**ASSIGNMENT/ASSESSMENT ITEM COVER SHEET**

**Hossain**

**Sayeed Bin**

**Student Name:**

**FIRST NAME Family / last NAME**

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7

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**Student Number:**  Email: c3340471@uon.edu.au

**Course Code** **Course Title**

Database Management 2

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*(Example)*  *(Example)*

Intro to University

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Campus of Study: (eg Callaghan, Ourimbah, Port Macquarie)

Callaghan

Assignment 3: Data Marts and Business Intelligence

30 July 2021

Assessment Item Title: Due Date/Time:

Tutorial Group (If applicable): Word Count (If applicable):

Lecturer/Tutor Name:

Kellie Bohlsen

**x**

Extension Granted: Yes No Granted Until:

Please attach a copy of your extension approval

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30.07.21

Sayeed Bin Hossain

Sayeed Bin Hossain

C3340471

Assessment Item 3

Data Marts and Business Intelligence

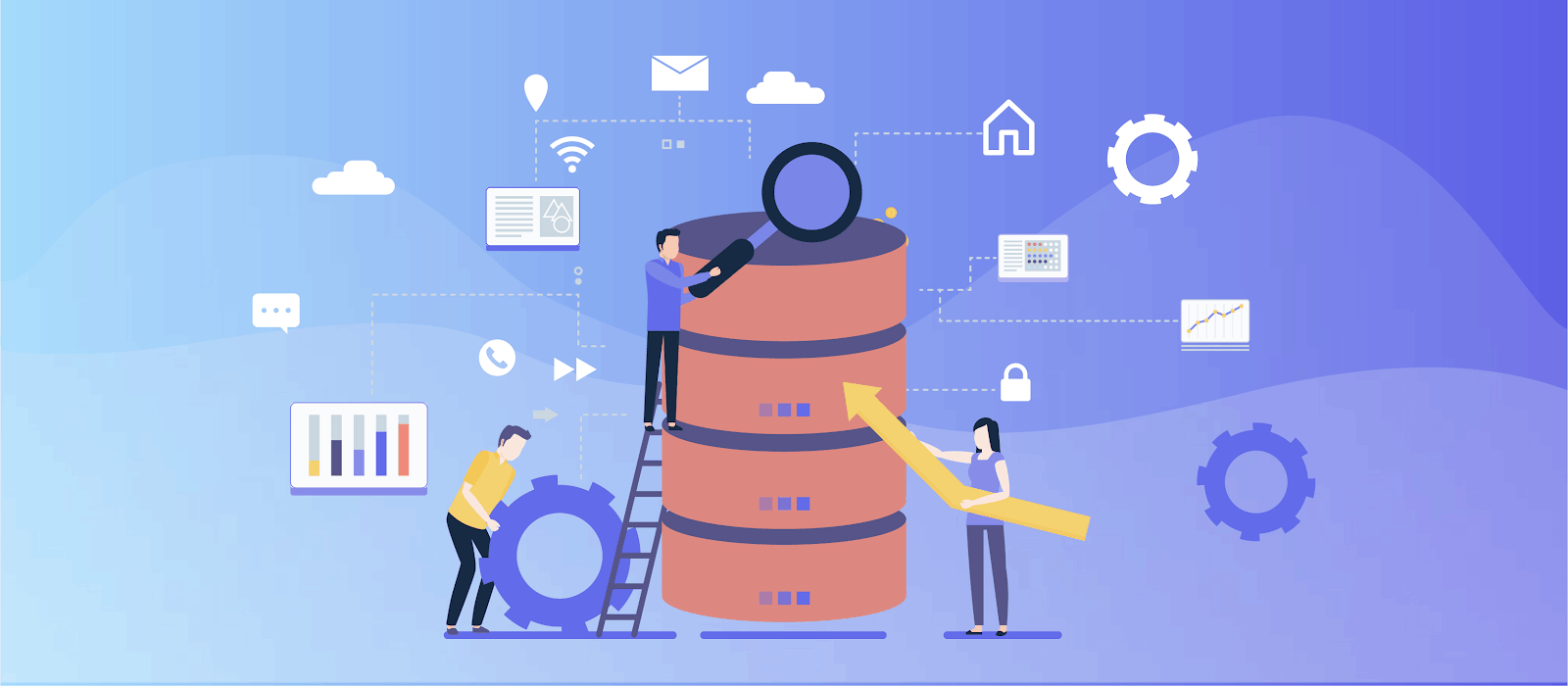


Table of Contents

[Part 2 – BUSINESS INTELLIGENCE REPORT 1](#_Toc78478469)

[Internet Sales Amount by Country 2](#_Toc78478470)

[Internet Sales Amount vs Sales Reason 2](#_Toc78478471)

[Internet Sales Amount by Product Line 2](#_Toc78478472)

**Part 2 – BUSINESS INTELLIGENCE REPORT**

This report analysed the overall business performance in different sectors while focusing on the internet sales area. Different charts have been developed and analysed to gain insight into the details of internet sales sector.

**Internet Sales Amount by Country**

A map of the world

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Figure : Internet sales amount by country

In the figure:1 above, we can see that North America and Australia had overall greater sales amount compared to other sales territory countries. It will be interesting to understand what factors affected the overall sales amount in these countries and why the sales amount of other countries are lower. Important marketing decision needs to be made based on the findings to drive the overall sales in the low performing areas.

Text

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Figure : Sales amount by Country

**Internet Sales Amount vs Sales Reason**

Graphical user interface, chart, application

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Figure : Internet Sales Amount based on Sales Reason

In the figure:3, we can observe that the main factor that drives the internet sales amount is the price of the product (35.57%). Followed by that, we can see that product on promotion, reviews, and manufacturer also holds significantly large portions of the chart which indicates that to increase the sales amount, management can focus on these areas. Additionally, it is seen that television advertisement only accounts for 0.81% of the sales. Thus, we can conclude that television advertisements are not effective enough and further investigation can be done to understand how television advertisements can be made more effective. Marketing team can develop different strategies instead of television advertisements that will be more effective. Effective advertisement can help to drive sales and maximise profit.

Graphical user interface, application

Description automatically generated with medium confidence

Figure : Internet Sales Amount by Country in different years

In figure 4, we can observe the internet sales amount of each country in different years. The chart indicates that the internet sales amount was highest in 2013 which means more people opt for online shopping rather than buying from physical stores. Hence, it will be interesting to investigate further to this trend so that the management team can take necessary steps like online marketing, promo for online shopping, etc. to increase the sale furthermore. This trend also indicates that since online shopping increased, in-store sales should decrease.

**Internet Sales Amount by Product Line**

Chart

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Figure : Order quantity by product line in different years

Chart, bar chart

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Figure : Sales amount by product line in different year

Another interesting finding from the analysis is how the internet Sales amount varied among different product lines in different years. From figure 5, we can see that in 2013 order quantity of product line S was the highest but if we look at the sales amount by product line chart (Figure 6), in 2013, we see that M produced the most sales amount. This indicates that product line S had lower unit cost and unit price compared to product line M. This can be seen in Figure 7. This information is crucial for the business to understand which product line is yielding better profit and how resources need to be allocated to maximise profit.

Chart, bar chart

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Figure : Unit cost of different product lines in different years

Furthermore, from figure 8 and 9, we can observe that product line R produced the most sales amount overall and across different countries as well but from figure 10, we can see that most order quantity was for product line S. This indicates that unit cost and price of product line R is higher than S. This information is especially interesting for the management to understand and analyse the profit margin of products determine what product line to focus on to maximise profit.

A picture containing chart

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Figure : Sales Amount by product line

Chart, bar chart

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Figure : Sales amount by country and product line

Graphical user interface, chart, application, pie chart

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Figure : Order quantity by product line