Technological Discontinuities and Hurdles in Implementation of MIS: B2B Market

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Abstract

Management information Systems are designed to improve the overall performance of an organization. While many of the new technology innovations can give rise to incremental changes, technological discontinuities are termed as those breakthroughs in technology that affects the entire company and market in general. Any discontinuity in technology imposes a threat to the organization in the sense that they make the existing infrastructure and system, management decisions and organization structure obsolete. It also alters the management approaches, skills and designs. Depending on the nature of the discontinuity, the impact can be competence-enhancing and competence-destroying. Competence-enhancing discontinuities are those discontinuities that cause an improvement in the price and performance of a particular product. A competence-destroying discontinuity requires new skills, abilities, and knowledge in manufacturing of the product. Business-to-business markets are those markets in which transactions occur between two companies and institutions, such as between an automobile manufacturer and wholesaler, or between a cosmetic product wholesaler and retailer. This research paper is focused on examining the impact of various technological discontinuities and hurdles in effective implementation of Management Information Systems (MIS). The paper is focused on the Business-to-business (B2B) markets. This paper also provides a guideline to the MIS managers to determine when a technological innovation becomes a technological discontinuity and the measures that are needed to be taken to tackle such organizational behaviors. Moreover, the key issues and challenges in effective implementation of MIS have also been highlighted

Introduction

Management Information Systems (MIS) is described as a set of tools that assists in collecting and processing of raw data into information. The acquired data then facilitates managers of any organization to organize and make efficient decisions. Management Information Systems (MIS) facilitates communication and the information acquired via MIS is essential in making essential logical business decisions. The traditional concept of Management Information Systems (MIS) was to gather data from internal and external sources and to presents this data in report formats and documents. In addition, this reporting of data used to occur at regular intervals. It was more impersonal, requiring each entity to pick and choose the processed data and use as per requirements. Later on, when distinction was made between data and information, the concept of MIS also evolved. Information is termed as the productive analysis of organizational data. Content Management Systems (CRM), Enterprise Resource Planning (ERP), Attendance Management Systems, and Marketing Management Systems are some of the commonly used MIS.

Information is person specific and varies with respect to a person's duties and responsibilities in an organization. MIS is now defined as the process of generating and managing information that serves as guidelines in making effective plans and decisions. It is a well-defined framework of guidelines, policies or practices, standards, and procedures for the organization MIS is used throughout the hierarchy of management and is supportive of the institution's long term strategic goals and objectives. Business-to-business is defined as transaction between two companies and institutions, such as between an automobile manufacturer and wholesaler, or between a cosmetic product wholesaler and retailer. Business-to-business or B2B is different from consumer markets in the way the products are designed, in the way the products are exchanged and even the relationships which exist. B2B also includes intercompany transactions of service, resource, capital equipments, and technology. The MIS manage of an organization is responsible for improving the performance of the organization by making use of the MIS principle.

The MIS manager needs to respond to any change that occurs in the business plan, business strategy or information technology of the company. Some changes are minor and ineffective in nature. Some are incremental and their impact becomes visible with the span of time. Some organizational changes, for example technological discontinuities are crucial in nature. Technological discontinuities are breakthrough innovations that extensively advance the technological resources of entire industries (Anderson & Tushman, 1990).

There are various terrifying stories present in the industry in which million dollars were spent on an IS project and still endured protracted delay and the worst of all these are which organization are forced to abandon their projects. If the prepared system is delivered on time with right specifications and within budget, still there is no guarantee that it will be appreciated and used by the intended users. Thus, there are also bright chances of not achieving the expected benefit. Many studies have been conducted to determine which factors are responsible for the success behind the implementation of the information system. Considering all the factors responsible for achieving the success, the most significant role is played by management support (Ifinedo, 2008). It is the claim of few researchers that the most critical factor to system implementation success is top management support (Young & Jordan, 2008). Any discontinuity in technology imposes a threat to the organization in the sense that they make the existing infrastructure and system and organization structure obsolete. It also alters the management approaches, skills, and designs. On one hand, technological discontinuities permits an organization to build on its expertise regarding information systems (IS), while on the other hand these discontinuities threatens to perturb the company's approach to IS management.

Such technological changes occur infrequently but have significant effects on any institution and organization (Tushman, Anderson et al. 1997). History is witness of the obvious fact that many renowned companies had to struggle hard during technological discontinuities (Utterback, 1994). Technological changes have unambiguous impact on economic growth and development of any industry. However, the emerging companies in the B2B sector have made use of these experiences and grow quite fast by learning from the mistake of their ancestors (Christensen and Ovedorf, 2000). The MIS managers do not know when a technological innovation will become a technological discontinuity. Hence, technological discontinuities pose both opportunities and risks to MIS of a company or business (Harsh, 2004).

The Technology Innovation Management state that those managers that access the technological impacts on organizational competencies before taking actions on competencies have high probability of acquiring positive results with their technology projects (Anderson & Tushman, 1997) . Technological innovations becomes challenging to MIS managers for a couple of reasons. Firstly, B2B requires MIS manager and employees to be in direct contact with customers and business partners. Secondly, technological innovations impact the cost model of business transactions, such as payments, sales and marketing. Thirdly, use of open-systems like Internet considerably expands the business opportunities of the organization. Finally, the new and emerging technologies have a noticeable effect on the overall architecture of the information system of the organization. Hence being aware of when a technological innovation transforms into a technological discontinuity is of vital importance in the B2B market (Kornkaew, 2012).

Business-to-Business Market (B2B)

Business-to-business markets are those markets in which transactions occur between two companies and institutions, such as between an automobile manufacturer and wholesaler, or between a cosmetic product wholesaler and retailer. There are a variety of differentiating factors that exist between the usual consumer markets and B2B markets (Nichols, 2014). B2B market is a big and saturated market. There are multiple suppliers of almost every product and service. The buyers and sellers have to complete amongst each other to win the confidence and trust of another business or company. However, their always exists opportunities for new businesses. New and innovative ideas with sound marketing techniques attract the attention of buyers and hence more businesses can be obtained. Apart from the fact that differences exists in product, differences exists in the way the products are exchanged. Consumer-to-consumer and business-to-consumer are bigger market ground and the measure of a sale or purchase is done with respect to individual product and service. Business-to-business consists of smaller number of sales but with bigger financial transactions. According to Nichols (2014), following are the characteristics of B2B markets;

Intricacy of the Purchase Decision – Purchase decisions in B2B are very complex. It is due to the fact that the value of various purchases is usually very high and decisions are not made by an individual. Multiple people are involved in even a small purchase decision as well.

Demand – When there is a demand in consumer market; there is a simultaneous demand in the B2B market. For instance, a computer hardware company came up with new set of motherboards ICs that are faster than the one that are already present in the market. These will be sold to computer manufacturers, who will the sell their products to the wholesalers or individuals. Hence, the demand in B2B markets is derived from consumer markets and value chain will determine how much contact you have with the end consumer (Tushman & Anderson, 2007). Smaller Customer Base – B2B markets possess a relatively smaller numbers of customers, ranging from a few hundreds to thousands.

High Value Transactions and Investments – The investments in B2B markets are often of very high values and high value comes with a high risk. The transactions are also of large values. For example, according to the Pareto's 80/20 principle 80% of a company's profits, values, complaints and sales comes from 20% of customers (Pareto, 1940).

Business-to-Business Ecommerce

Business-to-Business or B2B ecommerce involves online transaction of product and services between businesses. It comprises of computerized data processing and internet networking for economic and financial transactions. Electronic Data Exchange or EDI is the mode of transaction in B2B ecommerce (Reiley & Spulber, 2000). Usually, the companies that follow ecommerce behavior are the one that act as intermediates between actual buyers and sellers of products and services. B2B ecommerce has a substantial influence on the overall economy of the company. For example, the Gartner Inc., an American information technology research and advisory firm, estimated that in 1999, there were about USD 90 -13824 in B2B internet transactions as compared to only USD 16.7 billion in B2C transactions.

There are several advantages associated with adaptation of ecommerce. Some of them involve an increase in potential market share, advertising at a relatively lower cost and global access in the market with minimum barriers. Like every other methodology, some disadvantage exists as well and they are high maintenance cost of websites, procurement of necessary hardware and software like Enterprise Resource Planning (ERP) and Content Resource Management (CRM), training associated with these software, security issues and customer loyalty factor.

B2B Business Models

Following are some of the Business-to-Business ecommerce models;

B2B E-distributor - E-distributers are direct suppliers. They supply goods and services to various businesses individually. E-distributer is generally a single company and serves multiple businesses at the same time. Example of such distributers is grainger.com.
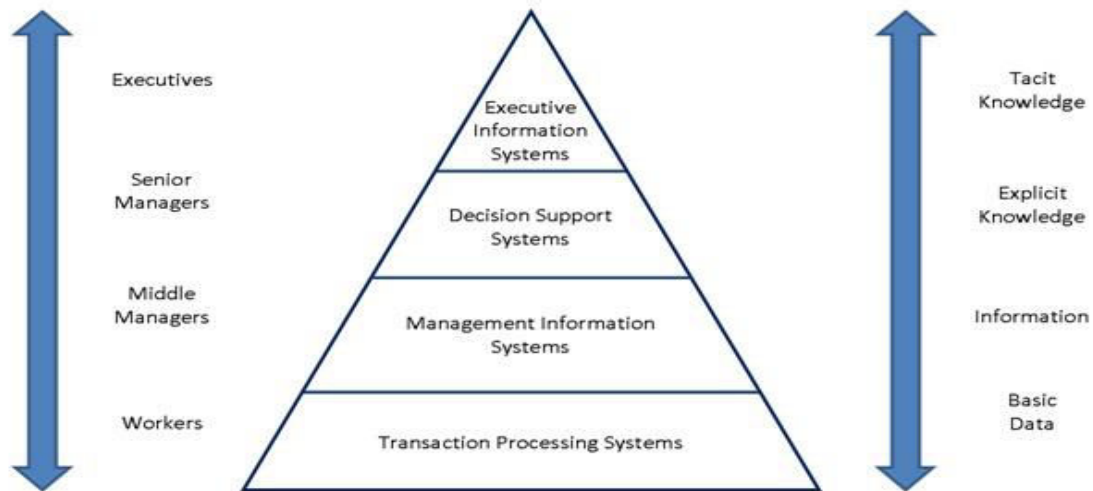
B2B E-procurement - E-procurement are designed to make purchases to electronic and internet markets. It includes transaction processing of fees, licensing etc. E-procurement businesses include B2B ASPs and B2B service providers. E-procurement includes both desktop purchases and group purchase. An example of E-procurement model is Ariba.

Electronic Exchanges - Electronic exchanges are those businesses where buyers and sellers make commercial purchases. Examples of such businesses are eBay and farms.com

Management Information Systems (MIS)

A Management Information System (MIS) is defined as a blend of people, computer processing technology and procedures for collection and organization of information in order to facilitate in making effective decisions. Making sound and efficient decisions helps in attaining organizational goals within the set time. In any company, sufficient amount of time and effort is dedicated to collect relevant data, documentation of that data, and effective processing and communication of the processed data to the concerned authority. Information is person specific and varies with respect to a person's duties and responsibilities in an organization (Haag, Cummings & Dawkins, 2004).

Types of Information System

The figure below depicts the hierarchy of any organization and the types of MIS systems involved at any level. There are in general four levels and types of MIS;

Source: Girdhar, Management Information System (2013)

Transaction Processing Systems

Examples of TPS are the payment systems, reservation systems and deposit recording systems in banks. TPS are designed to process a huge volume of regular and recurring transactions. Transaction processing systems are operational-level systems and lies at the bottom of the pyramid and are applicable to routine workers and employees of the organization. The table sums up the operations and functions of TPS;

Inputs	Processing	Outputs
Transactions, Events	Validation, Sorting, Listing, Merging, Updating, Calculation	Lists, Detail Reports, Action Reports, Summary, Reports

Operations Information Systems

An inventory management system and budgeting systems are some examples of such systems. They are dedicated to gather, organize and summarize the comprehensive data for that managers of the organization can take relevant actions. It is helpful to mid-level managers of the company. These systems are efficiency oriented and deals with the past and present rather than the future (Oz, 2006).

Inputs	Processing	Outputs
Internal Transactions, Internal Files, Structured data	Sorting, Merging, Summarizing	Summary Reports, Action Reports, Detailed Reports

Decision Support Systems

Decision support systems, as their name suggests, are designed in a way that they provide such information which is helpful in making intelligent decisions. Decision support systems are used by senior managerial level and are often used to examine existing structured information and allow managers to make potential future decisions (Schewe, 2006). Computer supported co-operative work (CSCW) and financial support systems are some examples of DSS.

Inputs	Processing	Outputs
Internal Transactions, Internal Files, External Information	Modeling, Simulation, Analysis, Summarizing	Summary reports, Forecasts, Graphs, Plots

Executive Information Systems

Expert management systems are designed to imitate humans in making decisions in a particular field. It supports unstructured decisions and is concerned with predicting the future. This system is helpful for the decision makers and board of directors of the company.

Inputs	Processing	Outputs
External Data, Internal Files, Pre-defined models	Summarizing, Simulation	Summary Reports, Forecast, Graphs, Plots

Components of Management Information Systems

There are five components of a Management Information system;

Data – The unprocessed raw data that MIS converts into information.

Hardware – Hardware includes I/O and storage devices, data communication tools and processing units.

Software – The software component of MIS includes the instructions set for data processing, data display and data storage.
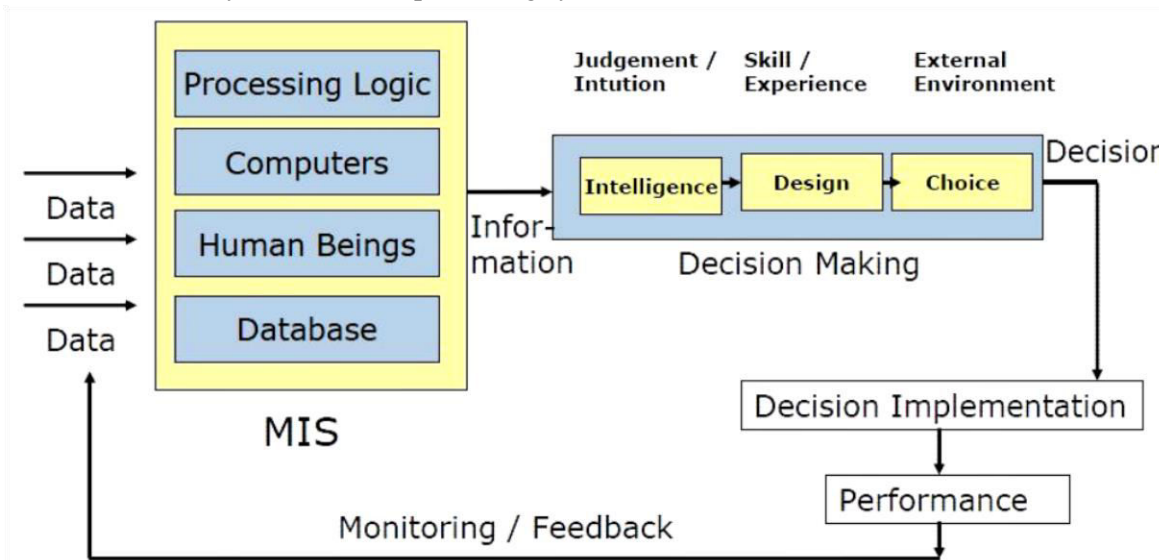
Communication – Communication includes the transfer of electronic information from source to destination. Communication medium can be Ethernet, WiMax, Wifi, Fiber etc.

 People –They are the people for which the MIS generates reports and designs. They are the decision makers of the business and include business executive and managerial staff.

Procedures – Procedures includes rules for information processing information security and other software related rules.

Data Processing in Management Information Systems

The figure below depicts a basic Management Information System. The first step of MIS is collection of relevant information and providing that data to the MIS system. The data generally comes from sources that are internal to the company and includes old transactions like old sales, payments, purchase of a product etc. These input transactions are recorded by a Transaction processing system (TPS).
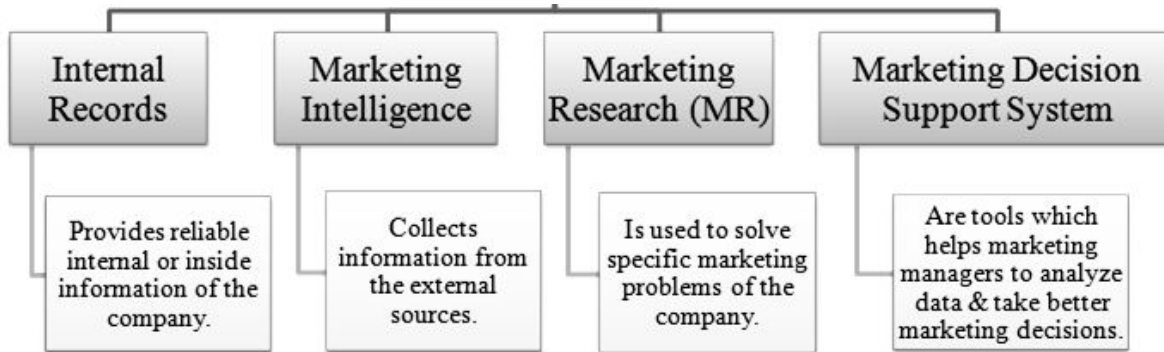

Source: Sirpal, (2013). MIS Concepts and Design

The data is then processed by the dedicated MIS of the organization. It should be noted that MIS or IS can be a traditional off-the-shelf system or a custom-made system designed for a particular company. Data processing stage requires large amount of software coding and dedicated software engineers are assigned to make necessary amendments in the processing script.

After the raw data is processed by the MIS, the output called information is obtained. The output is in the form of reports, graphs, charts, census, or any other form which is most optimal in effective decision making. Example of output devices can be computer displays, printers, or simple paper. The processed data is the stored in Databases (DB) or optical drives for future references (Legris & Ingham, 2003).

Market Information System: An Example of MIS

Consider a simple Market information system. It is a type of Management Information System. MIS are designed to identify that information essential for managers to make marketing and organizational decisions. The collected data is then transformed into information. The information is then supplied to the managers. The MIS system is divided into the following four subsystems;

Internal Records	Marketing Intelligence	Marketing Research (MR)	Marketing Decision Support System
Provides reliable internal or inside information of the company.	Collects information from the external sources.	Is used to solve specific marketing problems of the company.	Are tools which helps marketing managers to analyze data & take better marketing decisions.

Source: Katyani, M. (2014)

Internal Records- Marketing managers make use of the internal records which provide the latest information regarding cash flows, investments, sales, accounts, and inventories of the company. In MIS, the internal records are in digital formats. These records help in gaining faster access to reliable information of the organization.

Marketing Intelligence- Marketing intelligence is related to collection of information from external sources. In a business environment, marketing intelligence block is responsible for gathering updates about the current market conditions and the changing trends in the market as well. This block collects information from source like trade journals, magazines, press releases, newspapers etc.

Marketing Research- Marketing research is conducted to solve problems associated to marketing of a specific product or service of the company. Data related to a particular problem is collected and tabulated. Conclusions are drawn on the basis of analysis of this data and recommendations are then given to solve the problem at hand.

Marketing Decision Support System - Marketing decision support system or MDDS consists of various tools that help in analysis of data for efficient decision making. MDDS includes both hardware and software tools that help the marketing managers in market segmentation, broadcasting budgets etc.

Technological Discontinuities

Technological discontinuities can be defined as the random, rare, and impulsive technological innovations which lead to certain technological change and which lead to a change or substitution of various products or designs (Anderson & Tushman, 1990). Any discontinuity in technology imposes a threat to the organization in the sense that they make the existing infrastructure and system and organization structure obsolete. It also alters the management approaches, skills, and designs. According to various scholars, technological discontinuities may lead to industry breakthroughs that can invalidate the competitive advantages of an incumbent (Rothaermel & Hill, 2005). For example, consider a popular technological discontinuity in the mobile and communications market. The earlier mobile phones were based on the legacy TDMA technology. It was termed as 1G or Ams mobile. Then came the 2nd generation mobile phones that made the 1G phone technology obsolete. Soon the concept of data networks was introduced, and hence 2.5 generation of mobile phones came, making the 2G phones an old tale. Then with the advancements in the telecommunications market, 3G and 4G mobile technology was introduced, with even faster data rates and internet speed. Recently, the very latest 5th generation of mobile phones have hit the research grounds and as we have been reading in everyday newspapers, there is going to be another technology boom, leading to another technological discontinuity. Technological discontinuities reshape the value chain of any industry and allow new competitors to enter the industry who introduces new ways of both creating and capturing value (Govindarajan & Gupta, 2001). In B2B markets, dominant logic is defined as the methods by which managers conceptualize the business and make significant decisions of resource allocation (Prahalad, 2004). In way, dominant logic keeps companies and businesses focused on future goals, or it may restrict the peripheral vision of managers (Petrie, 2004).

Dominant logics may alter with time. The evolution of dominant logics B2B markets has been recognized as being driven by the technologies involved. Markets follow a common lifecycles from emergence to maturity (Agarwal & Tripsas, 2008). This lifecycle is affected by technological discontinuities that may lead either to the industry's decline, or to a new embryonic phase (Afuah & Utterback, 1997). Hence, while technological discontinuities can commence industry evolution, business model innovation can also play a vital role in creating change in dominant industry logics (Sabatier, Kennard & Mangematin, 2012). Introduction to a new technology in the market is a slow and bit by bit process unless there is some major technology breakthrough. Major technological breakthroughs and innovations represent such significant technical advance such that there no increase in scale, efficiency, or design can make older technologies competitive with the new technology (Sahal, 1981). These innovations may lead to product improvement such as VLSI vs LSI technology or product substitution such as steam fuel vs petrol and single-wafer vs semiconductors. In worst case, these technological innovations may lead to product discontinuities such as old AMS mobiles versus the new 3G and 4G LTE technology. There are two methods by which technological discontinuities can be triggered;

1. Technology innovation or technology-pull
2. Market requirement or market-pull

The substitute technologies must be examined and compared with reference to the relevant markets. If extensive change occurs exists in any field, it is always followed by technological discontinuities. These technological discontinuities impact the overall performance of the company. Technological discontinuities increase market competition, resulting in rivalry. Also, when some technology innovation occurs, the companies have to restructure the organization and management systems. Moreover, new and skilled human resources are needed to be hired.

The Dominant Logic

Dominant logic can be stated as a mindset or conceptualization of the business and the managerial tools to achieve these goals and make decisions in that business (Prahalad & Bettis, 1986). The dominant logic provides a general framework by the help of which companies conceive what their customers want and the ways by which customers' needs can be fully served. Hence companies design their business models and strategies depending upon their dominant logic and the type of opportunities they detect. There are in general three components of a dominant logic at the industry level (Phaal et al., 2011);

- **Value context** – Value context refers to the business landscape which contains prospects of capturing and creating values.
- **Value creation** - Value creation refers to the competences and capabilities used by institutions to produce products and services.
- **Value capture -** Value capture refers to the methods and procedures used by organizations to for appropriate delivery of products and services.

The dominant logic can be well understood by the example of Nokia mobile communications. Nokia was considered the market leader in the development of mobile handsets. But the graphs have shifted since the introduction of Android technology. Android is an open source software develop platform for mobile application development. Nokia Mobiles are popular for its windows phones. When the technology boom of android application development hit the market, all the mobile phone developers shifted their interest towards this open source platform. Nokia, with the dominant logic in view, decided to continue using the Windows based platform. With the Android giants like Samsung and HTC, Nokia lost its competitive advantage and hence faced a steep downfall for a couple of years.

Technological Shifts: Business Competences

There exist two types of technological shifts in determining the competences of a business or organization. The shifts can be either competence-destroying or competence-enhancing depending upon they either tend to destroy or enhance the competence of the company in the market (Little, 2011).

Competence-destroying Discontinuity

Competence-destroying discontinuity either creates a new product class such as the 4G LTE mobile technology, technological substitution with a new and improved technology or, technological discontinuity in the worst case.

Competence - destroying process breakthroughs entail combining previously distinct steps into a more uninterrupted or may involve an entirely different process. A competence-destroying discontinuity requires new skills, abilities, and knowledge in manufacturing of the product. For example, diesel engines required new skills that steam-engine manufacturers did not possess. Acquisition of new skill set and production processes are interlinked with major changes in the distribution of power and control within industry and market in general (Kuppili & Aryasri, 2012).

Competence-enhancing Discontinuity

Competence-enhancing discontinuities are those discontinuities that cause an improvement in the price and performance of a particular product. These discontinuities substitute the older technologies but do not become a cause to make the skills of an individual obsolete. Competence-enhancing technological discontinuities provide an improvement over prior products yet build on existing know-how. An example of such competence-enhancing technology can be the popular IBM 360 series which was made by amalgamation of older technologies, but stands way ahead in terms of cost, features, and performance.

Challenges in Implementation of MIS

To implement MIS is a management process. It changes the style I which people used to work and the organizational behavior. The implementation of MIS either can be in the favor or against the company depending upon the strategy used to implement the system. Following are some of the challenges and hurdles associated with effective implementation of Management Information System;

Dominant Logic and Technological Discontinuities

Dominant design logic and technical discontinuities does not provide any guarantee of success. The dominance design is a function of technological and social factors that cannot be fully known in advance. Technological discontinuities trigger a period of technological ferment culminating in a dominant design and, in turn, leading to the next period of incremental, competence-enhancing, technological change. For example, the well-known and market leading company Kodak is bankrupt now. The problem of Kodak, as perceived by many business analysts is that Kodak did not enter the digital world well enough and fast enough. But in reality, Kodak faced the severe challenge of technological discontinuities. They did not adopt the new technological innovations. Fuji film made use of these innovations and soon they surpassed Kodak in the photography business.

Technology Related Challenges

Both technology and technology-related products are emerging at very high pace. With the new technological innovations, various challenges exist while implementing MIS. One such challenge can be advance technology competitors. Another challenging factor can be the orientation of customers towards required information about product and quality and the industry orientation towards upcoming technology. It also includes foreign orientation of investors in local markets and government intervention in case of any new technology.

Management Processes Issues

Management process issues are related to operation functions of a company and include processes like budgeting, strategic planning, and operational directives.

Leadership Issues

Leadership issues are related to interaction between executives and management of an organization. Example of some of the leadership related issues can be issues relating to organizational support, timeframes, scheduling, interdepartmental coordination, and support at individual level. If leadership skills and the other related factors are not present, the business has to spend considerable amount of time in just individual level trainings and in motivating, the people of the firm to accept then newly implemented management information system.

Data Migration Issues

When any technological discontinuity is observed, a new or modified MIS has to be implemented. This needs migration of old data and information into the new system, with new data formats (for example, migration from Java to Perl language). Migration of data from one format or system to other is a hectic and time consuming process.

Organizational Environment Issues

These are the no tangible issues, such as organizational culture, behavior, and organizational changes. Organizational and environment issues can be organizational culture, internal and external policies, change in technologies and external consultants. Environment plays a key role in adaptation of any new system in a firm. In a business-to-business kind of environment, the company will prosper more quickly if adoption of new and innovative ideas is present in its culture and history.

The People Factor

It is the human psyche that they do not like changes of any aspect. If an employee is comfortable in using keyboard, he would always resist if he is forced to work on touch pads. Hence, the people factor is a major hurdle in case of effective implementation of MIS.

Oversupply of MIS Information

The information acquired from MIS can be both underutilized and over utilized. Sometimes, the acquired information can flood the markets and causes prices to drop. This happens when the information is used to identify the most profitable markets. In a business-to-business environment, every company tries to move into the category of products with the highest prices. But when all the companies or organizations in B2B will adopt the same logic to increase their ROI, the supply of their product will increase to such an extent that the price may drive down drastically in the following year. Table below shows a summarized map of various implementation challenges of MIS (Beaumaster, 1999).

Leadership Issue	Management Process Issues	Organisation Environment Issues	Technical Systems Issues	Personnel Issues
Inter-departmental Coordination	Stategic Planning	Organisational Culture	Existing Systems	Organisational Expertise
Individual Support	Budgeting	Internal and External Politics	Standardisation	Individual Expertise
Organisational Support	Organisational Directives	Contracts	Compatibility	Internal Leadership
Timeframes and Scheduling	Written Guidelines	Changing Technologies		Staffing
		External Consultants		Resistance to Change
				Training

Source: Beaumaster, Implementation Challenge Issues (1999)

Key Issues in MIS Implementation Success

The factors that affect the implementation of information system are called critical success factors (CSF). Most of the work done in the context of critical success factors is for Enterprise Resource Planning (ERP).   According to various studies and literature of MIS systems, it has been evaluated that successful MIS implementation can be achieved with the help of critical success factors (CSFs). These CSFs are mainly related to project management, requirement analysis and overall IS planning (Somers & Nelson, 2001). It has also been analyzed and evaluated that most of the CSFs have been identified by researches for the successful implementation of ERP systems.

Moreover, it has also been highlighted that some of the key issues in MIS implementation success are also related to effective organizational training and implementation process and facilities. Without an effective training, the complex process of implementing MIS systems cannot take place in an efficient manner. Furthermore, it has been highlighted that with rapid advancements in the field of technology, the role of MIS and its implementation success has greatly transformed. This transformation has brought both positive and negative challenges for the field of MIS. Competition has been regarded as one of the worst challenges because it has made the field of MIS extremely competitive and any organization that lags behind in adopting and implementing the latest MIS systems fails to survive in the global markets. Therefore, competition has become one of the key or you can say major issue for achieving MIS implementation success in today's highly competitive and diverse global environments.

Conclusion

Management Information Systems or MIS are the process and methodologies of gathering, generating and managing information that serves as guidelines in making effective plans and decisions. The information acquired from the MIS is used by employees at levels such as employee level, mid management, upper management and other stakeholders. Business-to-business market and ecommerce is the transaction between two companies. B2B is a complex market sector where both buyers and sellers play equal roles. Products designed for B2B are quite complex in nature and involves big financial transactions. Hence an effective Management Information system plays a key role in successful gathering of internal and external data. Many important decisions regarding future transactions are based on the statistics of the previous year's loss and profit margin. Technological discontinuities are the technological factor that tends to reshape the value chain of any industry and allow new competitors to enter the industry who introduces new ways of both creating and capturing value. Dominant design logic and technical discontinuities does not provide any guarantee of success. This paper provides a guideline for MIS managers and executives to successfully implement an effective Information system. The other hurdles such as data migration and leadership issues are also discussed which may become a challenge to MIS and its implementation.

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