems of the management information system focus on the various functions of the organization, including the marketing function. Given the importance of this function within the organization, we will discuss in this article the role of marketing information systems in supporting the control function and activating the decision-making process. We will focus on introducing the marketing information system and its characteristics, as well as the stages of its construction, and then we will show the impact of applying the latter within the marketing function. In this context, the problem of the study can be limited to the following fundamental question:

- What is the role of the marketing information system in making decisions and supporting the control process within the marketing function?

Keywords

Marketing Information, Decisions, Systems

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1. INTRODUCTION

The importance of this research is evident in:

- Highlighting the strategic importance of the marketing information system, especially during the decision-making process, by providing information that achieves compatibility between the decisions taken within the marketing function with the general objectives of the organization.
- Highlighting the role played by the application of the information system within the marketing function, by raising the performance of the internal control process over marketing activities inside and outside the economic institution.

research aims :

Through this research we aim to:

- Explaining the importance of the marketing information system, as there is no existence or survival of the organization if it does not develop its information systems, especially the marketing ones.
- Knowing the role played by the marketing information system in supporting the decision process and formulating quality marketing decisions, which contribute to building effective marketing strategies within the organization

There are many definitions that address the marketing information system due to the complexity and complexity of the latter. Kotler defined the marketing information system as “a continuous and interactive structure of individuals, equipment, and procedures to collect, store, analyze, evaluate, and distribute accurate, timely information used by marketing decision makers.” Improving planning processes “Marketing implementation and control.”

He also defined the marketing information system as “a continuous and organized process of collecting and recording data, classifying it,

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preserving it and analyzing it, whether it is past, current or future data, related to the organization's business and the elements influencing it, and working to retrieve it to obtain the information necessary to make marketing decisions in a timely, appropriate and accurate manner." appropriate and to achieve "Organization objectives"

2. Characteristics of the marketing information system.

The marketing information system has many characteristics, including:

- A permanent and continuous system, meaning that it works continuously in order to provide data and information and make them available and accessible at the time when its user needs them.
- A future-oriented system to provide information about the conditions of the coming periods, which helps in making good marketing decisions.
- It relies on mathematical models to analyze the information it provides to the end user.
- The marketing information system stores and integrates marketing information.
- This system is often computer-based, meaning it is primarily an information system.

The second requirement: The stages of the marketing information system.

The marketing information system goes through four main stages:

2. 1. System inputs.

Inputs into the marketing information system are the basic building block for operating the system, through entering raw data that is used to create and generate information. This data depends on internal and external sources.

a. Internal sources.

It represents data obtained from other sub-information systems, such as the financial information system, production system, human resources system, etc.

B. External sources.

They are represented by those entities that reflect those dealing with the institution, such as:

- **Customers:** This is done by knowing the number of current customers, their characteristics, the times they make purchases, the places they buy, the volume of their purchases, as well as their income levels.
- **Competitors:** By knowing their number, changes in their market shares, and the competitive advantage gained by their products as well as their marketing strategies.
- **Markets:** that is, knowing the size of the market, profitability indicators in each market, factors affecting sales volume, and changes in the importance of consumer groups.
- **The Internet:** Through the Internet, an organization can collect data and information directly and indirectly related to its business, such as collecting information about current and potential consumers, and about local and international competition.

2. 2. Processing operations.

The processing process is usually carried out by employees in the Marketing Information Systems Department and under the supervision of the Director of the Information System Department, in order to carry out a set of operations concerned with converting inputs into outputs. The most important operations are as follows:

- **Collecting data from various sources.** This step requires knowing what and types of data are required.
- **Classifying data by putting it into useful categories or divisions.** This is done in two steps: classifying this data and dividing it into groups according to certain standards or characteristics that enable it to be distinguished.

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- Developing and preparing statistical and computer-ready programs to analyze data and develop models for forecasting sales, consumer behavior, and environmental changes.
- Preparing reports in areas that require a continuous flow of information, such as consumer needs, trends, purchasing behavior, and competitors' actions and policies. As well as preparing reports on non-recurring tasks, such as evaluating markets before entering them, and evaluating the strengths and weaknesses of marketing work. These reports may take the form of regular periodic reports, exceptional reports, or reports to predict the future.
- Ensure that the appropriate information is transferred in the form of outputs to the appropriate decision-making centers within the organization.

2. 3. System outputs.

After the processing operations, the outputs of the marketing information system are obtained, for the purpose of marketing managers benefiting from them in making decisions easily and effectively. The information should be diversified according to the needs of the beneficiaries, such as information about following up with employees. Selling, information about current customers, information about the efficiency of promotional methods, information about Mechanisms for distributing goods, information about new products, information about the nature of competitors in the market, etc.

2. 4. Reverse feeding

The feedback process identifies deviations that occur in the information actually available. A gap often occurs between the information actually collected and that information that was planned to be provided, and then the necessary corrections are made and supported. This stage involves decision makers who work to build

specific standards to measure the effectiveness of Those outputs, and correcting the deviations occurring in it.

The third requirement: subsystems of the marketing information system.

The marketing information system management uses three other subsystems:

3. Internal records information system:

It is a subsystem of the marketing information system that is concerned with collecting data and information from within the organization to evaluate marketing performance by identifying its strengths and weaknesses, as well as discovering opportunities and threats facing marketing activities. Records and research are used. Internal staff in making daily and operational decisions and implementing and monitoring these decisions The cost of using internal records is relatively low compared to other sources of data and information. The most prominent of these internal records are:

- Marketing function records: These records contain data and information about consumers, their needs, desires and demographic characteristics, data and information about Their attitudes towards prices, distribution outlets, promotional methods, etc.
- Accounting and finance function records: These records contain data and information about total production planning, main production scheduling, planning material needs, data and information about profits or losses, sales, costs, etc.
- Production function records: These records provide data and information about overall production planning, major production scheduling, planning of material needs, industrial resources, transportation and preparation systems, etc.
- Human Resources function records: These records contain data and information about employees, their wages, incentives, measures, promotions, work turnover, and others.

3.1. Marketing intelligence system.

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It is one of the subsystems of marketing information systems that works to provide continuous daily information and data about various developments in the marketing environment in order to prepare and modify marketing plans, while covering areas related to the organization, so that the organization has complete, comprehensive and continuous knowledge of the developments going on around it and Variables and thus be able to monitor their effects on the organization's work, both positively and negatively.

3. Marketing research system.

Marketing research can be defined as “the collection, recording, and analysis of data related to problems in the flow of goods and services from the producer to the final consumer or industrial buyer.” The definition explains that the marketing research function aims to provide data to management in a way that enables it to make sound decisions regarding marketing problems, whether as That was before or During or after the production and marketing of goods or services. This means that marketing research serves decisions related to all elements of the marketing mix, and also serves decisions that benefit in managing the marketing program.

The role of the marketing information system in the decision-making stages.

3.1. Making decisions regarding the financial resources needed by the marketing function

In this regard, decision-making is based on the following models: “The budget is based on a percentage of previous cycle sales, or the percentages used by competing institutions, or even the reserves owned by the institution.” This requires the availability of information Accurate information about sales volume, market shares, and current and expected costs of manufacturing The appropriate decision in choosing the best model.

3.2. Making decisions regarding the overall structure of the product.

This is done by providing the system with information about:

- The diversity of products offered by the organization on the horizontal dimension.
- The extent of the number of products that can be divided into the market within one production line on the vertical dimension.
- The extent of the connection between the products offered by the organization in the market in terms of technology, production facilities, final use, or even distribution, and the method of promotion of the product.

3.3. Making planning decisions to market new products

This is done by providing the system with information about:

- Available opportunities and new products that can be added to existing products.
- The nature of competition, especially non-price competition, and areas of benefiting from available marketing capabilities.
- The possibility of the organization facing the obsolescence of existing products or a decline in sales or profits achieved.
- New forms of products and their addition to existing products.
- The degree of variation in the capabilities, desires and consumption habits of customers.
- Opportunities to expand product markets and the risks of concentrating product consumption in a narrow scope.

3.4. Pricing policy decision making:

This is done by providing the system with information about:

- Expected changes in the prices of inputs used in manufacturing the product.

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- Forecasting future behavior of demand and costs; And potential changes in the determinants of demand for the product.
- Pricing method, i.e. levels of costs and profits, the effect of price on working capital and information about the purchasing power of consumers.
- The reflection of pricing on the media, society, and government agencies directly related to the institution.
- The effect of the discount on sales growth, long-term profit growth, and even discounts granted by competitors.

3.5. Decision making regarding promotion policy:

This is done by providing the system with information about:

- The extent of consumers' knowledge of the organization, its products, and its policies.
- Behavioral and demographic characteristics of consumers, especially identifying information about the most influential consumer groups that affect the purchase decision.
- Laws and legislation governing the scope of promotional efforts.
- Sales areas, the extent to which salesmen cover them, the extent to which salesmen need training, and the reasons for failure of salesmen.
- Advertising and promotion agencies and their efficiency and observance of sound scientific foundations and concepts and ethical principles of advertising.

3.6. Making decisions regarding distribution policy:

This is done by providing the system with information about:

- The length of the direct and indirect distribution channel, with the channel width determined on the basis of comprehensive or selective distribution.

- Channel components of middlemen and bananas are identified with an analysis of their ability to distribute the product.
- Various costs, especially the costs of handling orders, packaging costs, and insurance premiums for merchandise inventory.
- Distribution problems and opportunities to maintain the currently adopted systems.

The effectiveness of the marketing information system in making decisions

Internal control is the measure that organizations rely on to measure the extent of their success or failure, by comparing their actual performance with the set goals or with the performance achieved in the past. From the administrative side, the control system means that it is a set of means and standards necessary to raise operational efficiency and encourage adherence to administrative policies. Therefore, the supervisory system guarantees all the necessary activities to make the efforts made within the framework of this activity achieve its goals. Hence, the information system provides a marketing supervisory system that enables the identification of defect points that hinder the provision of this program and indicates appropriate adjustments. Thus, we find that the role of the information system in the internal control of the marketing function is through various follow-up processes, which can be embodied through the following points:

4. Sales follow-up:

The process of monitoring sales is carried out by determining product sales trends and the products that the organization deals in, the profitability of the products, the performance of each sales branch, and the performance of salesmen. The marketing information system provides various information needed by the sales follow-up process, including: orders, consignments, lists, ledger, accumulated unprocessed orders, receipts, general sales reports, etc....

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Sales are followed up through the outputs provided by marketing information systems, which are represented by the information contained in the following documents and papers:

- Actual sales contracts (sales invoices): Information about: type of product, quantity of commodity, payment terms, discount, territory of sale, sales person, type of customer.
- Sales reports: Information on: product profitability, production line, regional sales area, and sales person
- Profitability reports: information about selling costs and the profitability margin, which is considered very important in determining the extent of the contribution of the producer, the breadwinner, and the sales men.
- Profitability margin reports: Providing information on products that are profitable after a certain period in a way that motivates the direction of redesigning or changing the specifications of the product or even eliminating it if the information available in these reports indicates that the profit margin High profit will help support promotion campaigns.
- Branch managers' reward report: These reports contain information about the managers of branches and regions who achieved the largest volume of sales.

4. 1. Customer follow-up:

Customer follow-up is through the provision of detailed and recurring reports provided by the information system. These reports help managers and officials carry out an internal follow-up and control process that is embodied through the following:

- Ensure that the services provided to customers are satisfactory
- Consider the possibility of adopting their own pricing policy based on the volume of their purchases

- Ensure that sales volume and profitability margin exceed expectations
- Ensuring the adoption of the appropriate reward for successful salesmen, which leads to ensuring appropriate follow-up of customers. Hence, the role of the information system is to provide the necessary information that enables management to analyze their activity and ensure the possibility of increasing their purchases and converting them into profitable customers over time.

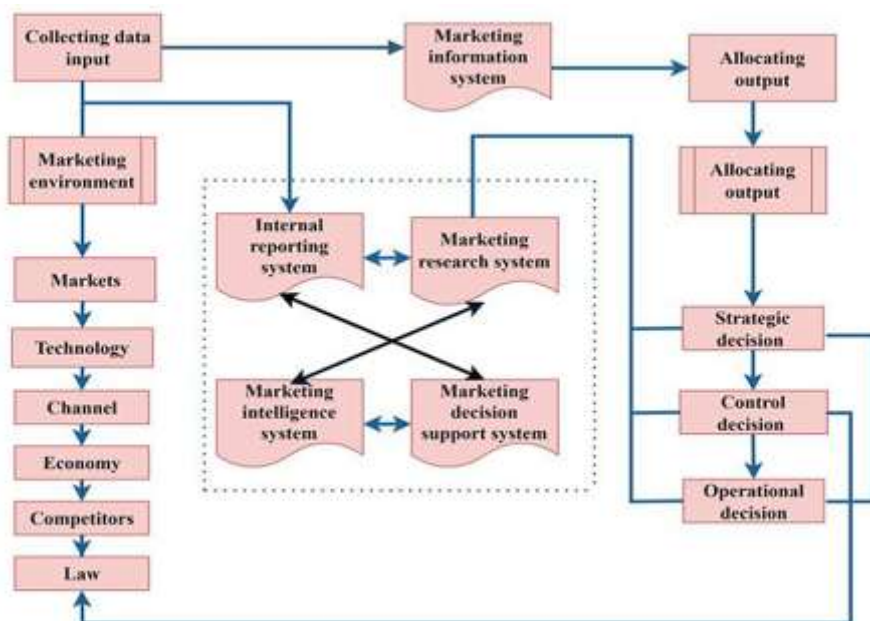
4. 2. Follow up on marketing expenses:

The information system provides the marketing department with information on marketing expenses, which are: salaries, commissions, advertising and promotion costs, research and study costs, product distribution costs, sales discounts... etc. In addition, the information system provides There are reports that contain reasons These deviations are monitored for the purpose of achieving effective control that helps in developing plans and strategies that allow for the elimination of these deviations in subsequent sessions.

4. 3. Follow up on the marketing environment:

Providing the organization's management with correct, accurate and timely information often enables marketing information systems to monitor external environmental variables that are usually difficult to control or influence, and then develop appropriate policies to confront or adapt to them.

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3. CONCLUSION

This study addressed the issue of the impact of the marketing information system on marketing decision-making, as the information system works to provide the organization with various necessary information, which in turn contributes to making marketing decisions, and also provides several advantages, including addressing the problems present in the stages of decision-making. Our study also proved that there is a close relationship between the marketing information system and the marketing decisions taken in the bank, because the marketing information system is considered an essential element that helps in achieving the organization's goals as it is a producer of information, which in turn is an important resource for the organization in light of the rapid developments and intense competition. Therefore, adopting an information system It effectively measures problems and helps predict and address them when they occur. The organization's benefit from the marketing information system is considered an urgent necessity because of its positive return

on the organization, its survival and continuity, and the development of work methods quickly and modernly to obtain information in the form required to make the right decision. The actual desired goal.

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