Blackwell Electronics

Data Mining Implementation

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Goals

How data mining helped establish solutions to our business needs

Customers' brand preference

Predict sales of product type

Associations between products

Future applications of Data Mining

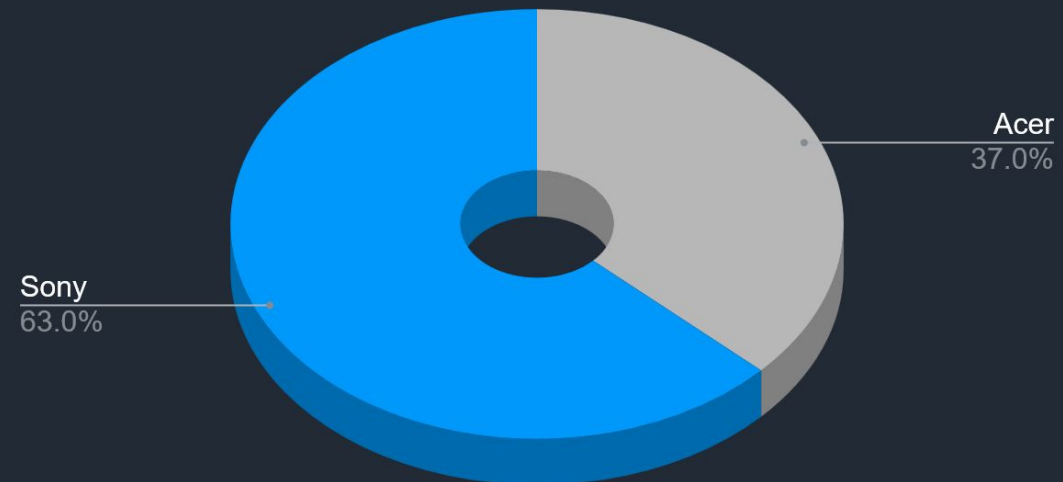# Brand Preferences

Questions

Missing answers on customer's survey about their brand preference

Methods

Through classification methods, we predicted missing values to an incomplete survey (~10k to 15k)

Results

9393 individuals chose Sony as a their prefered brand; 5505 respondents chose Acer as a preference

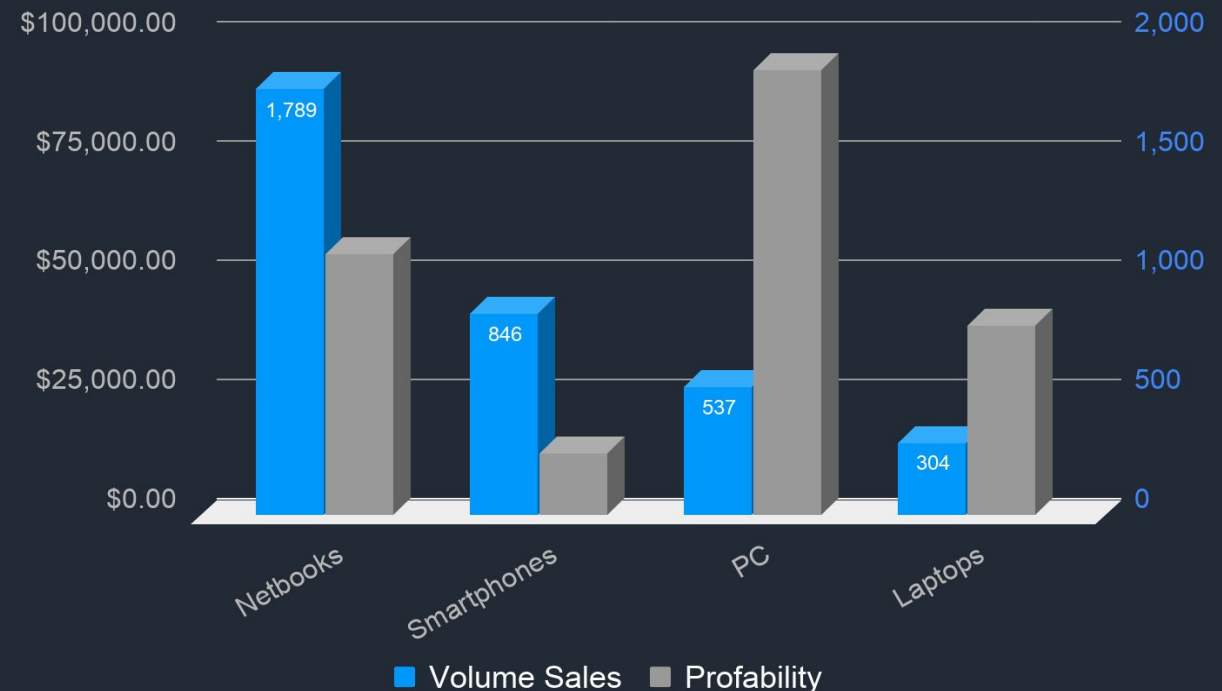Acer
37.0%

Sony
63.0%

Sales by product type

Questions

A true understanding on how product types perform based on overall sales

Methods

Through multiple regression methods, we've analysed historical sales data in order to predict overall sales volume

Results

According to our predictions Netbooks and Smartphones are the most sold 'product types'

Chart axis labels: $100,000.00 / 2,000, $75,000.00 / 1,500, $50,000.00 / 1,000, $25,000.00 / 500, $0.00 / 0

Bar values: Netbooks 1,789; Smartphones 846; PC 537; Laptops 304

Categories: Netbooks, Smartphones, PC, Laptops

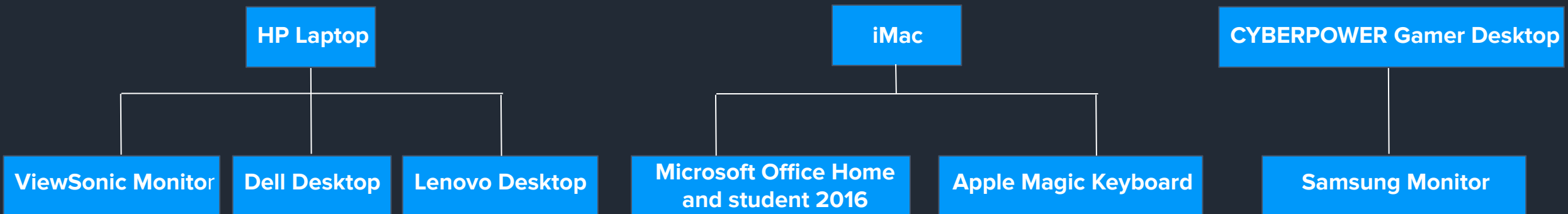Legend: ■ Volume Sales ■ Profability

Market Basket Analysis

Questions

Better understand the clientele that Electronidex is currently serving and determine product associations to accurately evaluate an optimal partnership

Methods

Through a method, which examines associations, we were able to discover a few valuable relationships between products

Results

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          HP Laptop                              iMac                    CYBERPOWER Gamer Desktop

ViewSonic Monitor  Dell Desktop  Lenovo Desktop    Microsoft Office Home   Apple Magic Keyboard    Samsung Monitor
                                                    and student 2016
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Future Aplications

Customer Segmentation

Dividing a customer base into groups of individuals that are similar in specific ways; Correctly target tailored marketing messages to customers

Churn Prevention

Able to predict which customers end their relationship (when and why); Cost of retaining an existing customer is much lower than the cost of acquiring a new one

Risk Assessment

Construct 'decision support systems' that can correctly predict which are the profitable operations for our company

Any questions?

Thank you!

Francisco Cardoso | Christiano Hernandez | Alberto Muniz | Bhavna Parikh | Bhadresh Modi