

Chapter five

Marketing challenges of information system

5.0 The Management of Information systems

The rapidly changing business environment and increasing availability of information have brought new challenges as well as unique marketing opportunities that did not exist even a few years ago. As Mullins, Walker, and Boyd (2011, p.283) state, “Marketing is rapidly becoming a game where information, rather than raw marketing muscle, wins the race for competitive advantage.” As a result, Marketing Information Systems (MkIS) have become a vital element for effective marketing. These tools are designed to support marketing processes including marketing research and analysis, planning, budgeting, and controlling (Saaksjarvi & Talvinen, 1993). Many organizations are investing in sophisticated marketing information systems, but the effectiveness of these systems within organizational contexts is a major managerial concern.

i) Information Resource Management

Who should manage MIS? * Managers or technicians? * End users or specialists?

Inadequate management of information services by business firms and other organizations has been documented for many years. - Thus, there is a real need for managerial end users to understand how to manage this vital organizational function.

a) The impact of information technology

When computers were first introduced into business, predictions were made that there would be significant changes in management and organizations. The information processing power and programmed decision making capability of computer-based information systems were supposedly going to cause drastic reductions in employees, including middle management and supervisory personnel.

Naturally, highly automated systems do not require as many people as manual methods. Therefore, there have been significant reductions in number of people required to perform manual tasks in many organizations. However, these reductions were countered by dramatic increases in sales and service personnel, knowledge workers, and managers as businesses increased the depth and scope of their operations.

Management and Information Technology

Information technology, that is, the technologies in modern computer based information systems, is once again portrayed as a major force for organizational and managerial change.

In fact, information technology is already changing decision-making, management structures, and work activities in companies around the world. The use of telecommunications networks and real-time inquiry/response systems is example of the impact of information technology on management. Finally, information systems technology presents managers with a major managerial challenge.

Managing the information system resources of a business is no longer the sole responsibility of information systems specialists. Instead information resource management has become a major responsibility of all managers.

b) Information Resource Management

There are three major developments that are affecting how corporate management views the information systems function:

- ✓ Information systems technology and its applications for users' needs are growing and changing rapidly. Hardware and software resources can now better support a wide variety of traditional and new business uses.
- ✓ Inadequate performance and unsatisfactory use of information systems and resources is a major problem in many organizations. Top management is unwilling to accept this state of affairs and is demanding new approaches to managing information services.
- ✓ Information systems can now give a firm a major strategic advantage over its competitors in the market place.

Information resource management (IRM) is a response to those pressures. IRM can be viewed as having five major dimensions:

- 1) *Resource Management*- IRM views data, information, computer hardware, software, and personnel as valuable resources that should be effectively and efficiently managed.
- 2) *Technology Management*- IRM emphasizes that all technologies that process, store and deliver data and information must be managed as an integrated system of organizational resources. Such resources include telecommunications and office systems, as well as computer-based information processing. These technologies are the primary responsibility of the chief information officer (CIO).
- 3) *Distributed Management*- IRM emphasizes that managing information system resources has become a major responsibility of the management of an organization at all levels, and in all functions.

4) *Functional Management*- the IRM concept stresses that the management of an organization must apply common managerial functions and techniques to the management of information resources.

5) *Strategic Management*- Finally, IRM concept stresses that the information services function in the firm must be more than a provider of computer services, it must also make major contributions to the profitability and strategic objectives of the firm.

Thus, the information systems function must change from an information services utility to a producer of information products that earn profits for the firm and give it a comparative advantage over its competitors.

c) **Information Systems performance**

Computer-based information systems are developed by business firms to reduce costs, increase profits, provide better service to customers, provide better information to management, and gain competitive advantages. Using computers should reduce the cost of doing business by automating the processing of data and the control of operations. The experiences of successful organizations reveal that the basic ingredient of high quality information systems performance is extensive and meaningful involvement of management and end users in the planning, development, and operation of computer-based information systems.

Management involvement- Proper management involvement requires knowledgeable and active participation of managerial end users in the planning and control of information system resources.

End user involvement- Any new way of doing things generates some resistance by the people affected. Solving the problems of end user resistance requires meaningful end user involvement based on formal methods of education and training, participation in systems development, communication and coordination between end users and information systems staff.

i) **Managing Information services**

a) **Organizing Information services**

Information services departments perform several basic functions and activities. These can be grouped into three basic functional categories:

I. *System Development Management*- is responsible for managing the investigation, analysis, design, implementation, and maintenance of information systems in organizations.

II. *Operations Management*- is concerned with the use of hardware, software, and personnel resources in the corporate or business unit data centers (computer centers) of an organization.

Operational activities that must be managed include data entry, equipment operation, production control, and production support.

III) *Technical Services*- Consist of a variety of major functions that are vital to the provision of information services and the management of information system resources. They include data administration, user services, telecommunications management, capacity management, and technology management.

b) Managing Information Services Personnel

Managing information services involves the management of managerial, technical, and clerical personnel. One of the most important jobs of information service managers is to recruit qualified personnel, and to develop, organize, and direct the capabilities of existing personnel. Employees must be continually trained to keep up with the latest developments in a fast-moving and highly technical field. Employee job performance must be continually evaluated and outstanding performances rewarded with salary increases or promotion.