# **ICT394 Business Intelligence Application Development**

## Tutorial 03: Data Warehousing

**Background**

In the previous tutorial, we looked at the University of Konstanz and their implementation of Yellowfin BI. **We were particularly interested in** the **problems** with which they were trying to deal, **and the reasons they had for implementing BI**.

In this tutorial, we will be looking at another case study: **Daimler-Chrysler**. In the context of this topic, we are looking at the effort they had to put in to consolidate all the different databases they had so they could be better informed about their customers.

The **aim of this tutorial** is to answer the following questions:

* What is a data warehouse?
* How would a data warehouse be used?
* How do data warehouses impact on data quality?

At the completion of this tutorial, **you will be able to**:

* Provide a definition of a data warehouse, including examples as to how and in what circumstances it would be used
* Provide examples of data warehouses being used in organisations.

#### Step 1: Case Study

Watch the video**, *Chrysler’s Data Quality Management Case Study***, <https://www.youtube.com/watch?v=N78lHpiCD0k>

#### Step 2: Answer the following questions relevant to the Case Study

1. What are the core strategic initiatives of DaimlerChrysler and how does the company manage customer data to achieve these goals?
2. What challenges did DaimlerChrysler face when consolidating its customer databases, and how did the company overcome these challenges?
3. How does DaimlerChrysler's emphasis on quality improvement manifest in the company's processes and products?

#### Step 3: Answer the following more general questions

**In your groups** and **using the Daimler-Chrysler case** as an example, answer the following questions:

1. Explain, using examples, how data warehousing can impact on organisational data quality?
2. A common definition of a data warehouse is that it is a **subject-oriented**, **integrated**, and **time-variant** database.
3. Explain, using examples, what each of these terms mean.
4. Find another example of a customer-focused data warehouse.

You can also refer to this week’s lecture for help.