Data Mart Implementation (P01)

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<< The goal of this project is to implement a data mart based on a transactional data source. The team may use a different data source >>

# Introduction

* Scope
* Objectives
* Processos de Negócio que a database aguenta

# Data sources

* Diagrama da database do stor
* Preencher tabela tendo em conta a database
* Modelo relacional (?)

Table 1: Summary of WWI database contents

|  |  |  |
| --- | --- | --- |
| **Event / object** | **Table** | **Nr. Records** |
| Rentals | *Rental* | 99 999 |
| Bikes | *…* | … |
| … | *…* | … |

# Dimensional modelling

<< e. g.: Stores with the highest sales growth? Which products topped sales in the last month?

Then, for each process, identify the metrics and the corresponding measures to include in the fact table.>>

* Preencher matriz
* Identificar metricas e medidas para incluir na fact table

Table 2: Data Warehouse Matrix

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DIMENSIONS**  **BUSINESS PROCESSES** | Dimension 1 | Dimension 2 | Dimension 3 |  |  |  |  |  |  |  |  |
| Process 1 | X |  | X |  |  |  |  |  |  |  |  |
| Process 2 |  | X | X |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| … |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

# Design of the dimensional data model

For each table (TF or Dim.), you should complete a data description map (see **Appendix A**)

# Appendix A – Data description maps

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Type of table** | **Nr. Records** | | **Description** | | | | |
| Dim\_A | Dimension | ?? | | ?? | | | | |
| **Target (Data mart)** | | | | **Source (OLTP)** | | | | |
| **Column** | **Description** | **Data type** | **SCD** | **Table** | **Column** | **Data type** | **ETL rules** | **Example of values** |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

Table 3: Data description map of Dim\_A

* Não entendi

# Data mart implementation

* Explicar Kettle

# Conclusion

* Revisão crítica do trabalho feito
* Pontos fortes e fracos
* Se possível, o que se mudaria/adicionaria