### Advantages and Disadvantages to Using a Data Warehouse

Operational database is designed to process and manage dynamic flow of real -time data. It allows access to the archived data and permits data modification of this data such as deletion, adding or changing. The significant difference between operational and warehouse systems are that operational system designed to assist with transaction process whereas data warehousing oriented for online analytical process (OLAP) (Exforsys). Therefore usage of data is optimized for different purposes, see Table 1.

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| **Operational Database** | **Data Warehouse** |
| Supporting high-volume transaction performance with minimum rear reporting.  Provides process-oriented or process-driven analysis only around defined processes of the business and its tasks. | Supporting high-volume analytical transactions with maximum reporting that promptly used for making strategic decisions.  Provides subject-oriented analysis with main focus on the business area where company requires strategic decisions. The collected information is concise about particular issue and collected from more then one operational sources. The data analysis produce information about short-range strategies its assessment and evaluations. |
| Dealing with current data and this data updated on the regular basis. | Dealing with historical data and this data rarely changed. Data warehouse stores information as non-volatile and read only format. This data is loaded on the regular basis and growing constantly. |
| System optimized for fast data uploading but small content at the time. | System optimized for fast data retrieval and large content at the time. |
| Data is specific to application performance; therefore it is non-integrated or partially integrated causing data redundancy. | Controlling data redundancy problems within DBSM integration layer. |
| Doesn’t require expert level of computing skills to navigate system. | Requires advance computing knowledge to navigate system. |

Table 1: Operational system VS data warehouse (Rensselaer).

Data Warehouse is computerised system for storing information. This information helps organisation to analyse historical patterns and make important business decisions. The advantage of having large repository of information that it helps to solve number of problems, increase company profitability while and reduce cost to access this historical data within external sources. Furthermore, the data is consistent, relevant, structured and combined from various locations into one centralised location. This data centralisation helps to find multiple solutions than where data analysed separately. Data Warehouse allows storing already retrieved data within operational level that improves turn around time of data reporting and analysis(Power).

The advantage of having data warehouse in marketing is that the data is static and provides a "single version" of the truth about enterprise activities. To understand better its customers -students, future prospects on the marketplace and opportunities to attract more students- customers, researchers and funds.  
However there are a number of disadvantages that need to be addressed. Firstly, data warehouse is very expensive to maintain as data itself must be normalised, loaded and extracted. Moreover, company have to train their users otherwise it could lead to the security problems while conducting any queries via online access. Secondly, there is always a chance that new transaction system may not be compatible with the currently used systems. There are also a numerous ways of storing information in the data warehouse and applying one set of rules might not be beneficial if in the future company decides to change the way it conducts business (Exforsys).

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