



TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES

MANILA CAMPUS

*College of Information and Technology Education*

*Bachelor of Science in Information Technology*

CIS 202 – IT32S1

DATA MINING AND WAREHOUSING

ACTIVITY 001

TECHNOLOGICAL INSTITUTE  
OF THE PHILIPPINES

Submitted By:

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Submitted To:

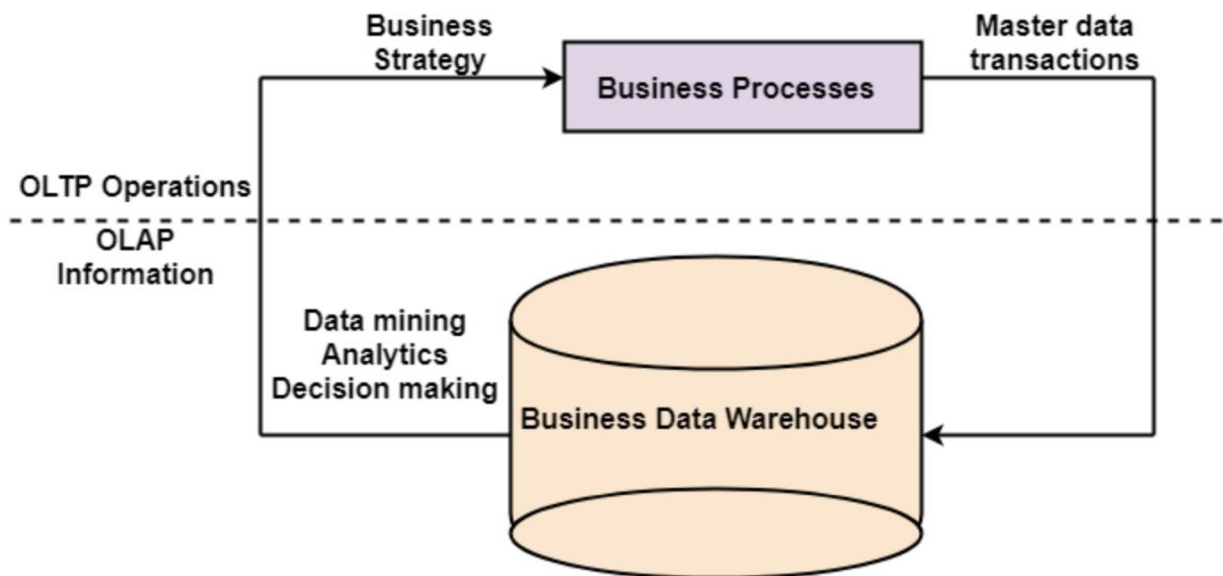
Professor Joseph Domingo

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## CIS202 – Data Mining and Warehousing

Activity 1. Answer the following questions based on your own understanding. \*Note – the simpler your explanations are, the better it shows that you understood the concepts.

1. What is a data warehouse and how does it help with the current trends and issues in technology we are experiencing?
  - A data warehouse is a stored collection of data that is non-volatile, subject-oriented, and is optimized differently from transaction-based db. It is mostly used in a business context.
2. Which DW infrastructure is mostly used in the industry? Why do you think so?
  - The most commonly used Data Warehouse Infrastructure in the industry today is the Two-layer Architecture. It is the most used infrastructure in the industry because it's not too complex like the Three-layer Architecture and it also solves the problem with the One-layer Architecture.
3. Examine the image below and discuss the difference and similarities of OLTP and OLAP based on the illustration.



SIMILARITIES	DIFFERENCES
OLAP and OLTP both deal with data.	OLAP has more complex queries while OLTP has simpler queries.
OLAP and OLTP both have databases that they can use.	OLAP has longer transactions as compared to OLTP but OLTP's transactions are frequent while OLAP's transactions are less.
OLAP and OLTP both have back-ups in their system.	OLAP's main operation focuses on extracting multidimensional data for analysis while OLTP's main operation focuses on CRUD functionality specifically, Insert, Update, and Delete.
OLAP and OLTP both are integral parts of their respective uses with OLAP being important on data analysis and data retrieval while OLTP is important on Data Processing.	OLTP is a Transaction Processing System which focuses on recording the current Update, Insert, and Delete process while OLAP is an Analytical Processing System which stores historical data inputted by OLTP

## **Honor Pledge**

*“I affirm that I have not given or received any unauthorized help on this activity and that this work is my own.”*