

# [Technological trend](https://assignbuster.com/technological-trend/)

Executive Summary: We are in the era where the organizations are the most inventive social arrangement of our age and of civilization. It will be spectacle to know that hundred of thousand of people with highly individualized background, skills and interests are coordinated in various corporations to pursue common goals. The main prospective of this study is quite straightforward, as we want to analyze a technology trend and its impact on a particular industry. The impact will analyze the current and future benefit instance for the industry. We have decided to use Management Information System (hereafter MIS) technology applicability and its potential on the Information Technology industry. At the beginning, in businesses and other organizational structures, internal reporting were made out only manually and periodically, as a by-product of the accounting system and with supplementary statistics, and gave limited and delayed information on management presentations. In their infancy, computer technologies were used for the convenient business of computing the payroll and keeping day to day tracking of their accounting information. As the technology grew many applications were developed that provided help to managers regarding information about inventories, sales and other data that helps out in organizing the enterprise, the term " MIS" come up to depict these kinds of applications. Now, this term is using broadly in a number of perspectives and includes resource and people management applications, decision support system, database retrieval applications, project management and many more applications and systems are being used in this context. Information System (I. S.): In a common intellect, the terms Information System (I. S.) denominates to system of people, data reports and actions that process any sought of information or data in an organization, its also comprise the organizational manual and automated processes. In a taper sense, the term information system or computer based information system indicates to the specific software applications that are used to manage data records in a computer system and mechanizes some of the information processing activities of any organization. Computer based information systems are in the meadow of information technology. The discipline of business process modeling elaborates the business procedures supported by the information technology. There are various types of information systems such as office systems, knowledge management systems, transaction processing systems, decision support systems, office information systems and database managements systems. Significantly these information systems are information technologies, which are archetypal designed to facilitate humans to perform assignments for which the human brain is not well suited, for example handling huge amount of information, controlling many instantaneous processes and performing complex calculations. Information technologies are very essential and malleable resources available to executives. (Rockart et al., 1996). Many companies have builds positions for Chief Information Officer (CIO) that sits on the managerial board with the Chief Executive Officer (CEO), Chief Operating Officer (COO), Chief Technical Officer (CTO) and Chief Financial Officer (CFO). The CTO may also hand round the responsibilities of CIO, and vice versa. The Chief Information Security Officer (CISO), who focuses on an organization's information security system usually, reports to the Chief Information Officer. In computer security, an information system is depicted by the following constituents:- Interfaces, which hold up the interface between humans and computer, such as speakers, scanners, pointing devices, keyboards, etc.- Channels, which interlinks repositories such as cables, bridges, routers and etc.- Repositories which embrace data temporarily or permanently, such as RAM, buffers, caches, hard disks etc. Mostly data stored in repositories which are managed through a database management system. Management Information System: Management Information System is a premeditated system of the processing, collecting, disseminating and storing data in the form of needed information to carry out the management functions. In simple words it is an acknowledged report of the activities those were planned and executed. According to Philip Kotler " A marketing information system consists of people, equipment, and procedures to gather, sort, analyze, evaluate, and distribute needed, timely, and accurate information to marketing decision makers." (Kotler Philip, 2006)The term Management Information System (MIS) and Information System (IS) are often confused. Information systems embrace systems that are not proposed for decision making. The area of study is called Management Information System (MIS); it is sometimes also referred to, in a limited sense, as information technology management. The area of study should not be mystified with computer sciences. IT Service Management is a practitioner-focused regulation. MIS has also some difference with Enterprise Resource Planning, as ERP includes constituents that are not inevitably focused on decision support. Professor Allen S. Lee in his comments reported that "..... research in the information systems field examines more than the technological system, or just the social system, or even the two side by side; in addition, it investigates the phenomena that emerge when the two interact......" (Allen S. Lee (2001)Importance Of Management Information System (MIS): Management Information System placed to be as a vital standard for the following reasons: Facilitates feedback to CMH provider agencies in the shape of comparative reports showing trends and industrial standards. This feedback is helpful for defining procedures and determining performance. Implementing the MIS: Traditional technique of MIS is illustrated it by showing a pyramid, into which at the bottom each item of statistics (such as record of the students) produces a broad base. Further up onto the pyramid the width narrows as the statistics are added up into, e. g. departmental totals. At the top of the pyramid the data is sparse and encompasses overall totals for an organization and ratios of one department of data to another, but all this elevated level information is drawn from basic operating data. For example if we take comparative statistics from any of the universities and national figures on higher education. Conceivably one can assume this graphically by introducing a corona around the top of the pyramid to symbolize the whole circle of an MIS. In the contemporary age of business there has been a tendency among corporations to focus attention on supply chain management in to cost cutting dilemma. This is largely due to an augment in lower cost competitive services and products within a specific industry. With such a high level of antagonism in the market, businesses are forced to cut as many concerns as they can to guarantee their products have a competitive pricing level while still maintaining consumer consumptions. To build their work easier and more competent, managers have been executing their supply chain management approaches with management information system. This permits managers to focus on the organizations day to day operations while MIS observes what is going on and recommends what should be done, based on various facts and figures. Supply chain planning systems is now became the standard of industry. These systems " enable the organization to produce demand forecasts for a product or service and to develop sourcing and manufacturing plans for that product or service. Such systems help companies/ organizations make better and comprehensive operating decisions, such as determining how much of a precise product to manufacture in a given time period, instituting inventory levels for raw materials, intermediate products and finished goods; establishing where to store the finished goods; and identifying the mode of transportation to use for delivery of the product." (Laudon 388)Engagement Of MIS: Many excellent plans go wrong due to a malfunction by the Manages or the Steering Committee to understand how to convert the concepts of the plan into reality or because of failure to recognize danger sings until it is too late. More commonly, nevertheless, there are simpler causes. For example: If the project is an extensive one, the Project Manager should try to create some quick results early one. Human factors are becoming more and more significant in the planning organizational changes and people need to see some results early. Company Choice For The Project: The Management Information Systems project will base on the company I am currently working for, which is Northrop Grumman Corporation. I am currently working out of Woodland Hills at the Navigation Systems Division and happen to use our IT system on a daily basis. Our system is global and allows us to communicate seamlessly with division, sector, corporate, and overseas employees and management. We are also able to communicate directly with our customers, both military and commercial, through teleconferencing, email, blackberry's, and secure websites and databases. I believe our IT system and the people who service it is one of the reasons that we are able to do business so efficiently. Northrop Grumman's system has certain parts that are classified, and due to that I will be unable to discuss those areas, but I will do my best to fill in the blanks. I have already spoken directly to my MIS Director and he has kindly offered to help me sort through what I can and cannot publish for this class. I hope that my project will help others understand how large aviation companies use their IT systems to do business so efficient. Company Overview: Northrop Grumman Corporation is one of the top companies providing services and solutions in 5 different company areas which are: aerospace, electronics, information systems, shipbuilding, and technical services. Northrop Grumman Corporation as a whole employs over 120, 000 people across their five sectors and the corporate office. I am going to concentrate the Navigation Systems Division where I work, which is a part of the Electronics systems sector. Our company is structured like a pyramid with both our sectors and our employees. There is one corporate office that oversees five sectors, and those sectors oversee multiple divisions. Our Management structure is much the same in that we have a corporate president who oversees sector VP's, who oversee Divisional VP's, who oversee Divisional Directors and it carries on down the chain. I am an Engineering Manager and am probably right under the director level if I had to guess. I have included a chart below to help better understand the structure. The Navigation Systems Division of Northrop Grumman specializes in situational awareness and inertial navigation systems for military, commercial, and space vehicles. I am personally working on an inertial navigation unit for an Air Force satellite that is used for missile defense. Values Of The Company: Our Company Values are below: Views From Management of the Company: Northrop Grumman Corporation is a premier defense, electronics and information technology company which provides a broad range of technologically advanced, pioneering products, advanced aircraft, shipbuilding and space technology. Northrop Grumman management is built on technology innovation and in our course of business we produce world-class intellectual property. Our accomplishment draws on the rich heritage of high tech companies comprising Northrop Grumman, including TRW Space & Mission Systems, Westinghouse, Logicon, Litton Industries and Newport News. Many lives have been touched by the technologies extended for space exploration and national defense by Northrop Grumman and other government contractors. Keeping with this rich tradition, out intellectual property licensing program promotes the commercial use of our technologies. Northrop Grumman Corporation And MIS And Its Potential Benefits: The Management Information systems infrastructure at Northrop Grumman is quite immense and incorporates a ton of software and hardware from all over the globe in order to make this company work seamlessly. At the Navigation Systems Division in Woodland Hills, the company has a contract with Hewlett Packard to supply all of our hardware. The most common hardware used is desktop PC's and laptops. Laptops are only distributed to Engineering Managers or those employees who are authorized to work from home. Company cell phones, in the form of Blackberry's are also linked to the network so that anyone who has one can access company email and directories. There are at least 6 buildings on our campus and each one has its own set of servers that feed directly to the mainframe server in Baltimore. The campus also has cell phone tower repeaters which allow service to company phones all over campus. There are no wireless access points on our campus as most of the information we deal with is classified, and wireless is easily hacked. All of printers and copiers are also linked to the network and shared amongst all the employees of certain areas. There are 12 network data drives and access is authorized by your job title and program, but this is basically how we share information across the division. The software side of things is just as immense and each employee has a suite of software that is the same across all computers and then some that are different. We are using Microsoft Windows and Microsoft Office Suite as our main software. The internet and intranet are accessed through internet explorer. The intranet is the site where all employees can go to access shared software, shared drives and catch up on what is happening in the company. All of our engineering drawings are accessed through our Salt Lake City campus along with our Test Plan software. I would say that most of our database style software is run through Oracle. We also have what is call Livelink or share center which is basically an online database that is accessible to all sectors and divisions of the Northrop. Livelink is where information is stored that we want shared across the company and with our customers. All of our online software is automated as well. For example, when I write a test plan and save it into the Oracle data base in Salt Lake City, it automatically notifies the Quality Engineer in charge of that program through an email, which they need to review and approve a test plan. This automation saves a lot of time as I do not have to go tracking anyone down to do their job. There is a lot more software to discuss, but I will save this for the full report. There are a number of benefits lies in this rationale like retrieving the data in almost no time and recording the data is also easy. With the applicability of MIS the company can make authentic and good reports to present it more comprehensively in front of the upper management, and with the help of these comprehensive reports decision making will become so convenient. All these things will positively impact on the future decision making for the company and such decision making will be quite positive from the standpoint of the company for their future. Management Information System is a conjunction of Management and Information System studies. It deals in all aspect from the basic needs to the managerial necessities. This study helps out, sufficiently finance and managerial and maintain to ensure free flow of information and sufficient use of MIS in decision making on long-term and short-term planning as well as budgeting. As if proper orientation will be given to managers at all the stages as well as in service training for secretaries to make sure proper and sufficient use of MIS facilities in generating and disseminating information for better decisions and atmosphere in the organizations. We have seen the implementation of MIS on the information technology sector and have also seen the potential benefits of it on the decision making of the organization.