

UBC BOLT - First Byte Team 8

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Slide Schedule

Overview of B/YTÉ

How we used the data

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Q&A



Overview of B/YTÉ

Business Overview





Operates a single Brickand-Mortar location in Downtown Vancouver.



Little social media presence & no online operations.





3 Executive Members and 2 Full time employees.



Consistent Sales Volume

SWOT Analysis

Strengths

- Superior Product Quality.
- Stable Customer Base.
- Year-round consistency.

Weaknesses

- Unfit Supplier.
- No Online Presence.
- Incredible Competition in every market segment.
- High running costs of a Brick-and-Mortar store.
- Staffing Issues, overextension.

Opportunities

- Running Online Business.
- Marketing.
 - Focusing on Sustainability and Local business.
- Supplier Change better suited for business values and operation.

Threats

- Well Established Competition in the mall in all market segments
 - Oucci: An ultra-high end designer brand.
 - mAritzia: A high end athleisure brand.
 - M&H: A low end fast fashion brand.
- No Online Presence
 - Failing to appeal to new demographics
 - Brand
 Obsolescence of our brand over time

Main Issues We Aim To Resolve

- Product & Supply:
 - Delayed Shipments
 - No Inventory
 - Excessive Product Variety
 - Unsustainable Products and Supply
- Staffing:
 - Overextension of each member of staff.
- Online Presence:
 - Increase online presence of our brand.
 - Marketing and Operations.
- INCREASE SALES AND PROFITS!!!



How did we use our data?



Data Cleaning



Exploratory Data Analysis & Visualization

Data Cleaning

- Configure our Data File
- Remove Duplicates
- Ensure Proper Formatting and Typing
 - Removing Invalid Type Entries, e.g. Invalid dates (02/29/2022)
- Remove Outliers for Analysis
- Save our Cleaned Dataset in a new Data Frame

Exploratory Data Analysis & Visualization

- Annual Overview of Sales Volume & Margin
- Demographic Analysis
 - Age Distribution
- Quantitative Figures by Age Group (Volume, Margin, Customers)
- Product Analysis
 - SKUs per Category
 - Top and Bottom 300 SKUs
 - Margins and Performance by Category

These three elements of our reproducible data analysis are the foundation of our solution.

The "Three Step" Solution



1. Smart Operations



2. Market Repositioning



3. Business Consolidation

Part 1:
Smart
Operations.
A Logic-Driven
Component



Part 1: Smart Business Operations

A Smart yet Simple Solution: REVAMP THE BUSINESS MODEL le. Close the In Person Store

Part 1: Smart Business Operations

Why?

- Market Sentiment indicates the obsolescence of Brick-and-Mortar stores.
- Store is inconvenient for customers.
- Extreme Competition.
- Reduces **strain** on Executive members.
- Online model permits a Direct-To-Consumer Approach.
- Market Refocus (see pt. 2)

Part 1: Smart Business Operations

What can we do with Re-investment? With the additional funds available from shutting down our store, we can...

- Switch Suppliers to a new, quicker, local, more sustainable supplier.
 - Improving our product and giving us Marketing Material.
- Hire an Online Web Store Team
 - Streamline our costs and Operations.
- Hire a Marketing Team
 - Reaffirm our Values to our Customer's

Part 2:
Market
Repositioning.
A Data-Driven
Component



The solution: Target the 10-20 Years Old Demographic

The facts.

- We are achieving high customer quantities in all demographics between ages 20-60.
- We are **poorly** reaching in demographics aged under 20 and over 60.
- We want to obtain more customers in the ages of 10-20.

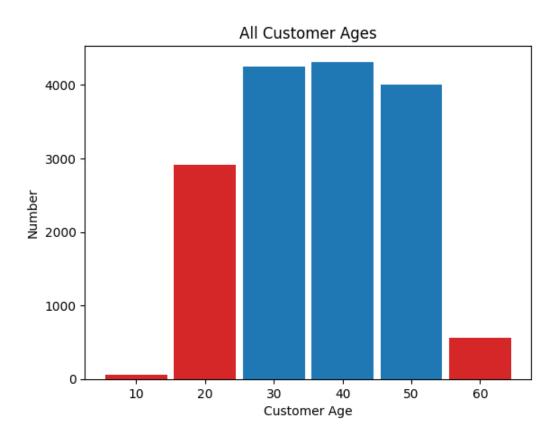


Figure 1: Bar Chart of our Customer Base (x = Customer Age, y = Number of Customer)

Maybe Small but Important!

- Customers under 20 purchase the greatest volume of our product.
- Targeting this untapped potential will drastically increase volume.
- We can target them online. This demographic of consumers is known to online shop.

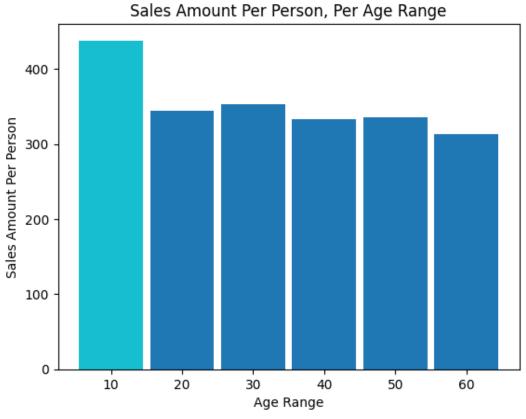


Figure 2: Bar Chart of the Yearly Consumption Value per Customer (x = Customer Age, y = Sales per Person)

Process (seept 3.):

- Consolidate our efforts online
- Invest in Marketing
- Create an Online Presence
- Adjust our Business
 Strategy and Model.

The key takeaway is that we know the direction of our brand.

Outcomes:

- Access to new, untapped markets:
 - Online Shoppers in Current Age Demographics.
 - Entire New Age Demographic.
- Brand Image revamp.
 - Young, hip, cool, cause its online.
- Increased sales volume overall.

Part 3:
Business
Consolidation.
A Data-Driven
Component



While we make the adjustment to move online...

Disposable Capital and Management Availability are compromised.

The solution:

Consolidate our Product Line during our Online Shift... or possibly Permanently.

Product Diversity is good, but...

- Over 1431 SKUs into 15 categories:
 - Dress Shirt, Hat, T-shirt, etc.
 - This is **MASSIVE** for a company of our size.
- Not all of them perform well.
 - **Modify** our product lineup using **data**!

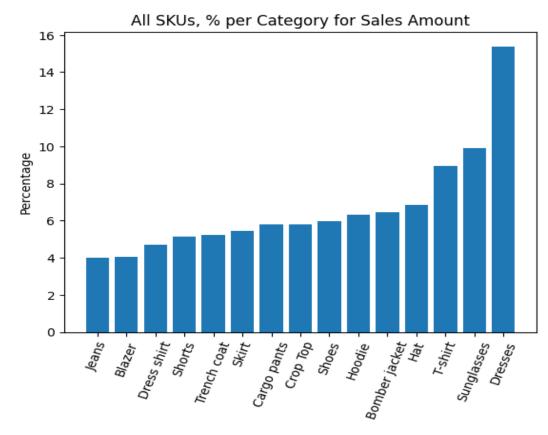


Figure 3: Bar Chart of All SKUs for Sales Amount, % per Category (x = SKU Category, y = Percentage)

Cutting poorly performing SKUs

- Our top 300 SKUs account for OVER 70% of our Sales!
- Identify bottom 300 SKUs to cut from lineup.
 - Reduces Expenditures with Suppliers
 - Refocus consumer attention on products they want.

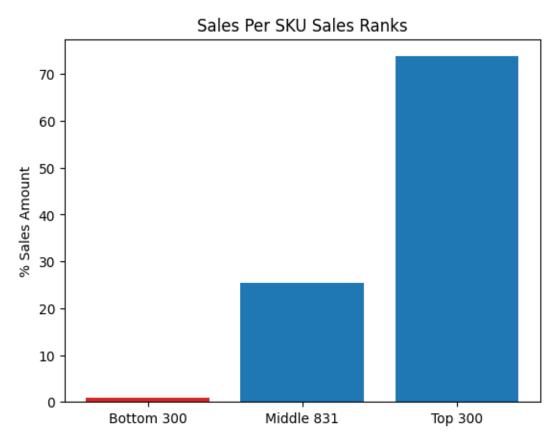


Figure 4: Bar Chart of SKUs Ranks for Sales
Amount, % per Groups
(x = SKU Group, y = Percentage)

Effects:

By consolidating our product lineup:

- We eliminate underperformers and promote top performers.
- We can optimize and expedite our supplier shift.
- We can reduce overhead costs.
 - DTC Model will eliminate stocking costs completely.
 - Reducing our product lineup optimally will manage supplier costs.
- We reduce time spent on product management.



Solution Impact

Summary of Our Solution

Our solution is to:

- Shut down the in-person store.
- Pivot our Business Model in favor of a decentralized DTC model
- Reallocate funds by hiring Webstore & Marketing Teams, and Swapping Suppliers.
- Target the 10-20-Year-Old demographic and Internet Users over 20 via Online Store and Marketing.
- Cut down our product lineup to improve profitability and volume.

Summary of the Impact of Our Solution

Our solution increases sales and profits by:

- Streamlining Business Operations
 - Removing multiple massive Operating Expenses (Store & Stock)
 - Repositioning our Brand
 - Refining our Product Lineup
- Increasing Online Presence
 - Revamp the Brand Image.
 - Marketing to Reinforce our Core Values to Consumers.
- Unlocking Key Demographics
 - New Demographic with Teens.
 - Online Shoppers in Current Demographics.
 - New locations via Online Shipping

Measure of Implementation Success

We will measure the success of our implementation by: Running the exact same reproducible data analysis pipeline that we created on the next year's data.

This is done by verifying the key performance metrics of:

- Business Health:
 - Overall Sales Volume
 - Overall Product Margins
- Demographic Analysis:
 - Sales volume by age group
 - Customer volume by age group
- Product Analysis:
 - Top and bottom SKUs
 - Proportion of sales by ranked groups of SKUs
 - Performance by category

