## Problem Statement - Laptop Configuration and Price Analysis Context

Laptopia101 is an online laptop retailer with a wide range of products. Different types of customers have different requirements, and Laptopia101 wants to improve its website by including informative visuals regarding laptop configuration and prices to improve customer experience.

The original dataset can be viewed here.

## **Objective**

To answer some of the questions which will help us understand the kind of information and visuals Laptopia101 can put on their website to improve customer experience.

- How many laptops are available across the different companies manufacturing laptops?
- How does the price vary across the different companies manufacturing laptops?
- How does the price vary across the different types of laptops?
- The amount of RAM available is a key factor in gaming performance. How does the amount of RAM vary by the company for Gaming laptops?
- GPUs are a key component for users interested in gaming, and Nvidia is one of the leading manufacturers of GPUs. How does the price vary by the company for Gaming laptops with an Nvidia GeForce GTX GPU?
- It has been found from sales history that executives prefer fast and lightweight laptops, and Ultrabooks are one of the best choices for them. How does the weight of laptops of type Ultrabook differ by the company?
- The sales history also shows that executives have a preference for small laptops running on Windows OS for ease of use. How many laptops running on Windows OS have a screen size not greater than 14 inches are available across different companies?
- Operating systems like Linux and ChromeOS are not so common, and the sales

- history shows that the number of customers buying laptops running on these operating systems is limited. How many laptops across different companies run on a Linux or Chrome operating system?
- High-resolution screens are good to have in laptops for entertainment purposes.
   How many laptops are available for different companies with screen resolutions better than 1600x900?
- What percentage of laptops in each company have high-resolution screens?
- Intel and AMD are primary manufacturers of processors. How does the speed of processing vary between these two processor manufacturers for laptops of type Notebook?
- Many recent laptops have started to provide multiple storage options (like an SSD with an HDD). What are the different kinds of storage available for laptops manufactured by Apple? (Refer to the 'Memory' column)

## **Data Description**

The data contains information about the model, manufacturer, price, and configuration of various laptops in the inventory of Laptopia101. The detailed data dictionary is given below.

## **Data Dictionary**

Company: Laptop Manufacturer

Product: Brand and Model

TypeName: Type (Notebook, Ultrabook, Gaming, etc.)

Inches: Screen Size

ScreenResolution: Screen Resolution

Cpu: Central Processing Unit

Ram: Laptop RAM

Memory: Hard Disk / SSD Memory

GPU: Graphics Processing Unit

OpSys: Operating System

Weight: Laptop Weight

Price euros: Price in euros