An analysis and study of information systems with their related terms and concept...

Technology, Information Technology

" An analysis and study of Information systems with their related terms and concepts" Deepak Sharma Research Scholar , Mewar university Rajasthan Mob. 9639916009 E-mail:com Abhishek Singh Bhatanagar Student MCA, Subharti University Meerut Mob. 9897008522 E-mail: com Abstract: This paper is written as a weapon to know about information systems in depth. As tomorrow's managers, entrepreneurs, or business specialists, business students need to know how to use and manage informationtechnologyin today's networked enterprises and global markets.

In this dynamicenvironment, they will rely on interconnected networks of information systems for end user collaboration, including communications and computing among end user work groups and teams, and enterprise wide computing, including communications and information processing for business operations, managerial decision making, and strategic advantage. So this paper is a great assets in knowing about information system in brief. Keywords: information, system , management , DSS , TPS etc. 1. Introduction:

An Information System is any combination of information technology and people's activities using that technology to support operations, management, and decision-making. In a very broad sense, the term information system is frequently used to refer to the interaction between people, algorithmic processes, data and technology. The focus of Info Systems is on the development of solutions for business problems rather than simply describing them. 1. 1 Functions (benefits) of information

Systems: 1. It helps in increasing employee productivity. . It Help users to become information's competent, that means find it easy to organise their information, search for information, analyze their information and using old information to create new information. 3. For providing better support to managers for effective decision making. 4. Information systems strongly focus on explaining empirical phenomena of the real world. [pic] • 1. 2 Categories of Information system: 1. Transaction Processing Systems (TPS) 2. Decision Support Systems (DSS) 3. Expert Information Systems (EIS) . Management Information Systems (MIS 5. Office Automation Systems (OAS) 1. 2. 1 Transaction Processing System: It processes business transaction of the organization. A Transaction Processing System or Transaction Processing Monitor is a set of information which process the data transaction in database system that monitors transaction programs Transaction can be any activity of the organization. Transactions differ from organization to organization. For example, take a railway reservation system .

Transaction processing systems provide speed and accuracy, and can be programmed to follow routines functions of the organization 1. 2. 2Decision Support Systems (DSS): Decision Support Systems (DSS) are a specific class of computerized information system that supports business and organizational decision-making activities. A properly designed DSS is an interactive software-based system intended to help decision makers compile useful information from raw data, documents, personal knowledge, and/or business models to identify and solve problems and make decisions.

Typical information that a decision support application might gather and present would be: • Accessing all of your current information assets, including legacy and relational data sources, cubes, data warehouses, and data marts • Comparative sales figures between one week and the next • Projected revenue figures based on new product sales assumptions • The consequences of different decision alternatives, given past experience in a context that is described 1. 23 Expert information system

An expert information system with which a decision maker in the construction, or a related industry, can generate a decision record and related control instructions in a facile manner without significant omissions while ensuring that substantially all of the options available for making the decisions have been considered. The expert system includes a microcomputer which executes a system control program to select information units from the expertise of a data base and to concentrate individual information units until an entire decision record has been generated.

The process is enhanced by a multiwindowed display which displays possible selections from the expert data base while contrasting that data with data in another window having a list of data indicating the decisions or selections already made. A display pointer with a controllable position is employed to select lines and phrases of the expert information from that portion of the data base displayed in the selection window. The selection of such information causes the line or phrase from the data base, an information unit, to be transferred to the decision record and to the display of the

selected decisions window. . 2. 4 Management information system (MIS) It is the organized approach to the study of information needs of a management at every level in making operational, tactical, and strategic decisions. Its objective is to design and implement man-machine procedures, processes, and routines that provide suitably detailed reports in an accurate, consistent, and timely manner. Modern, computerized systems continuously gather relevant data, both from inside and outside the organization.

This data is then processed, integrated, and stored in a centralized database (or data warehouse) where it is constantly updated and made available to all who have the authority to access it, in a form that suits their purpose. 1. 2. 5 Office automation system Office automation systems (OAS) are configurations of networked computer hardware and software. A variety of office automation systems are now applied to business andcommunicationfunctions that used to be performed manually or in multiple locations of a company, such as preparing written communications and strategic planning.

In addition, functions that once required coordinating the expertise of outside specialists in typesetting, printing, or electronic recording can now be integrated into the everyday work of an organization, saving both time andmoney. 2. Information systems for Business operations: Business operations are those ongoing recurring activities involved in the running of a business for the purpose of producing value for the stakeholders. They are contrasted with project management, and consist of processes.

The outcome of business operations is the harvesting of value from assets of a business. Assets can be physical or intangible. An example of value derived from a physical asset like a building is rent. An example of value derived from an intangible asset like an idea is a royalty. The effort involved in " harvesting" this value is what constitutes business operations. Information technology plays a major role in reengineering business processes.

The speed, information processing power, and ease-of-use of modern computer hardware, software, and networks can dramatically increase the efficiency of business processes, and communications and collaboration among the people responsible for their operation and management. IT is a strategic requirement for agile product development and delivery. Information systems provide the information people need to support agile operations, as well as the information built into products and services 2. 1 Information system for strategic advantage:

Information systems can be used to implement a variety of competitive strategies. These include the five basic competitive strategies (differentiation, cost, innovation, growth, alliance), as well as other ways that companies can use information systems strategically to gain a competitive edge. For example: 1. Lower Costs 2. Differentiate 3. Innovate 4. Promote Growth 5. Develop Alliances 6. Improve quality and efficiency Conclusion: So finally we can conclude that information system is a greatest tool by which our organization can take more and more liberties in future to achieve theirgoals.

It increases the accuracy and reliability of information that is much needed by today's organizations. References: 1. " Definition of Application Landscape". Software Engineering for Business Information Systems (sebis). Jan 21, 2009. Retrieved January 14, 2011. 2. O'Brien, J A. (2003). Introduction to information systems: essentials for the e-business enterprise. McGraw-Hill, Boston, MA 3. Alter, S. The Work System Method: Connecting People, Processes, and IT for Business Results. Works System Press, CA 4. www. google. com 5. www. sciencedaily. com 6. www. wikipedia. com [pic][pic] [pic]