

INSTITUTO SUPERIOR DE ENGENHARIA DO PORTO MSc in Informatics Engineering

Armazéns de Dados

Based on the *data cube* previously created, perform the following multidimensional data analysis in *Microsoft Excel* or *Microsoft Power BI* using the pivot table format:

- 1. Total value of the annual sales.
- 2. Total value of the annual sales by city.
- 3. Total value of the annual sales and quantities, by customer city and by customer gender.
- 4. Quantities sold in the 3rd quarter of the year by item category.
- 5. Total value of sales by item category, with the chance of analysis also at the subcategory level (i.e., drill down), made during the weekends of the year.
- 6. Total value of sales by customer region and by month, but only for the customers whose marital status is single.
- 7. Quantities sold in each day of February.
- 8. Total value of sales by week for all the products that have the "Toyquest" brand.
- 9. Total value of sales made until the 8th day of each month, organized by semester.
- 10. Total value of sales and quantities, between the 100th and 109th day of the year, for the item "Office Space 10".
- 11. Total value of sales and quantities in the 51st week (the one before Christmas), by customer gender and by the number of children.
- 12. Total value of sales between 20th and 24th of December, for the item categories "Computers" and "Game Consoles" made to customers that have more than one children.
- 13. Total value of sales by each item that belongs to the category "Accessories" but only for the customers that live in cities belonging to the eastern region.
- 14. Quantities sold of the items that belong to the "PC Game" subcategory, made from Monday to Friday and paid by cash advance or debit card.
- 15. Total value of sales and quantities by item, with the chance of analysis just at the brand level (i.e., roll up) in the 1st and 3rd quarter of the year.
- 16. Total value of sales by store and payment method, made during the afternoon, during the month of December.