

A Marketing Information System (MIS) is intended to bring together disparate items of data into a coherent body of Information. An MIS is more than raw Data or Information suitable for the purposes of decision making. An MIS also provides methods for interpreting the Information the MIS provides.

Moreover, as Kotler's Definition says, an MIS is more than a system of data collection or a set of Information Technologies:

"A Marketing Information System is a continuing and interacting structure of people, equipment and procedures to gather, sort, analyse, evaluate and distribute pertinent, timely and accurate information for use by marketing decision makers to improve their marketing planning, implementation and control."

An MIS begins with a description of each of its four main constituent parts: Internal Reporting System, Marketing Research System, Marketing Intelligence System and Marketing Models. It is suggested that whilst the MIS varies in its degree of sophistication – with many in the Industrialised countries being computerised and few in the developing countries being so – a fully-fledged MIS should have these components, the Methods (as well as Technologies) of collection, storing, retrieving and processing data notwithstanding.

Let me throw some light over internal Reporting Systems: All Enterprises which have been in operation for any period of time have a wealth of Information. However, this Information often remains under-utilised because it is compartmentalised, either in the form of an individual entrepreneur or in the functional departments of larger businesses. That is, Information is usually categorised according to its nature so that there are, for example, financial, production, manpower, marketing, stockholding and logistical data. Often the entrepreneur, or personnel working in the functional departments holding these pieces of data, do not see how it could help decision makers in other functional areas. Similarly, decision makers can fail to appreciate how Information from other functional areas might help them and therefore do not request it.

The internal records that are of immediate value to Marketing Decisions are: Orders Received, Stock Holdings and Sales Invoices. These are but a few of the Internal Records that can be used by Marketing Managers, but even this small set of records is capable of generating a great deal of Information.

Below, is a list of some of the Information that can be derived from Sales Invoices traditionally:

- ❖ Product Type, Size and Pack Type by territory
- ❖ Product Type, Size and Pack Type by type of account
- ❖ Product Type, Size and Pack Type by industry
- ❖ Product Type, Size and Pack Type by customer
- ❖ Average Value and / or Volume of Sale by territory
- ❖ Average Value and / or Volume of Sale by type of account
- ❖ Average Value and / or Volume of Sale by industry
- ❖ Average Value and / or Volume of Sale by sales person

By comparing orders received with invoices an Enterprise can establish the extent to which it is providing an acceptable level of customer service. In the same way, comparing stock holding records with orders received helps an Enterprise ascertain whether its stocks are in line with current demand patterns.

Now let me throw some light over Marketing Research Systems: The General Topic of Marketing Research has been the prime subject of the text book and only a little more needs to be added here. Marketing Research is proactive search for Information. That is, the enterprise which commissions these studies does so to solve a perceived Marketing Problem. In many cases, data is collected in a purposeful way to address a well-defined problem (or a problem which can be defined and solved within the course of the study). The other Form of Marketing Research Centres not around a specific Marketing Problem but is an attempt to continuously monitor the Marketing Environment. These monitoring or tracking exercises are continuous Marketing Research Studies often involving panels of farmers, consumers or distributors from which the same data is collected at regular intervals. Whilst the ad hoc study and continuous Marketing Research differs in the orientation, yet they are both proactive.

Whereas Marketing Research Systems (Customer Preferences) is focused, Market Intelligence Systems is not. A Marketing Intelligence System is a set of procedures and data sources used by Marketing Managers to shift Information from the Environment that they can use in their Decision Making.

This scanning of the Economic and Business Environment can be undertaken in a variety of ways, including:

- Unfocused Scanning – The Manager, by virtue of what He / She reads, hears and watches exposes Him / Herself to Information that may prove useful. Whilst the behaviour is unfocused and the Manager has no specific purpose in mind, it is not unintentional.
- Semi Focused Scanning – Again, The Manager is not in search of particular pieces of Information that He / She is actively searching but does narrow the range of media that is scanned. For Instance, the Manager may focus more on Economic and Business Publications, Broadcasts, etc. and pay less attention to political, scientific or technological media.
- Informal Search – Here the situation is where a fairly limited and unstructured attempt is made to obtain Information for a specific purpose. For Example, the Marketing Manager of a firm considering entering the business of importing frozen fish from a neighbouring country may make informal inquires as to prices and demand levels of frozen and fresh fish. There would be little structure to this search with the Manager making inquiries with Traders He / She happens to encounter as well as with other ad hoc contacts in ministries, international aid agencies, with trade associations, importers / exporters, etc.
- Formal Search – This is a purposeful search after Information in some systematic way. The Information will be required to address a specific issue. Whilst this sort of activity may seem to share the characteristics of Marketing Research it is carried out by the Manager Him / Herself rather than a professional Researcher. Moreover, the scope of the search is likely to be narrow and far less intensive than Marketing Research.

On the other hand, Marketing Intelligence Systems (Company focused) is the province of entrepreneurs and senior managers within an agribusiness. It involves them in scanning newspaper trade magazines, business journals and reports, economic forecasts and other media. In addition, it involves management in talking to producers, suppliers and customers as well as to competitors. Nonetheless, it is a largely informal process of observing and conversing.

In near future, some enterprises will approach Marketing Intelligence gathering in a more deliberate fashion and will train its sales force, after-sales personnel and district / area managers to take cognisance of competitors' actions, customer complaints and requests and distributor problems.

Enterprises with vision will also encourage intermediaries, such as collectors, retailers, traders and other middlemen to be proactive in conveying Market Intelligence back to them.

Last but not the least Marketing Models within the MIS has to be the means of interpreting Information in order to give direction to decision. These Models may be computerised or may not. The Typical Tools are:

- ✓ Time Series Sales Models
- ✓ Brand Switching Models
- ✓ Linear Programming
- ✓ Elasticity Models (Price, Incomes, Demand, Supply, etc.)
- ✓ Regression and Correlation Models
- ✓ Analysis of Variance (ANOVA) Models
- ✓ Sensitivity Analysis
- ✓ Discounted Cash Flow
- ✓ Spreadsheet "What If" Models

These and other similar Mathematical, Statistical, Econometric and Financial Models are the Analytical Subsystem of the MIS. A relatively modest investment in a Desktop Computer is enough to allow an Enterprise to automate the analysis of its data. Some of the Models used are Stochastic, i.e., those containing a probabilistic element whereas others are Deterministic Models where chance plays no part. Brand Switching Models are Stochastic since these express Brand choices in probabilities whereas Linear Programming is deterministic in that the relationships between variables are expressed in exact Mathematical Terms.

Accordingly MIS is a powerful tool for businesses of all sizes. It provides access to the company's data and helps analyze the various trends in marketing activities, such as sales performance, customer segmentation, competition tracking, and more. With an MIS in place, businesses can make informed decisions about their strategies with confidence.

By monitoring the performance of their marketing campaigns and analyzing customer data, businesses can create effective strategies that will help them maximize profits. MIS also helps in forecasting future sales and demand, which can be used to make smarter decisions about product development and pricing.

All in all, a correct MIS process is actually a typically essential tool for businesses of all sizes. It allows businesses to collect and analyze data about their customers so they can make more informed marketing decisions. With the right MIS in place, companies can gain a better understanding of their target markets and make smarter business decisions.

Presently Professionals in marketing use research and data analysis to learn about their customers, market and competition. Many companies have started using MIS to collect and interpret data for better marketing campaigns. Understanding the individual components of an MIS can help one use each element more effectively, but is rather a collection of various technologies and resources that marketers use to retrieve data and generate information for decision-making. These systems in turn combine multiple data sources and methods of analysis to create a comprehensive look at internal and external elements of a product market. For example, marketers can use this system to look at internal sales reports for a particular product or external data about customer satisfaction.

Nevertheless, these are some of the MIS Classified Attributes that can help us use marketing data more successfully are -

- ✧ Internal Records Component of an MIS includes information about areas of marketing and sales within our company. This can include elements like Product Inventory, Marketing and Sales Performance, Number of Purchases made, Debits and Credits, Lists of Employees, Past Data and Reports

By entering this data as part of an MIS or allowing a software program to retrieve it, we can compare our department's performance and its ability to market effectively. Understanding the internal strengths and limitations of our company can give us a better understanding of how to improve marketing functions and appeal to more customers. Typically, it's easy to get and store internal records for an MIS because we have all the information within your company.

- ✧ Marketing Research Component is a vital piece of an MIS that focuses on solving specific problems or finding new opportunities in our market. For problem-solving, marketing research involves defining a problem, researching the details of it in our market and creating a solution based on our research. When we want to find new opportunities, we can follow a similar method but research our market instead and define the potential opportunities within it.

Marketing research is an important component of an MIS that values concentrating on specific details and goals. Having a set goal, such as a defined problem or opportunity, can direct our research to the most valuable sources and types of data we need to reach that goal. We can use both internal and external sources to complete market research.

- ✧ Marketing intelligence is a broad component that values researching the entire external market to understand how our competitors and customers work and react. Instead of using automated systems, this component often involves looking for information by talking to partners and suppliers, hosting product feedback sessions and reading competitors' performance reviews. Another common way to get market intelligence is through print and electronic media, which often has news articles and segments about different companies and product markets.

Having a good understanding of the external factors that influence our marketing is important for creating successful advertisements. Including marketing intelligence information in our department's MIS can help our colleagues develop plans and make decisions that account for the changing market and competition.

- ✧ Marketing decision support system (MDSS) - Another Component of an MIS is the marketing decision support system or MDSS. This system processes the data from all sources of information collected through the other components. It then analyzes and interprets this data to help us better comprehend it. There are various techniques and tools, like data management software, that allow the MDSS component to gather data from internal sources and produce it in measurable, accountable formats.

For example, a piece of software may retrieve data about the average monthly cost of online advertisements and the amount of money we need for advertising online in the upcoming month. We can use this information to decide about monthly budgets, placing online ads and the benefits of this marketing effort.

Now let's discuss the utilities of MIS. Using an MIS for your company's marketing department has many benefits, including -

- Simplified Research Process:

We can automate some aspects of the data collection process in an MIS, which often makes the research process simpler. Some marketing and information management software allows us to retrieve data from online sources, compile it from surveys and collect it in one program for later use. If our MIS uses data analytics software and compiles reports for us, this can make it easier to learn important details about our market without having to analyze and create reports ourselves.

- Improved Decision-Making:

Having a lot of information about our market can also improve decision-making in our department. If we use the data from an MIS to learn about our customers, current sales and competitors, we might make more effective decisions in all areas of operation. This can be useful for people at every level of our marketing department, as they can use the knowledge they gain from an MIS to determine which solutions and decisions might have the most positive influence on their product sales.

- Easy Accessibility:

Many components of an MIS use software programs and web applications to retrieve, hold and present information so it's accessible to anyone in our department with access to those programs and applications. This is especially useful when people in our department want to share information with one another or send reports to people in other departments. Since we can keep most marketing information in online or computer databases, we can send it through email and open the files on computers with proper security settings.

- Ability to Compare Sources:

An MIS can make it easy to compare various sources of information and ensure we have the fullest report on our product's market. We can use an MIS to retrieve or accept data from various sources, which we can input or automatically retrieve using programs and applications. Then, we can compare the results to get different perspectives on a topic. It's also useful to keep previous reports and statistics from our marketing department in this system to compare sources over time and help ensure the sources we use most frequently provide reliable data.

- Consistent Data Results:

We can get more consistent results with our data when we use an MIS to collect, store and interpret information for our marketing team. This is because an MIS allows us to use the same process to store and analyze each type of data we collect. Preparing reports with visuals like graphs and charts is also easier because we can use matching formats for all the visuals in our MIS database. This can create a cohesive look for our marketing presentations and make it easier to compare similar graphs and charts over time.

- Better Plans and Evaluations:

The data we collect and interpret using our MIS can benefit our company by helping us make better plans and evaluate existing methods. Using an MIS to monitor the success of our campaigns and our customers' satisfaction with advertisements can allow us to make changes that improve those methods and learn what works best for our product and market. These details can also give us the data we need to find areas with problems so we can solve them and make more thorough plans for future marketing campaigns.

- Quick Reports in a changing Market:

Depending on the techniques we use to retrieve and analyze data with our MIS, we can get quick reports on our market to make emergency changes and adapt plans more effectively. This is especially important in markets that change frequently or after a new product release that may compete against our company's offerings. A well-constructed MIS can produce reports for us soon after these changes occur in our market for improved planning and response opportunities.

Additionally, not to mention we can also use the following tips to help us learn to use an MIS successfully and improve our Marketing Efforts -

Firstly we need to determine our goals and metrics. Setting goals and creating metrics to measure success can help we use an MIS more effectively. Goals and metrics directs us to the information we need and whether we're using it well, which may help us improve our overall marketing efforts and understand market data better.

Then we need to collaborate with our team and colleagues. Since an MIS is useful for all levels of marketing, it's important to collaborate with our team and colleagues in departments like sales and finance to ensure everyone uses the MIS consistently. For example, if we prefer storing files in a specific place as part of the information system, we might decide to meet with teams and colleagues to establish this organizational method.

Then of course we need to visualize the data in different ways. While there are only a few ways to collect data, there are multiple ways to visualize it using our MIS. Consider visualizing the data we can interpret in different ways to see various perspectives for our market and make more valuable comparisons between graphs, charts and tables with past data.

Lastly we are required to collect our data thoughtfully. It's important to think about how we can collect data thoughtfully for our MIS, as some sources provide better information than others. Also think about whether each of our sources is credible and ethical before we decide to store their data in our MIS for our marketing department to use.

Therefore, while concluding it can be mentioned that Marketing Information Systems (MIS) is practically future oriented and initiates strategy formulation as well as planning for future marketing Operations which may be associated with Marketing Intelligence Systems and Marketing Research Systems as well.