

Blackwell Electronics

Sales Forecast and Profitability Analysis

Goals

Identify our customers

Understand **who** buys our products and **where**



Buying behaviour

Our customers' buying **patterns**



Profitability

Identify the most profitable **new products**



Customers' age

Based on the total sales per age group

Millennials

< 35



\$2,838,647.58

34%

Generation X

35 to 52



\$3,298,634.72

39%

Baby boomers

52 >

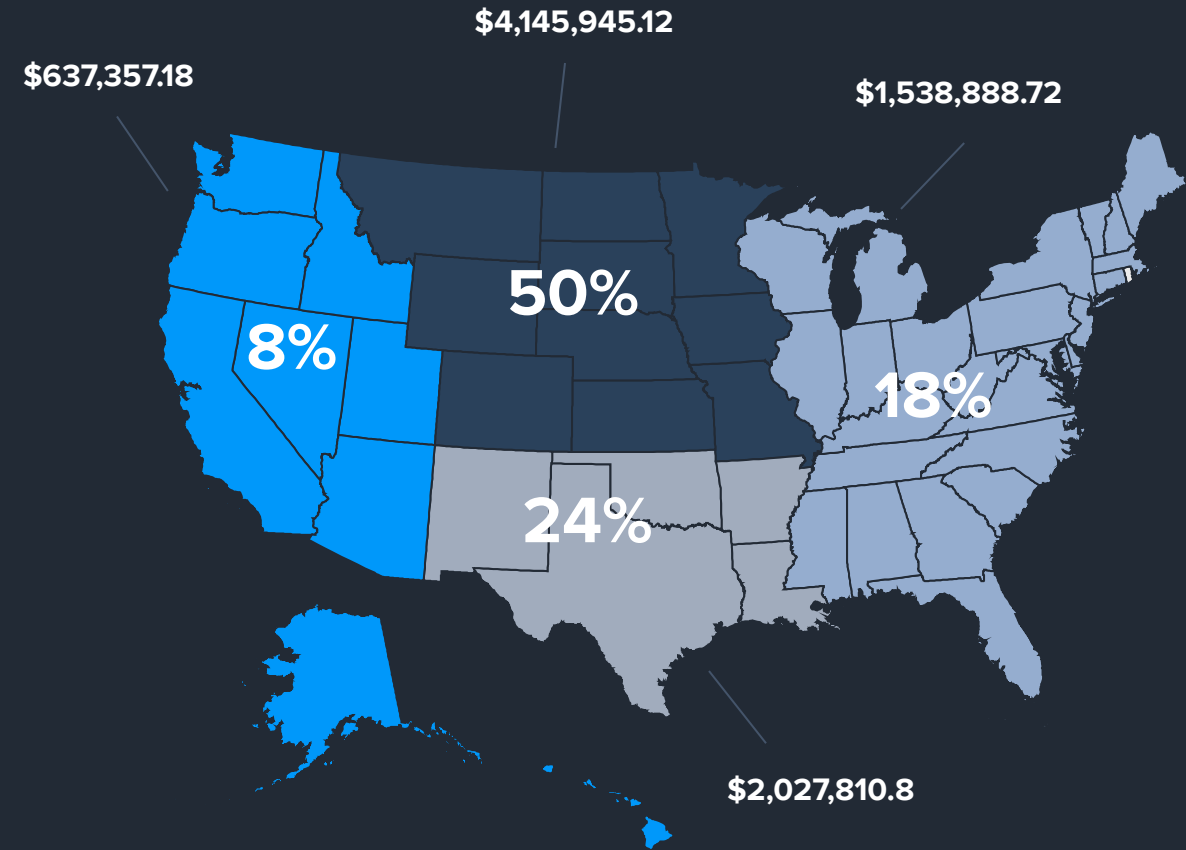
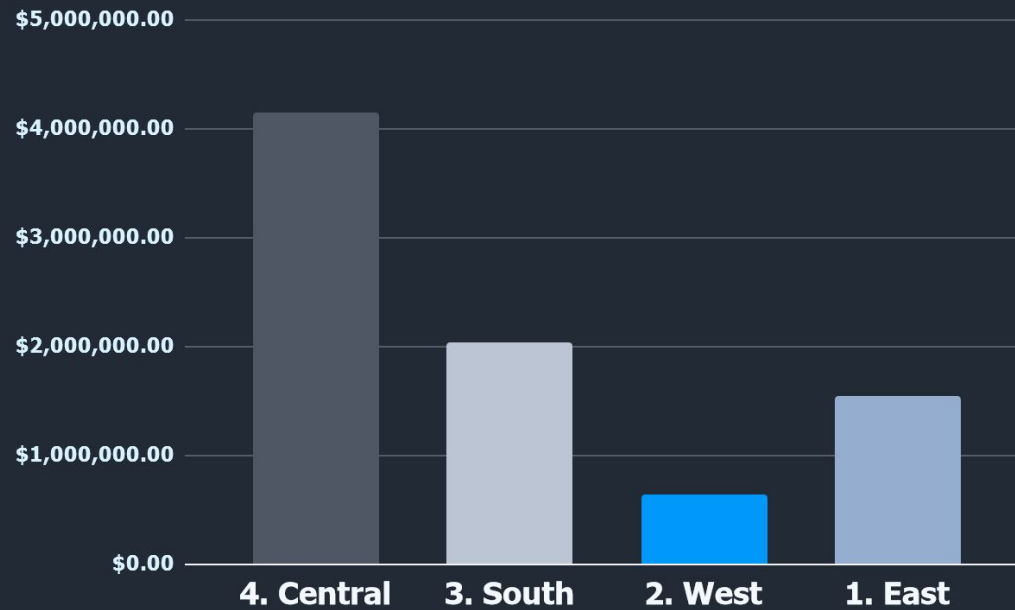


\$2,212,719.51

27%

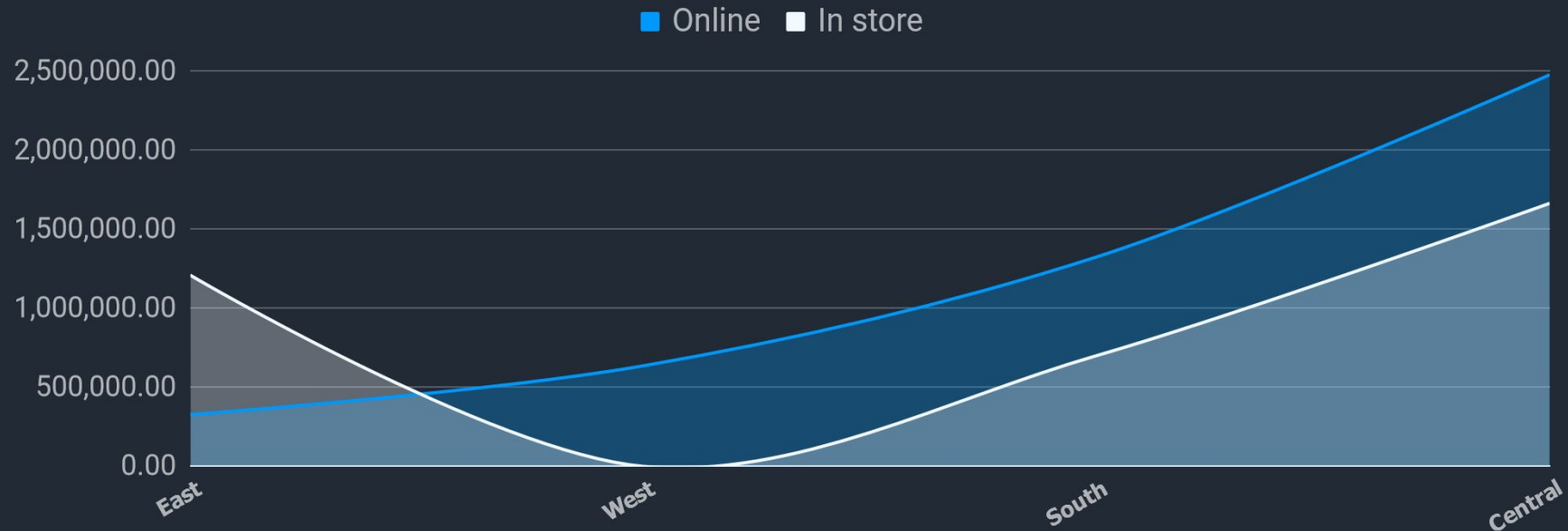
Region

Total amount (\$) spent by region



Amount spent

Online vs. In Store

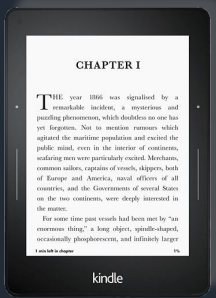


Total spent Online **\$4,772,090.73**

Total spent In Store **\$3,577,911.09**

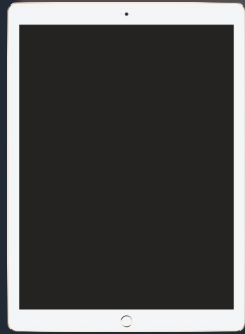
Total **\$8,350,001.82**

Top 5 new profitable products



1. Amazon Kindle

\$83577



2. Apple iPad

\$78131



3. PC Dell

\$63641



4. Sony Playstation

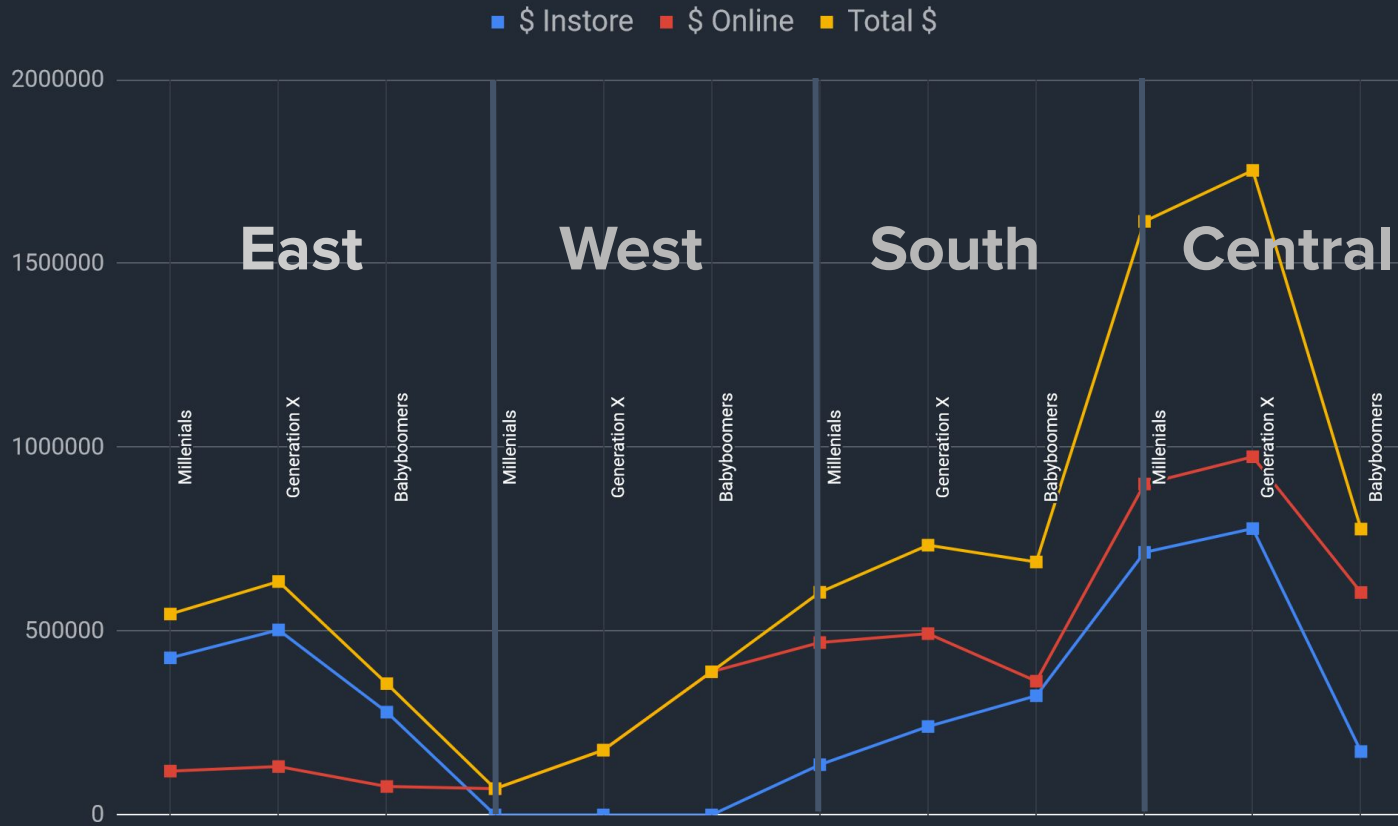
\$39564



5. PC Acer

\$37517

Recap



East

All age groups are purchasing more in store by a large difference. Large deficit in online purchases in comparison.

West

In store purchases are not offered. Sales volume increases as age increases.

South

Online sales is greater than in store sales. Generation X are the largest consumers.

Central

Online sales is greater. Very low sales with baby boomers. Generates the most revenue.

Recommendations

Future applications of data mining methods

Anomaly detection

Detect which stores are underperforming or outperforming to detect best practices and implement improvements

Association Learning

Find out what customers are purchasing, so customers can be targeted with specific marketing strategies (i.e. cross selling)

Cluster detection

Use data to sort customers into subgroups based on purchasing behaviors i.e. gamers and photographers may have distinct needs in their product selections. Potentially an opportunity for product bundling

Recommendations

How data mining can help with making informed e-Business decisions

Generate Revenue

Develop online marketing campaign for East, West and South region

Marketing Strategies

Seasonal marketing campaigns, including promotions and offers, in online purchases. Increase customers' online buying behavior in a specific region

Deep Analysis

Predict occurrences per region in order to better meet the demands of our customers i.e. top five profitable products

- Based on the data mining algorithms used, one can perform predictive analysis to fulfill business needs

How to differentiate profit vs loss by customer's purchase

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Any questions?

Thank you!