**Business Intelligence and Data Warehouses**

Name: Kennedy Kabaso.

Strayer University.

Week 9 Assignment 3

CIS 111

Intro To Relat Dbase Mgt Syst

Professor: Besharatian Hossein.

December 4, 2017

**Table of Content.**

**Cover Page -------------------------------------------------------------------------------------- Page 1**

**Assignment--------------------------------------------------------------------------------------- Page 3**

**Continuation------------------------------------------------------------------------------------- Page 4**

**Bibliography ------------------------------------------------------------------------------------- Page 5**

**Business Intelligence and Data Warehouses**

1. **Outline the main differences between the structure of a relational database optimized for online transactions versus a data warehouse optimized for processing and summarizing large amounts of data.**
   1. First, what is a data warehouse It is a large store of data accumulated from a wide range of sources within a company and used to guide management decision. It is one which was made to simply the decision making by people in the high position. In addition, it was made with a purpose of out put the result of a query and analysis rather than for transaction processing, and it contains historical data derived from transaction data while a relational database is for online transaction which is made up of data that is inserted, updated and deleted Data Warehouse is so big because of load of dealing with data from different places. Moreover, more data is being read than it is been written and updated. A data warehouse system can be made to consolidate data which is coming from different places which can made the tasks easy to a accomplished.
2. **Outline the main differences between database requirements for operational data and for decision support data.**
   1. Operation data is the data which is used for the daily operations of a company. The operational database is where the data warehouse gets data from. If like it could be tracking the project status while decision support data is a data in which tools are designed for processing and analyzing the data. This can be made easy by A decision support system (DSS) which “is a computerized information system used to support decision-making in an organization or a business. A DSS lets users sift through and analyze massive reams of data and compile information that can be used to solve problems and make better decisions”. **Operational Database** is the **database**-of-record, consisting of system-specific reference data and event data belonging to a transaction-update system. It may also contain system control data such as indicators, flags, and counters. The **operational database** is the source of data for the data warehouse
   2. The Operational data is store in the database which is made up of tables with all the attributes of different tables which are involved in the operation databases.
3. **Describe three (3) examples in which databases could be used to support decision making in a large organizational environment.**
   1. The first example in which databases could be used to support decision making in a large organization environment can be by the information which is taken from the database about all the sales which the business does, the purchases it does by checking how much items in the inventory so that they can know what kind of goods to replaced. And finally, see how much was the profit generated on the sales.
   2. The second example is how to prepare the financial statements using the data in the database. This can be achieved by find out how much the profit the made at the end of the financial year, how much was the beginning balance, how much was the ending balance and other transaction which can led to the balance sheet.
   3. The third example could be to see how the company is growing by using the database to see how much money is increasing at the bank for the past maybe ten years. Then use that information to draw charts which can show if there is a growth. That information will help the company see what decision can be made from that growth.
4. **Describe three (3) examples in which data warehouses and data mining could be used to support data processing and trend analysis in large organizational environment.**
   1. Data mining could be used to support data processing and trend analysis in large organizational environment by finding the amount of the increase in the organization during a certain time.
   2. Data mining could be used to support data processing and trend analysis in large organizational environment by using the data which is available to help a business make a better decision by projecting how much sales they can expect in the future.
   3. Data warehouse can be used to support data processing method by using the stored one which can be selected, retrieved and processed the one which is needed by the system administrator.
5. **Bibliography.**

* <https://docs.oracle.com/cd/B19306_01/server.102/b14220/bus_intl.htm>
* <https://www.healthcatalyst.com/database-vs-data-warehouse-a-comparative-review>
* <https://www.ibm.com/support/knowledgecenter/en/SSCRW7_6.3.0/com.ibm.redbrick.doc6.3/wag/wag31.htm>
* https://strayer.vitalsource.com/#/books/9781305886841/cfi/757!/4/4@0.00:46.1