

Example of database critical thinking

[Business](#), [Company](#)



A database is simply a collection of organized information, usually as a set of related lists of similar entries and organized so that it is easily accessible (Chan, n. d.). Art Museum makes extensive use of electronic relational database management systems (RDBMSs). Both technical and non-technical personnel use databases for various purposes.

The Art Museum database deals with tracking the artwork, artists, and locating where the art is displayed or stored within the museum. The database is an extremely important back-end to the software systems that is implemented. The database used is support the SQL (Structured Query Language) syntax. Technical personnel make use of MySQL (My Structured Query Language), a free relational database management system developed by Sun Microsystems (Guthrie, 2003). It is free to acquire and it is also open source meaning that permission is granted to modify its code base. It supports indexing (a technique that can make searching databases faster), transactions (allows modifying data and committing changes explicitly) as well as multiple connections thereby acting as a server.

Database is extensively used by non-technical personnel. The database system used by this category of employees is Microsoft Office Access. This also follows the SQL paradigm but also offers a Graphical User Interface (GUI) that makes database management easier. Users do not have to know complex SQL syntax to query, update or modify data in the database and can do so by simple clicking, dragging and dropping actions. The financial department stores all the financial data about the company in this kind of database. The company's revenues, accounting data, employee records (such as names, salaries and identification details) are stored in Microsoft

Office Access. Individual employees also store their personal data in their computers using Microsoft Office Access. This can include records of their music collections or any other data that they may deem suitable to be stored.

Some of the database constraints will include cost being incurred in training the users as well as a lot of time being wasted during training. In case the user is not interested personally, then the user adoption is affected which in turn reduces the effectiveness of the management system. Training sessions which must be incorporated by the organization in order for the new users to be provided with experience in dealing with the new system of management. For a database environment to have long term success, there are several objectives that has to be met. They include one, user adoption. It is considered to be the most important factor in database management.

Some of the elements that can influence the user adoption include user interface which happens to be the most important element since it includes designs, navigation, colors, and icons as well as all those things that create an impression on the user. In today's market, there are a lot of such software packages which give allowance to users to be able to organize their systems in regard to the information relevancy as required by their functions or jobs. The data base must also have a powerful feedback sphere. Management systems tend to be ever evolving hence requires a powerful feedback sphere that the users can access in order to provide the developers and the database manager with the system feedback. An employee's outlet to raise issues related to their system is necessary. The last factor is the user's self interest which also affects in a considerable manner, the user adoption while

operating the management system. In order to make the user more effective, efficient and valuable for the organization, it becomes important to identify the systems role. The organization should select the right kind of system in order to augment the adoption of the user to the system.

Detailed documentation is also an objective that should be met. This requires thorough as well as complete documentation which the user can refer to while handling the system, thereby determining the management system's long term success. The user is supposed to have acquired training, which is important for him or her to have a comfortable experience while handling the system.

Although the current database management systems serve their purposes well, improvements can be made on several areas. Currently, MySQL users interact with it through the command line interface. However several free Graphical User Interfaces exist and can be harnessed to make MySQL administration easier. These include MySQL Query Browser, MySQL Administrator and several others. The acquisition of this would also help eliminate the need to install and use Microsoft Access which adds to expenses since it is not a free software as MySQL is. All staff, including the non-technical ones, can be trained to use these GUIs and still enjoy the same, if not better, experience that they do with Microsoft Access.

It has become so competitive in the business world that companies are trying to maintain data conveniently and much easier through databases as well as various storage tools such as flash disc. The scope of the database management is to electronically retrieve and treasure data in a manner that is both effective and systematic. By use of the database that is well

designed, the museum is able to design the strategies that they have for the future success. The modern database management is the most convenient, secure and time saving data storage way, in a well designed framework. Some of the entities will include artwork, persons/users, artists, and locations. The table below illustrates the persons /users table and its related data type.

In conclusion, despite database management being viewed as complex, time consuming and expensive during installment, it becomes convenient, secure, cost saving and effective in the long run. It is therefore important for every organization to install it, in order to keep up with the technology changes as well as competition with other organizations (Reitman, 1984).

References

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