

Database analysis assignment



**ASSIGN
BUSTER**

Information is one of the most powerful assets of most organizations in the world today. It is the lifeblood of the organization and there needs to be a controlled flow so that business operations can move swiftly and efficiently. Organizations also need to share information with their employees and with collaborating agencies to ensure that their business objectives can be met without any significant impediments. I presently work for a Home Health Care agency in the Accounts Payable/Receivable department.

My work centers on managing financial information, keeping records of payments, monitoring the amount of revenue generated and keeping an up-to-date record of clients and their financial information. Presently, the only application we use to achieve the storage of information is Microsoft Excel Application. Excel provides an interface for storing information in rows and columns and viewing all the data at a glance. This study takes a look at the concept of databases, their importance, the various types that exist in the industry today and how they can be used to improve the operations of the organization where I work.

The Concept of Databases A database can be defined as a combination of records stored on a computer application that comprises tables that ensure that data is easily accessible. Databases are accessed through the use of computer programs and programming languages that can be used to query and sort the data into different categories as may be required. They make it extremely easy to find relevant information (Paredaens, 1987). A database is a form of electronic storage that is designed with tables comprising cells.

Cells are intersecting rows and columns of data used to store information in a manner that is easy to access. There are numerous types of databases but

the most popular vendors and manufacturers of database solutions are Microsoft, Oracle, Sybase and so on (Paredaens, 1987). Examples of database solutions include Microsoft Access, DB2, MySQL, Oracle and so much more. Microsoft Access is free and can be used to create database files that can be emailed and shared as a single file with little requirement for maintenance.

MySQL is another type of database that is free but requires the use of a web server. Oracle and Microsoft SQL Server have been released in different versions and are mostly deployed in large organizations. They are more robust and possess enhanced capabilities such as replication, transaction management, optimization, indexing, backup and so on (Wiederhold, 2001). A database can be used to achieve different purposes. It allows the update of records and alterations to data as many times as possible to ensure the availability and accuracy of data.

Databases make it easy to perform entry, tracking, analysis and report generation. With databases, it becomes easier to cross-reference different categories of information and perform operations on sets of data based on defined criteria. Another reason why databases are crucial is that they offer an electronic and secure format for storing data so that it can be guarded from unauthorized access. Also, many applications deployed in the IT market today are database-driven.

These applications have interfaces and forms that can be used to filter information from the database (Whitten, Bentley & Dittman, 2001). . Improvements that can be made at my Workplace In the organization I work in, we make use of spreadsheets to store the names of important clients,

financial information and staff. To retrieve the details of a client, one would have to sift through a workbook of multiple sheets since the names are usually not arranged alphabetically or within the same worksheet. This can be cumbersome and time-consuming when a lot of clients are waiting to be attended to.

The introduction of a database would be a huge step to alleviating this problem. It would provide a central location to all the information that is needed at any particular point. The financial data of the health care agency will be integrated into a single format that allows easy searches, queries and access. The fact that the database can be expanded easily to suit the evolving needs of my organization is another major advantage. If extra data needs to be stored in a different format, multiple databases can be developed to offer a lasting solution.

The database will also lead to more effectiveness because unlike the spreadsheet, it can be updated automatically and on a real time basis. It is also easy to manage through the use of an interface that allows the specification of whatever type of information is required. Conclusion Databases are becoming indispensable to the success of the digital age. We are in an era where people need to be able to access up-to-date information at the tip of their fingers any time they need it. Without databases, technology would not be where it is today.

From mobile phones to large computers, databases are increasingly utilized in a manner that is beneficial and can add positively to the progression and usefulness of technology in business operations. Databases are equally indispensable to large organizations that deal with high volumes of sensitive

data. Principles and techniques of effective database management should be adopted to ensure that the right kinds of professionals are deployed to manage the database systems and monitor all the activities that take place within the database environment.