Advantages and Dis-advantages of a manual information system Advantages: The following are the advantages of manual information systems Cost effective - it is cheaper compared to a computerized system because there is no need to purchase expensive equipment such as servers, workstations, printers, etc. The web and Mobile technologies make accessing data from anywhere possible. Retrieving data from the filing system also takes a considerable amount of time Prone to error - the accuracy of the data when verified and validated by human beings is more prone to errors compared to verification and validation done by computerized systems. Improved security - in addition to restricting access to the database server, the computerized information system can implement other security controls such as user's authentication, biometric authentication systems, access rights control, etc. Transaction processing systems (TPS) are by operational staff to record day to day business transactions, and they are used to make structured decisions Management Information Systems (MIS) are used by middle-level managers to make semi-structured decisions Decision Support Systems are used by top level managers, and they help top level managers to make unstructured decisions. This means updating data in one department automatically makes it available to the other departments Improved backup systems - with modern day technology, backups can be stored in the cloud which makes it easy to recover the data if something happened to the hardware and software used to store the data Easy access to information - most business executives need to travel and still be able to make a decision based on the information. Flexible -evolving business requirements can easily be implemented into the business procedures and implemented immediately Disadvantages: The following are some of the disadvantages of a manual information system. This leads to improved client/customer service Improved data accuracy - easy to implement data validation and verification checks in a computerized system compared to a manual system. The major difference between a manual and computerized information system is a computerized system uses a combination of software and hardware to record, store, analyze and retrieve information. Heavy reliance on technology - if something happens to the hardware or software that makes it stop functioning, then the information cannot be accessed until the required hardware or software has been replaced. Risk of fraud - if proper controls and checks are not in place, an intruder can post unauthorized transactions such as an invoice for goods that were never delivered, etc. Time consuming –all data entries need to be verified before filing, this is a time consuming task when done by humans. In a manual system, it is common to duplicate this data to make it easy to accessible to all authorized users. Experience shows unauthorized people can easily gain access to the filing room Duplication of data -most departments in an organization need to have access to the same data. The challenge comes in when the same data needs to be updated Data inconsistency - due to the duplication of data, it is very common to update data in one file and not update the other files. This leads to data inconsistency Lack of backups – if the file get lost or mishandled, the chances of recovering the data are almost zero. Advantages and Disadvantages of a computerized information system (MIS) The following are some of the disadvantages of a computerized information system. Advantages: The following are the advantages of computerized information systems Fast data processing and information retrieval - this is one of the biggest advantages of a computerized information system. Reduced data duplication - database systems are designed in such a way that minimized duplication of

data. Disadvantages: It is expensive to set up and configure – the organization has to buy hardware and the required software to run the information system. Lack of security – the security of manual systems is implemented by restricting access to the file room. Computerized information system Computerized systems were developed to address the challenges of manual information systems. In addition to that, business procedures will need to be revised, and the staff will need to be trained on how to use the computerized information systems. Computerized information systems are more efficient compared to manual information systems. Manual information systems are cheaper compared to computerized information systems. It processes data and retrieves information at a faster rate. Summary MIS stands for Management Information System.