**Postgraduate Diploma in Data Analytic and Business Intelligence**

**BIA 712 Data Warehousing**

**Assignment**

**For**

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1. Introduction

When it comes to global commuting, there are few names that hold significant importance. Business such as Uber, Taxify, Lyft etc are those visionary businesses that transform the way we commute. By making the best use of modern-day technologies and data gathering techniques, they have succeeded in creating an alluring commuting experience that no one could afford denying. Here in this document, we specifically focus on Taxify’s incredibly powerful strategies, the same kind which helps them secure a safe spot among the market-leading businesses.

Taxify, the Estonian-based trip-sharing company, was established in the year of 2013. Despite its novelty and lack of experience, it achieves a rapid pace through calculated marketing and customer-centric strategies. The 6-year-old businesses operate around 20 countries and 30 cities, including Europe, Africa, the Middle East, and Central America as of now. In fact, they have a broad customer base with an estimate of over 3 million users. They are the first trip-sharing business in the world that enables its users to pay for their trips through mobile carrier billing.

Task 1

1. GATHERING USERS’ SPECIFICATIONS
2. APPROACH TAKEN (ANALYSIS DRIVEN, SOURCE DRIVEN OR COMBINATION

Bottom-Up Design:  
  
In the bottom-up design approach, the data marts are created first to provide reporting capability. A data mart addresses a single business area such as sales, Finance etc. These data marts are then integrated to build a complete data warehouse.  The integration of data marts is implemented using data warehouse bus architecture. In the bus architecture, a dimension is shared between facts in two or more data marts. These dimensions are called conformed dimensions. These conformed dimensions are integrated from data marts and then data warehouse is built.  
  
Advantages of bottom-up design are:

* This model contains consistent data marts and these data marts can be delivered quickly.
* As the data marts are created first, reports can be generated quickly.
* The data warehouse can be extended easily to accommodate new business units. It is just creating new data marts and then integrating with other data marts.

Disadvantages of bottom-up design are:

* The positions of the data warehouse and the data marts are reversed in the bottom-up approach design.

1. REASON WHY THIS APPROACH WAS CHOSEN

This approach was choose because it cost effective and it all the developer to set the data mart before developing a Data warehouse.

1. IDENTIFY KEY USERS 3. DETERMINE ANALYSIS NEEDS

* Driver integrity - The position of the car should not be displayed exactly to users of the system, except for when driving a customer.
* User identity - All users of the system, drivers or operators, shall have a unique identification number.
* Usability - The system must be user-friendly. In the cars, special care must be taken to ensure that the interface is as non-intrusive as possible for the driver. Most functions should be possible to perform while driving and it is essential that the information is clear, the display clearly visible, and the sequences for different functions are short.

1. DEVELOP THE MULTIDIMENSIONAL MATRIX

5. CONCEPTUAL DESIGN

a) CONCEPTUAL SCHEMA

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b) LOGIC MODEL

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Task 2

Please refer to folder ETL ad Madrain