TechTrendz

Presented by
Anmol Nayak
Omkar Jain
Surya Bhardwaj

HACKODISHA 4.0

INTRODUCTION

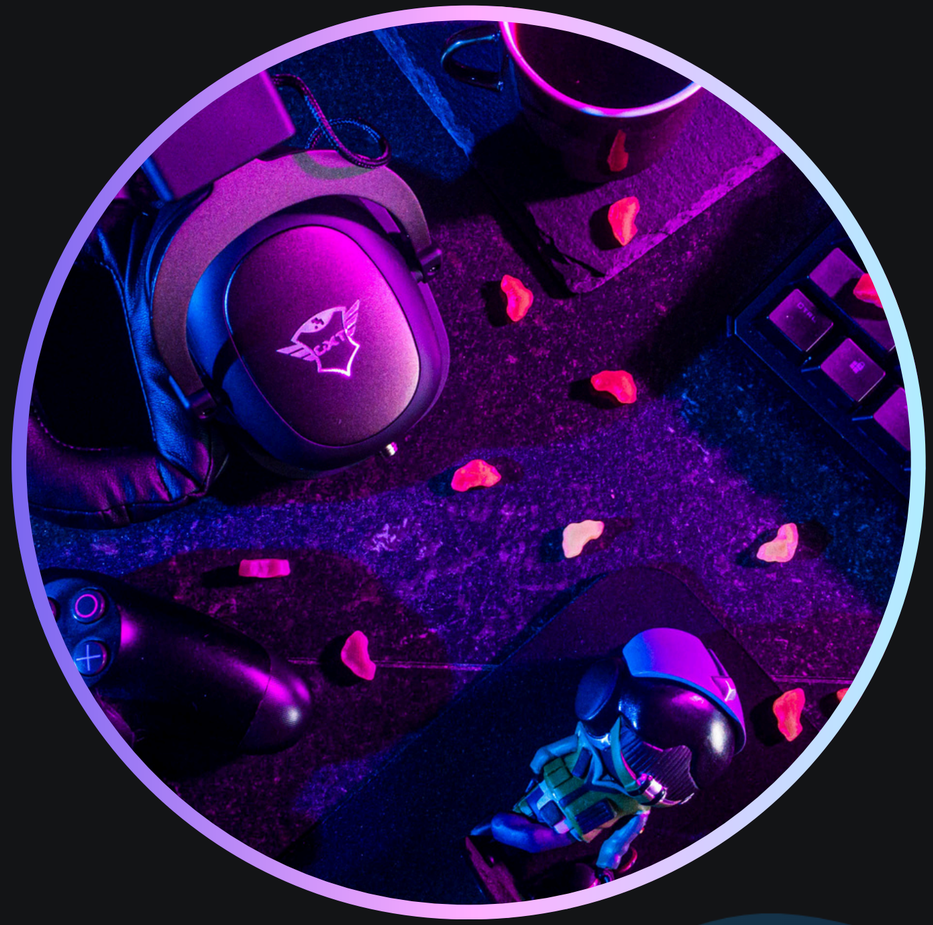
1 The mobile phone market is highly dynamic, with prices fluctuating frequently.

2 For consumers, it’s difficult to decide whether to purchase a phone now or wait for a better deal, leading to missed opportunities or overspending.

3 For retailers, unpredictable price shifts can result in inefficient inventory management, affecting profit margins and sales planning.

Tech solutions

- Our team has developed a machine learning model that analyzes historical price data of mobile phones over the past year and predicts future prices for the next month.
- This model doesn't just forecast the price but also predicts whether it will increase or decrease, helping both consumers and businesses optimize their decision-making.
- What makes this model particularly effective is its ability to capture seasonal trends such as significant price drops during the festive season.



The Data

Data Sources

- Multiple sources, including e-commerce platforms (e.g., Amazon, Flipkart), official brand websites, and retailer sites over the past 12 months.

Types of Data

- Historical Prices: Daily or weekly price data for different phone models over the past year.
- Sales Events: Markers indicating periods of major sales and promotions

Data Characteristics

- Seasonality
- Trend Patterns
- Noise in Data

Data Cleaning

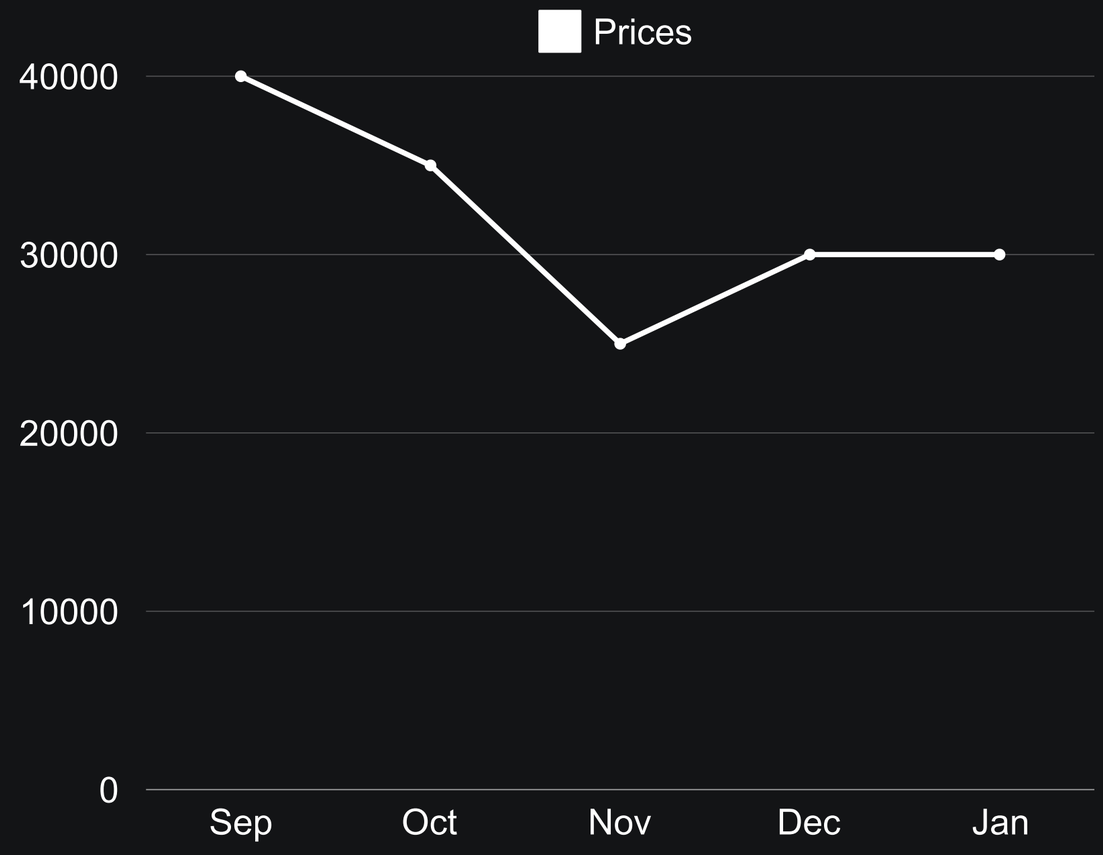
- Handling Missing
- Removing Outliers

Market analysis

Prices of older models tend to decline steadily, especially after the launch of newer models. This helps the model predict long-term depreciation.

Price drops are often linked to specific days of the week, especially around weekends or during flash sales.

We decomposed the time series data into trend, seasonality, and residual components.



CONCLUSION

- Our model provides a reliable prediction of mobile phone price trends, enabling both consumers and retailers to make informed decisions.
- The inclusion of seasonal data and historical trends has enhanced the model’s ability to capture real-world price fluctuations.