Database design

[Profession](#)

5. 1: DEFINITION OF DATABASE A database is a shared collection of interrelated data designed to meet the varied information needs an organization. A database has two important properties that it is integrated that it is shared. 5. 2: IMPORTANCE OF DATABASE The data resources of organization and its management are very important. The recognition by management that data or information is indeed a resource is a recent development. Information, which in essence is analysis and synthesis of data, will unquestionably be one of the most vital of corporate resources. It will be structured into models for planning and decision-making.

It will integrate into product design and marketing methods. In other words information will be recognized and treated as an assets. By integrated mean that previously distinct data files have been logically organized to eliminate redundancy and the facilitate data access. By shared mean that all authorized users in the organization have access to the same data to use for variety of other activities. 5. 3: BENEFITS OF THE DATABASE APPROACH The database approach offers number of important advantages. 5. 3. 1: Minimal Data Redundancy There is not as much storing of multiple copies of the data as in manual system.

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It is designed into the system improve performance and the system is aware of the redundancy. 5. 3. 2: Consistency of Data By eliminating or controlling redundancy in the database approach, it greatly reduce the approach, it greatly reduce the opportunities for inconsistency. When controlled redundancy is permitted in the database, the database system itself should enforce consistency by updating each occurrence of data item when change

occurs. 5. 3. 3: Integration of Data Database data are organized into a single logical structure with logical relationship defined between associated data entities.

In this way user can easily relate one item of data to another related item. 5. 3. 4: Sharing of Data A database in intended to be share by authorized users in the organization. Most database system today permits multiple users to share a database co-currently; each functional department can access this data by using their own views of that database. 5. 3. 5: Enforcement of Standard Establishing the data administration function is an important role in the database approach. This organizational function has authority for defining and enforcing data standards.

The database administrator will approve all data names, formats and data usage throughout the organization. 5. 3. 6: Data Accessibility & Data Responsiveness A database system provides multiple retrieval paths to each item of data giving a much greater flexibility in locating and retrieving data to user. 5. 3. 7: Reduced Program Maintenance A database system data are independent of the application programs that use them within limits. Either the data or the application programs that use the data can be hanged without necessitating a change in other factor. As a result program maintenance can be significantly reduced in a databaseenvironment.