

Armazéns de Dados

Departamento de Engenharia Informática (DEI/ISEP)

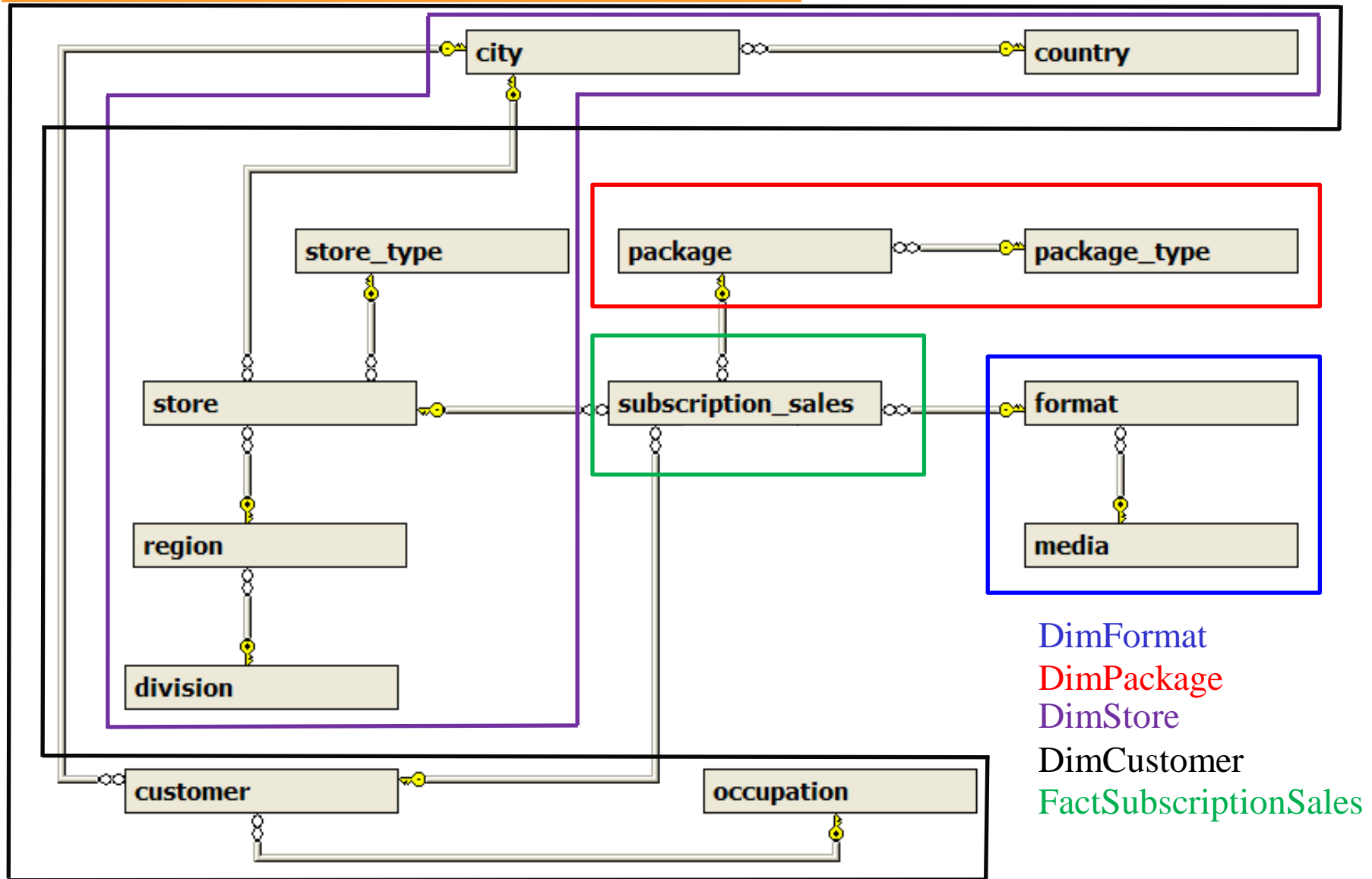
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Kimball Methodology

- Business Area
 - Sales
- Granularity level
 - Daily sales made to customers by store by format in the scope of the subscribed packages
- Dimensions
 - Date; Customer; Store; Format; Package
- Facts/Measures
 - Music_quantity; Music_unit_cost; Music_unit_price
 - Music_unit_profit; Music_total_cost; Music_total_value; Music_total_profit
 - ...

Operational System Data Model



Format Dimension

- Operational system source tables
 - Format(format_id, format_description, media_id)
 - Media(media_id, media_description)

DimFormat
<u>format_key</u>
format_id
format_description
media_description

Package Dimension

- Operational system source tables
 - Package(*package_id*, name, package_description, package_price, package_type_id)
 - Package_type(*package_type_id*, package_type_description)

DimPackage
<u>package_key</u> package_id package_name package_description package_price package_type_description effective_date expired_date is_current

Store Dimension

- Operational system source tables
 - Store(*store_id*, store_name, address, city_id, store_type_id, zipcode, phone_number, web_site, region_id)
 - City(*city_id*, city_name, country_id)
 - Country(*country_id*, country_name)
 - Store_type(*store_type_id*, store_type_description)
 - Region(*region_id*, region_name, division_id)
 - Division(*division_id*, division_name)

Store Dimension

DimStore
<u>store_key</u>
store_id
store_name
address
city_name
country_name
store_type_description
zip_code
phone_number
region_name
division_name
effective_date
expired_date
is_current

Customer Dimension

- Operational system source tables
 - Customer(*customer_id*, customer_name, gender, e-mail_address, date_of_birth, address, city_id, zipcode, phone_number, occupation_id, date_registered)
 - City(*city_id*, city_name, country_id)
 - Country(*country_id*, country_name)
 - Occupation(*occupation_id*, occupation_description)

Customer Dimension

DimCustomer
<u>customer_key</u>
customer_id
customer_name
gender
e-mail_address
date_of_birth_key
address
city_name
country_name
zip_code
phone_number
occupation_description
date_registered_key
effective_date
expired_date
is_current

Date Dimension

DimDate

date key

full_date

year

month

day

semester

trimester

day_number_of_month

day_number_of_year

day_number_of_week

weekday

weekend

month_name

...

Subscription Sales Fact Table

- Operational system source tables
 - Subscription_sales(*subscription_sales_id*, date, music_quantity, music_unit_cost, music_unit_price, film_quantity, film_unit_cost, film_unit_price, book_quantity, book_unit_cost, book_unit_price, package_id, customer_id, format_id, store_id)

Product Type Dimension

DimProductType
<u>product type key</u> product_type

Subscription Sales Fact Table

Fact_Subscription_Sales
<u>store key</u>
<u>customer key</u>
<u>format key</u>
<u>package key</u>
<u>product type key</u>
<u>date key</u>
product_quantity
product_unit_cost
product_unit_price
product_unit_profit
product_total_cost
product_total_value
product_total_profit

Dimensional Model

