

# Laptop Price Analysis



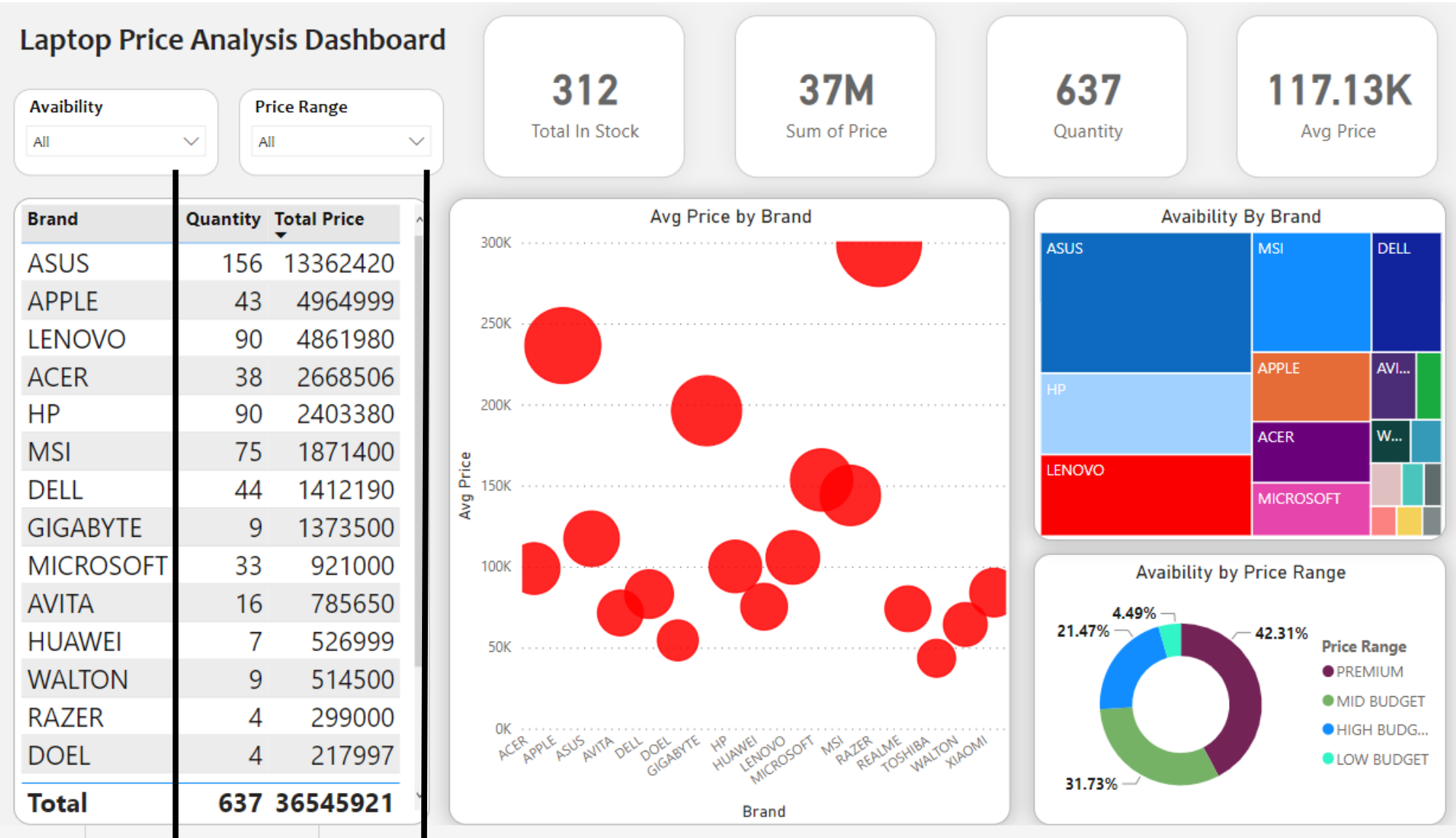
**Use Case:** In recent years IT products price in Bangladesh has been increasing for the economical condition of Bangladesh. The laptop is one of the most important IT products for regular use. The price of all brands' laptops increased recently for the LC issue in BD. So the main purpose of this project is to know about the pricing of different brands, average pricing, budget segmentation pricing, etc.



This project's dashboard is built with **Microsoft Power BI**. I scrap data from a known website with **Python** and **Beautifulsoup**. Use Power BI for **ETL** and **DAX** functions to get more information from the row data.

This project helps you to know the price range of all brands available in the Bangladesh market. You can easily know about the different budget laptops and their asking price, and make decisions about which brands are asking more price and which are given with a low price.

**Laptop Price Analysis Dashboard:** From this dashboard, we can see some KPI cards, which are total in-stock products, average price, and so on. Scatter Chart shows the brand-wise average price. That can easily visualize the most and lowest average price of the brand.



**Availability**

All

☐ IN STOCK

☐ OUT OF STOCK

**Two filters** are available here. You can filter out availability and Price Range from this and all the data will update interactively.

**Price Range**

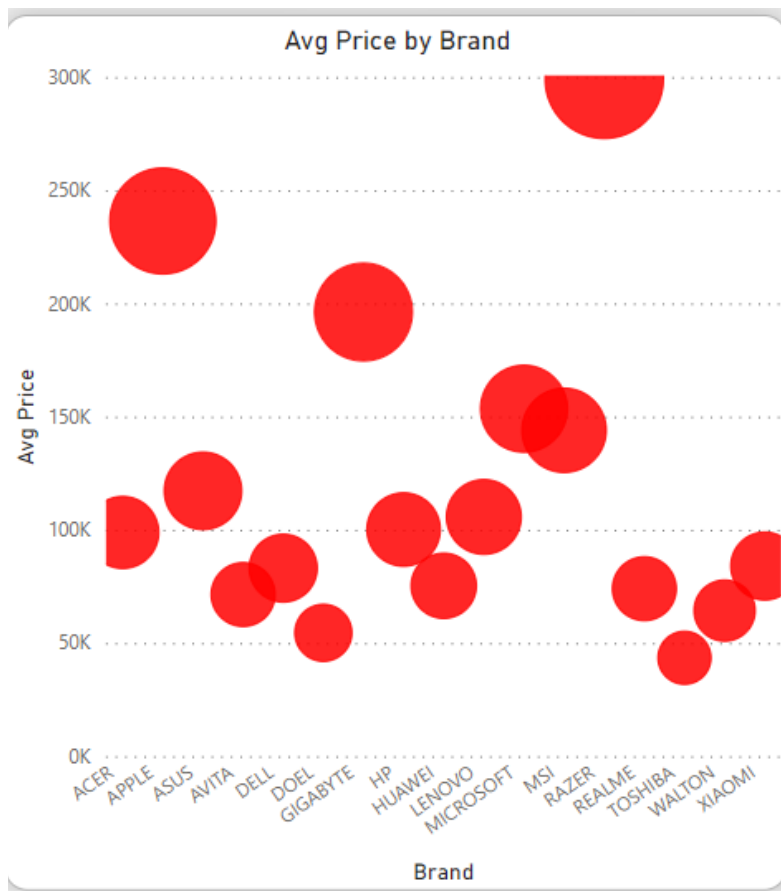
All

☐ HIGH BUDGET

☐ LOW BUDGET

☐ MID BUDGET

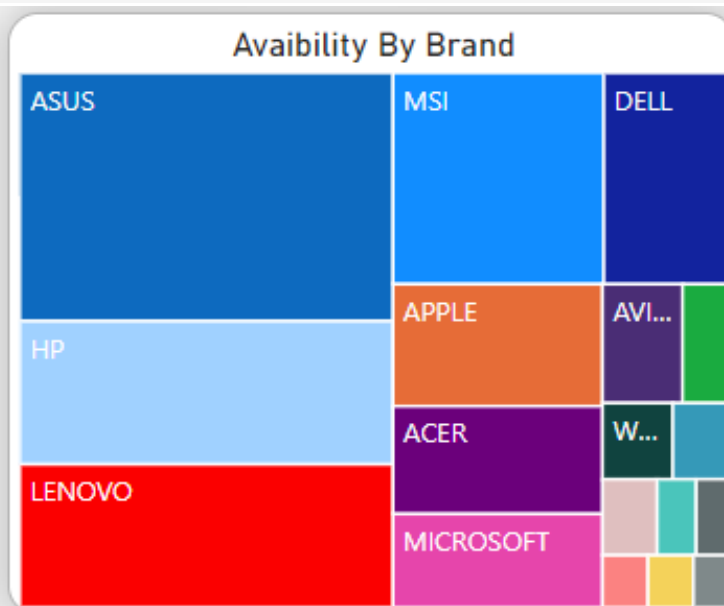
☐ PREMIUM



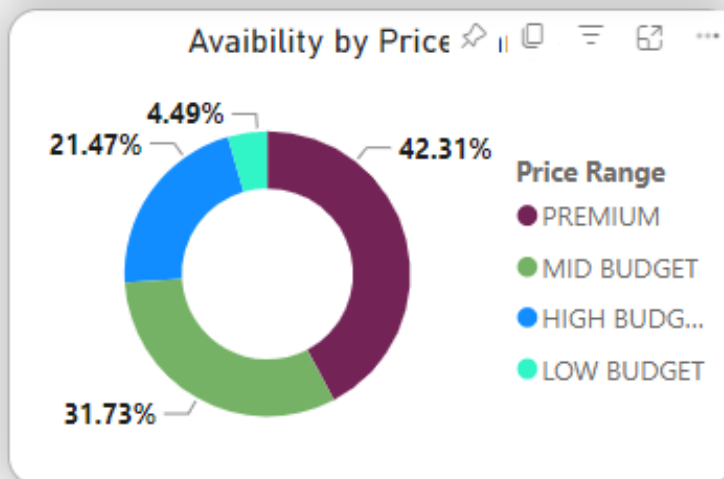
**With this Scatter Chart**, we can easily find out that the average price of the Razer brand laptop is high, and the DOEL brand is low.

**On the other hand**, ACER, HP, and LENOVO provide almost the same price on average.

**On the Treemap**, we can see the total available quantity by brand. Asus has the most quantity and HP, and MSI provides almost the same number. Other brand's quantity is not bad at all.



**On the Donner chart**, we can find out the percentage of budget laptops based on price range. We categorized it into 4 types.



- LOW Budget - Below 45k
- MID Budget - 45k - 75k
- HIGH Budget - 75k - 100k
- PREMIUM - Above 100k

Product_name ▾	Price ▾
APPLE MACBOOK PRO 16-INCH M1 MAX CHIP 64GB RAM 4TB SSD SPACE GRAY (MK233LL/A)	620000
APPLE MACBOOK PRO 14-INCH M1 MAX CHIP, 32GB RAM, 1TB SSD (Z15H00107) SPACE GREY, LATE 2021	399999
ASUS ZENBOOK 17 FOLD OLED UX9702 CORE I7 12TH GEN 16GB RAM 1TB SSD 17.3" TOUCH DISPLAY FOLED LAPTOP	399990
APPLE MACBOOK PRO 16-INCH M1 PRO CHIP 32GB RAM 1TB SSD SPACE GRAY (Z14W00105)	390000
ASUS PROART STUDIOBOOK PRO 16 OLED W7600H3A CORE I7 11TH GEN RTX A3000 6GB GRAPHICS 16" OLED LAPTOP	365000
ASUS ZENBOOK PRO 16X OLED UX7602ZM-ME132W CORE I9 12TH GEN RTX 3060 6GB GRAPHICS 16" 4K TOUCH LAPTOP	364990
APPLE MACBOOK PRO 16-INCH M2 PRO 16GB RAM 1TB SSD SPACE GRAY (MNW93)	355000
ASUS PROART STUDIOBOOK 16 OLED H5600QR RYZEN 9 5900HX RTX 3070 8GB GRAPHICS 16" OLED LAPTOP	333000
LENOVO LEGION 7 16ACHG6 RYZEN 9 5900HX RTX 3080 16GB GRAPHICS 16" 165HZ GAMING LAPTOP	333000
ASUS ROG FLOW X13 GV301QE RYZEN 9 5980HS RTX 3050 TI 4GB GRAPHICS (ROG XG MOBILE GC31S WITH RTX 3060)	330000
HP ZBOOK CREATE G7 CORE I7 10TH GEN RTX 2070 8GB GRAPHICS 15.6" FHD LAPTOP	320000
LENOVO LEGION 7 16ACHG6 RYZEN 7 5800H RTX 3080 16GB GRAPHICS 16" 165HZ GAMING LAPTOP	307000
ASUS PROART STUDIOBOOK 16 OLED H5600QM RYZEN 9 5900HX RTX 3060 6GB GRAPHICS 16" OLED LAPTOP	302000
APPLE MACBOOK PRO 16-INCH M1 PRO CHIP, 16GB RAM, 1TB SSD (MK1F3ZP/A) SILVER 2021	299000
RAZER BLADE 15 ADVANCED MODEL CORE I7 11TH GEN 16GB RAM RTX3070 8GB GRAPHICS 15.6" FHD 360HZ GAMING LAPTOP	299000
APPLE MACBOOK PRO 16-INCH M1 PRO CHIP, 16GB RAM, 1TB SSD (MK193) SPACE GRAY 2021	279000
ASUS PROART STUDIOBOOK 16 OLED H5600QM RYZEN 7 5800H RTX 3060 6GB GRAPHICS 16" OLED LAPTOP	275000
APPLE MACBOOK PRO 16-INCH M1 PRO CHIP, 16GB RAM, 512GB SSD (MK1E3ZP/A) SILVER 2021	265000
ASUS ROG ZEPHYRUS G15 GA503RM RYZEN 7 6800HS 16GB RAM RTX 3060 15.6" WQHD GAMING LAPTOP	265000
ASUS ROG ZEPHYRUS G14 GA402RJ RYZEN 9 6900HS RX 6700S 8GB GRAPHICS 14" WQXGA GAMING LAPTOP	260000
APPLE MACBOOK PRO 14-INCH M1 PRO CHIP, 16GB RAM, 1TB SSD (MKGQ3) SPACE GREY 2021	258000
APPLE MACBOOK PRO 14-INCH M1 PRO CHIP, 16GB RAM, 512GB SSD (MKGR3LL/A) SILVER 2021	252000
ASUS ZENBOOK PRO 14 DUO OLED UX8402ZE-M3050W CORE I7 12TH GEN RTX 3050 TI 4GB GRAPHICS 14.5" 2.8K TOUCH LAPTOP	249990



Product_name ▾	Price ▾	Brand ▾	Model ▾	Availibility ▾	Price Range ▾
APPLE MACBOOK PRO 16-INCH M1 MAX CHIP 64GB RAM 4TB SSD SPACE GRAY (MK233LL/A)	620000	APPLE	MACBOOK	IN STOCK	PREMIUM
APPLE MACBOOK PRO 14-INCH M1 MAX CHIP, 32GB RAM, 1TB SSD (Z15H00107) SPACE GREY, LATE 2021	399999	APPLE	MACBOOK	IN STOCK	PREMIUM
ASUS ZENBOOK 17 FOLD OLED UX9702 CORE I7 12TH GEN 16GB RAM 1TB SSD 17.3" TOUCH DISPLAY FOLED LAPTOP	399990	ASUS	ZENBOOK	IN STOCK	PREMIUM
APPLE MACBOOK PRO 16-INCH M1 PRO CHIP 32GB RAM 1TB SSD SPACE GRAY (Z14W00105)	390000	APPLE	MACBOOK	IN STOCK	PREMIUM
ASUS PROART STUDIOBOOK PRO 16 OLED W7600H3A CORE I7 11TH GEN RTX A3000 6GB GRAPHICS 16" OLED LAPTOP	365000	ASUS	PROART	IN STOCK	PREMIUM
ASUS ZENBOOK PRO 16X OLED UX7602ZM-ME132W CORE I9 12TH GEN RTX 3060 6GB GRAPHICS 16" 4K TOUCH LAPTOP	364990	ASUS	ZENBOOK	IN STOCK	PREMIUM
APPLE MACBOOK PRO 16-INCH M2 PRO 16GB RAM 1TB SSD SPACE GRAY (MNW93)	355000	APPLE	MACBOOK	IN STOCK	PREMIUM
ASUS PROART STUDIOBOOK 16 OLED H5600QR RYZEN 9 5900HX RTX 3070 8GB GRAPHICS 16" OLED LAPTOP	333000	ASUS	PROART	IN STOCK	PREMIUM
LENOVO LEGION 7 16ACHG6 RYZEN 9 5900HX RTX 3080 16GB GRAPHICS 16" 165HZ GAMING LAPTOP	333000	LENOVO	LEGION	IN STOCK	PREMIUM
ASUS ROG FLOW X13 GV301QE RYZEN 9 5980HS RTX 3050 TI 4GB GRAPHICS (ROG XG MOBILE GC31S WITH RTX 3060)	330000	ASUS	ROG	IN STOCK	PREMIUM
HP ZBOOK CREATE G7 CORE I7 10TH GEN RTX 2070 8GB GRAPHICS 15.6" FHD LAPTOP	320000	HP	ZBOOK	IN STOCK	PREMIUM
LENOVO LEGION 7 16ACHG6 RYZEN 7 5800H RTX 3080 16GB GRAPHICS 16" 165HZ GAMING LAPTOP	307000	LENOVO	LEGION	IN STOCK	PREMIUM
ASUS PROART STUDIOBOOK 16 OLED H5600QM RYZEN 9 5900HX RTX 3060 6GB GRAPHICS 16" OLED LAPTOP	302000	ASUS	PROART	IN STOCK	PREMIUM
APPLE MACBOOK PRO 16-INCH M1 PRO CHIP, 16GB RAM, 1TB SSD (MK1F3ZP/A) SILVER 2021	299000	APPLE	MACBOOK	IN STOCK	PREMIUM
RAZER BLADE 15 ADVANCED MODEL CORE I7 11TH GEN 16GB RAM RTX3070 8GB GRAPHICS 15.6" FHD 360HZ GAMING LAPTOP	299000	RAZER	BLADE	IN STOCK	PREMIUM
APPLE MACBOOK PRO 16-INCH M1 PRO CHIP, 16GB RAM, 1TB SSD (MK193) SPACE GRAY 2021	279000	APPLE	MACBOOK	IN STOCK	PREMIUM
ASUS PROART STUDIOBOOK 16 OLED H5600QM RYZEN 7 5800H RTX 3060 6GB GRAPHICS 16" OLED LAPTOP	275000	ASUS	PROART	IN STOCK	PREMIUM
APPLE MACBOOK PRO 16-INCH M1 PRO CHIP, 16GB RAM, 512GB SSD (MK1E3ZP/A) SILVER 2021	265000	APPLE	MACBOOK	IN STOCK	PREMIUM
ASUS ROG ZEPHYRUS G15 GA503RM RYZEN 7 6800HS 16GB RAM RTX 3060 15.6" WQHD GAMING LAPTOP	265000	ASUS	ROG	IN STOCK	PREMIUM
ASUS ROG ZEPHYRUS G14 GA402RJ RYZEN 9 6900HS RX 6700S 8GB GRAPHICS 14" WQXGA GAMING LAPTOP	260000	ASUS	ROG	IN STOCK	PREMIUM
APPLE MACBOOK PRO 14-INCH M1 PRO CHIP, 16GB RAM, 1TB SSD (MKGQ3) SPACE GREY 2021	258000	APPLE	MACBOOK	IN STOCK	PREMIUM
APPLE MACBOOK PRO 14-INCH M1 PRO CHIP, 16GB RAM, 512GB SSD (MKGR3LL/A) SILVER 2021	252000	APPLE	MACBOOK	IN STOCK	PREMIUM
ASUS ZENBOOK PRO 14 DUO OLED UX8402ZE-M3050W CORE I7 12TH GEN RTX 3050 TI 4GB GRAPHICS 14.5" 2.8K TOUCH LAPTOP	249990	ASUS	ZENBOOK	IN STOCK	PREMIUM

We used **Power BI** and ETL processes for transforming the row data so that we can find out more information from this.

It helps us to find out price segment, Brand, Model, and availability.





**Conclusion:** This project helps us to find out the laptop market and price in BD's recent time. We can also know about the brand's pricing and their availability of product quantity in recent market. It helps any stakeholder to take the decision to purchase a laptop. For the user, it will be easier to find out his/her desired laptop.