THE UNIVERSITY OF MELBOURNE

ISYS90086 Data Warehousing

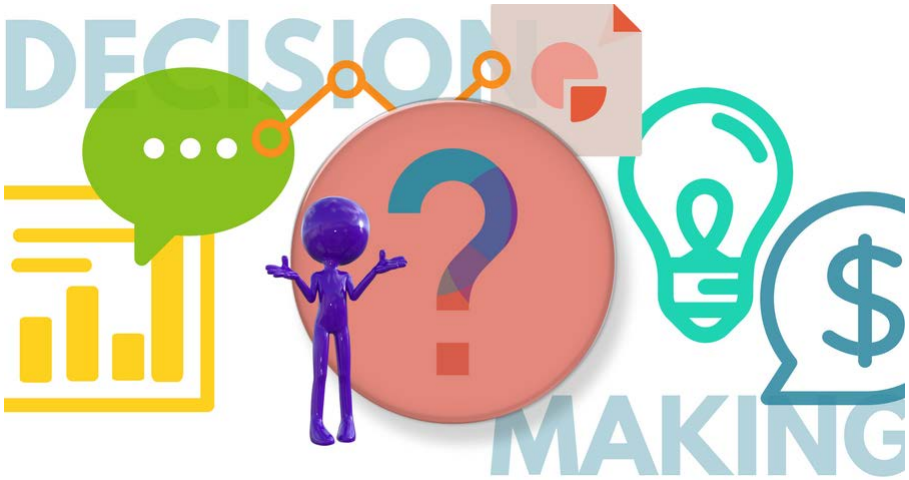
Overhill Winery Case Study

Overhill Winery

- Medium-sized boutique winery
- Goals
  - Managing future growth
  - Understanding customers, products, markets, and sales agents
- Operations
  - Growing grapes
  - Producing wine
  - Selling wine

Overhill Winery

- Growing grapes – 20 hectares of pinot noir, 20 hectares pinot noir and 15 hectares of the pinot grigio
- Three types of wine are currently produced and sold
- Information currently difficult to aggregate and use in decision making
- Needs a data warehouse!!

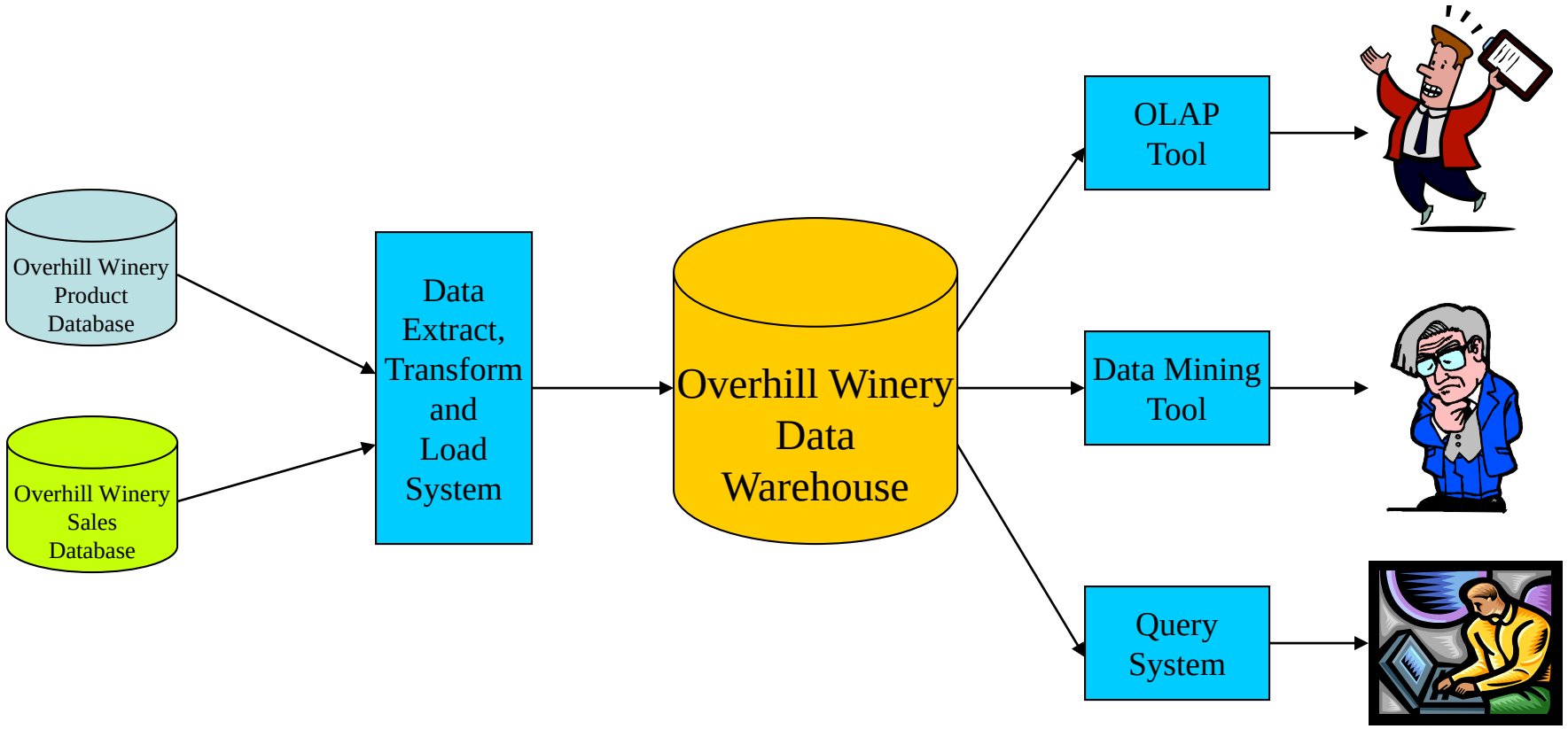


Overhill Winery (Business Problems)

1. Which products are the most profitable?
2. Who are the key customers?
3. Which market is the most profitable?
4. Which time periods are the most profitable?
5. Who are the key sales agents?

Overhill Winery: Operational Systems

Overhill Winery: Data Warehouse



Submission

- Report that describes and justifies the data warehouse design to management
- Around 3000 words in length
- Should include
  - Executive summary
  - Data warehousing overview
  - Design of the data warehouse
  - Explanation of how the data warehouse will be used to address the five issues
  - Appendix 1: Data dictionary
  - Appendix 2: SQL statements
  - Appendix 3: Work Breakdown

App.1 Example Data Dictionary

- Loan Fact Table

Attribute	Description	Source
Video Id	Unique identifier for a video.	Video Id attribute in Video database table.
Copy Number	Unique number assigned to each copy of a video.	Copy number attribute in Video-Copy database table.
Member Id	Unique identifier assigned to each member.	Member Code attribute in Member database table
Branch Id	Unique identifier assigned to each branch.	Branch Code attribute in Branch database table
Date Id	Unique identifier assigned to each week	A unique number generated for data warehouse.
Rental Amount	The amount of money paid for renting a particular video-copy by a member each week.	The rental amounts in the Loan table are aggregated for each Loan of a Video-Copy for each member for each week.
Fine Amount	The amount of money paid for overdue fines for a particular video-copy by a member each week.	The fine amounts in the Loan table are aggregated for each overdue Video-Copy for each member for each week.

App. 2 & 3

- Appendix 2 – SQL
  - include all of the SQL statements that you used to create your data warehouse in MySQL. This will include Create statements, Key creation and any indexing you deem necessary. Provide an explanation for why each index is required.
- Appendix 3 – Work Breakdown
  - Detail the breakdown of work of the team members for this assignment. This should be a detailed account of what each team member accomplished as part of the assignment.