

Intermediate Milestone 1



FEB25

Presented by

Ligasyah Arnanda Primadana

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Tableau Public Link

Here my Tableau Public **Link**

Business Context

As a data analyst at one of the most reputable e-commerce companies **WishfulBazaar**, we want to utilize more data insight to support company growth. You will analyze all information in this company using the given data. Mr. Ronaldinho (CEO), requested Mr. Neymar (head of data) to create a company-wide dashboard. Mr. Neymar trusts you to create the dashboard.

Here the request :

Hello, as per my explanation in our Analytics town hall our Company's main **OKR (Objectives and Key Results)** this year is about sales performances & getting to know our customers. So Mr. CEO requested some chart for analysis of company-wide to understand our business performance better. The bigger picture is I need your help to capture and understand more metrics and make the data more comprehensive and insightful

The Users

The primary user of the dashboard is Mr. Neymar, who serves as the Head of Data at WishfulBazaar. Additionally, Mr. Ronaldinho, the Chief Executive Officer (CEO), is a key stakeholder who has initiated this request through his directive for enhanced sales performance analysis.



Primary User: **Mr. Neymar** (Head of Data)
Key Stakeholder: Mr. Ronaldinho (CEO)

Business Understanding : The Worksheet (1)

The worksheet is required to fulfill critical business objectives outlined in WishfulBazaar's company-wide OKR (Objectives and Key Results) for this year, which focuses on improving sales performance and deepening customer understanding.

Purpose:

1. To provide executive leadership with actionable insights into overall business performance.
2. To enable data-driven decision-making by visualizing key metrics related to sales success, customer behavior, product returns, abandoned carts, and profitability.
3. To support strategic planning aimed at driving company growth by identifying strengths and areas requiring improvement within current operations.

Business Understanding : The Worksheet (2)

Mr. Neymar requires this dashboard in order to:

1. Monitor real-time progress towards organizational goals.
2. Identify trends or anomalies in sales activities.
3. Understand customer demographics and purchasing patterns. This will empower both operational teams and executive management with timely information necessary for effective strategy formulation.

Business Understanding : The Metrics

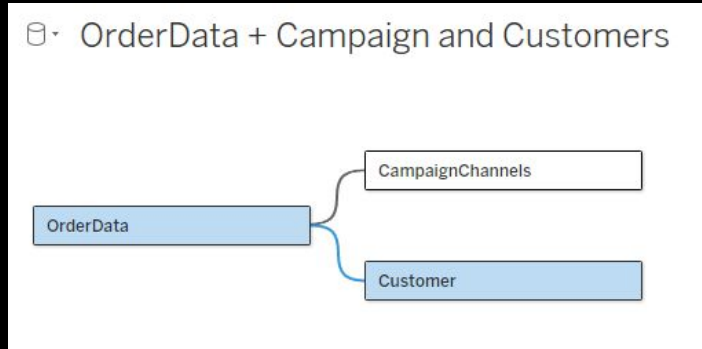
Here all the metrics and definitions

1. Sales Success
The total value of confirmed orders that were not returned (OrderConfirmation = "TRUE" AND OrderReturn = "FALSE").
2. Abandoned Sales
The total value associated with shopping sessions where an order was not confirmed (OrderConfirmation = "FALSE").
3. Return Sales
The total value of products that were returned after purchase (OrderReturn = "TRUE").
4. Purchase Order per Month
Average number of successful purchases per month across all customers.
5. Session Duration per Customer
Average time spent by each customer during their shopping sessions.
6. Company Profit
Net profit derived from successful sales only; calculated as total revenue minus cost.

Joining and Blending the data

The three datasets represent different but related aspects of business data:

1. Orders (OrderData) contain transactional details.
2. Marketing campaigns (CampaignChannels) relate to sessions/orders via SessionID.
3. Customers (Customer) hold demographic info linked by CustomerID.



Using relationships allows you to keep each dataset at its natural level of detail:

1. Orders are session-level,
2. Campaigns are session-level but optional,
3. Customers are customer-level.

This avoids problems like data duplication or incorrect aggregations that often occur when joining tables with different granularities directly. It improves performance because Tableau only queries related records when necessary based on what fields or filters you use in your dashboard — no unnecessary large flattened table is created upfront. Flexibility is enhanced since adding new fields or filtering from any table automatically adjusts how Tableau combines data behind the scenes without needing manual rejoining or restructuring.

Insight and Interpretation

- The company has achieved a **strong volume of successful sales** (over one million), which is encouraging.
- However, nearly 21% (238k out of ~1.13M + 238k +150k) of potential sales are abandoned before confirmation — this is an important **leakage point**.
- Returns also represent a notable portion (~11%) of transactions by value; addressing reasons behind returns could improve profitability.

Sales Scorecard

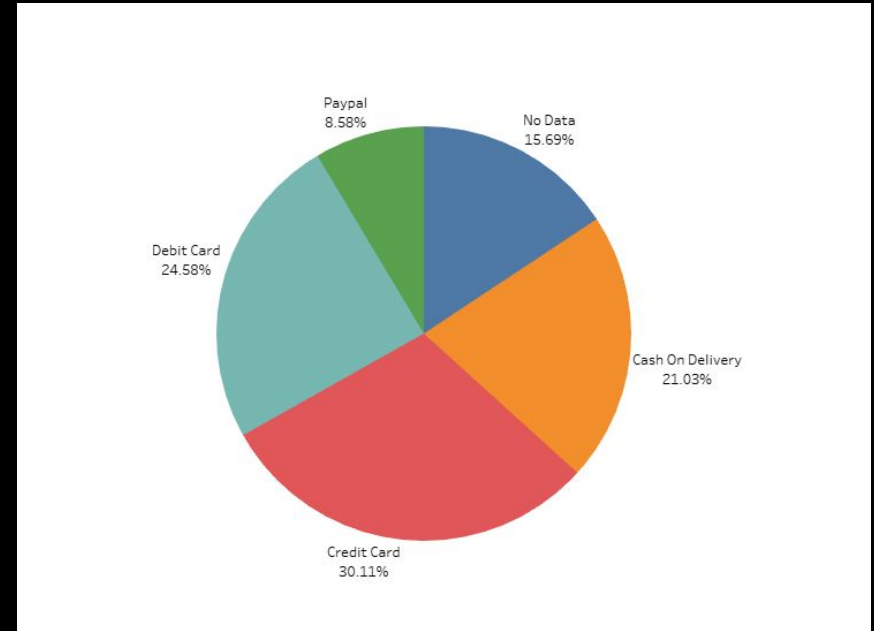
Sales Success:	1,133,444
Abandoned Sales:	238,888
Return Sales:	150,179

Payment Preference Chart

The dominance of **credit and debit cards** highlights the importance of maintaining secure and seamless card payment processing systems.

Cash on delivery's sizable share indicates that offering flexible payment options caters well to customer preferences and may help capture more sales from those hesitant to pay online upfront.

Addressing the "No Data" gap can improve reporting accuracy and help better understand customer behavior related to payments.



Success and Abandoned Sales Trend

Sales Success (Green Line):

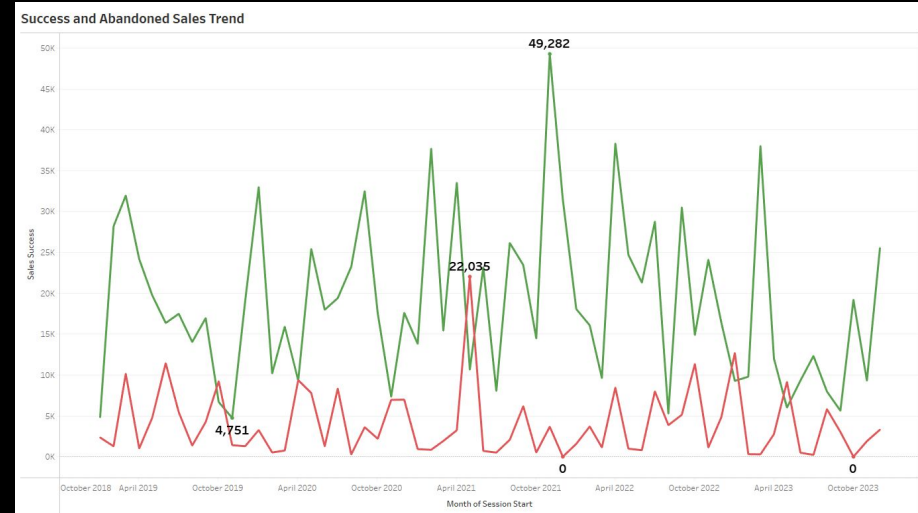
Shows significant fluctuations over time, with peaks and troughs indicating varying sales performance month-to-month.

The highest peak occurred in April 2021, reaching approximately 49,282 successful sales, suggesting a period of strong business activity or effective campaigns.

Abandoned Sales (Red Line):

Generally much lower than successful sales but shows occasional spikes.

The highest spike was also around April 2021, reaching about 22,035 abandoned sales. This could indicate issues such as cart abandonment during high traffic periods or checkout problems.



Hierarchy From Categories and Products

Understanding sales or customer preferences at both **category level** (e.g., fashion vs. electronics) and **product level** (e.g., jeans vs. shoes) can help optimize inventory management and marketing strategies.

The diversity of categories suggests WishfulBazaar serves a wide range of customer needs across lifestyle segments.

Category	Product
books	autobiography
	magazine
	novel
	textbook
electronics	hair dryer
	laptop
	table fan
	television
fashion	dress
	jeans
	shoes
	t-shirt
home appliances	electric stove
	microwave oven
	mixer grinder
	toaster
toys	action figure
	board game
	plush toy
	puzzle

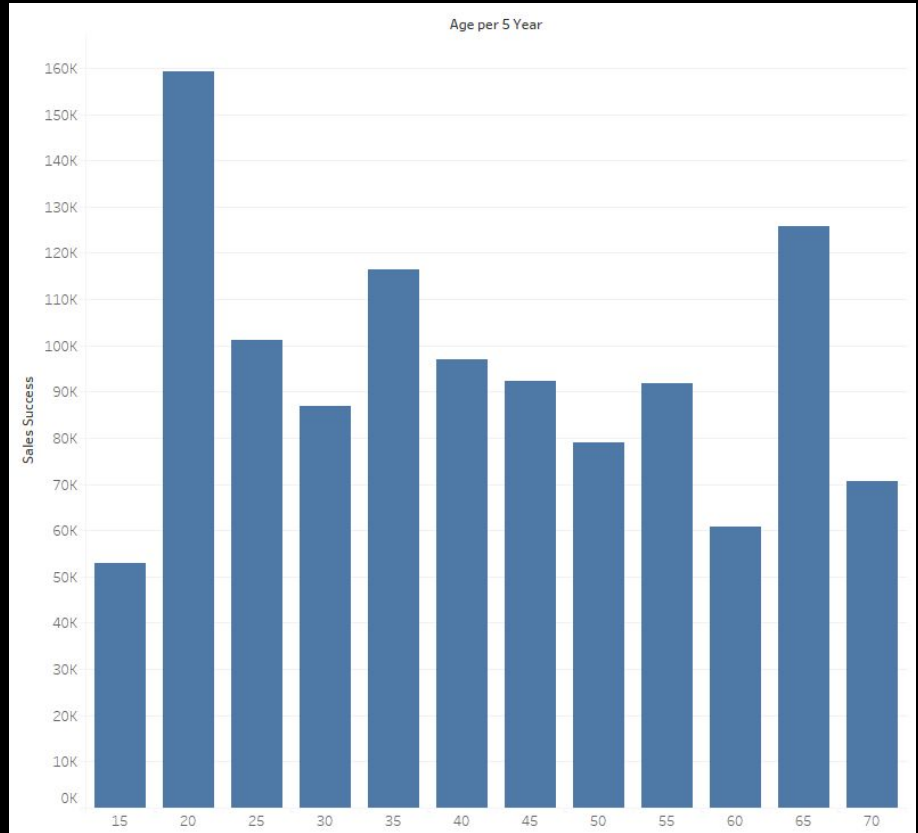
Total Success Sales per Bin

The age group around 20 years old shows the highest sales success, indicating that young adults are a very active and valuable customer segment for WishfulBazaar.

Another significant peak occurs around the 65-year-old age group, suggesting that seniors also contribute notably to sales success, which might reflect targeted products or loyal customers in this demographic.

Moderate sales success is observed in middle-age groups such as 35 and 40 years old, showing steady engagement from these customers.

The lowest sales success appears near age 15 and around age 60, possibly indicating less purchasing activity or different shopping behaviors in these groups.



Intermediate Milestone 2



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Tableau Public Link

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Top 3 Each Category

Category	Product	
books	textbook	1
	autobiography	2
	novel	3
	magazine	4
electronics	television	1
	laptop	2
	table fan	3
	hair dryer	4
fashion	shoes	1
	jeans	2
	dress	3
	t-shirt	4
home appliances	microwave oven	1
	electric stove	2
	mixer grinder	3
	toaster	4
toys	board game	1
	puzzle	2
	action figure	3
	plush toy	4

Top 3 Each Categories

Insight Top-Performing Products per Category:

- **Books:** Textbooks, autobiographies, and novels are the most popular. This suggests a demand for educational and personal storytelling content.
- **Electronics:** Televisions and laptops lead, indicating consumer preference for high-value, productivity, and entertainment items.
- **Fashion:** Shoes and jeans dominate, reflecting essential wardrobe preferences.
- **Home Appliances:** Microwave ovens and electric stoves are the top choices, showing a trend toward quick and convenient cooking solutions.
- **Toys:** Board games and puzzles are popular, hinting at a preference for interactive and educational play.

Recommendations Focus on Best Sellers:

- Invest in promoting the top 3 products in each category through advertising, bundling, or feature placement in stores.

Average Session Duration per Customer

Insights

Consistent High Engagement:

The top customers all average 34 to 35 minutes per session, which is quite high for most digital platforms or services. This suggests these users are highly engaged.

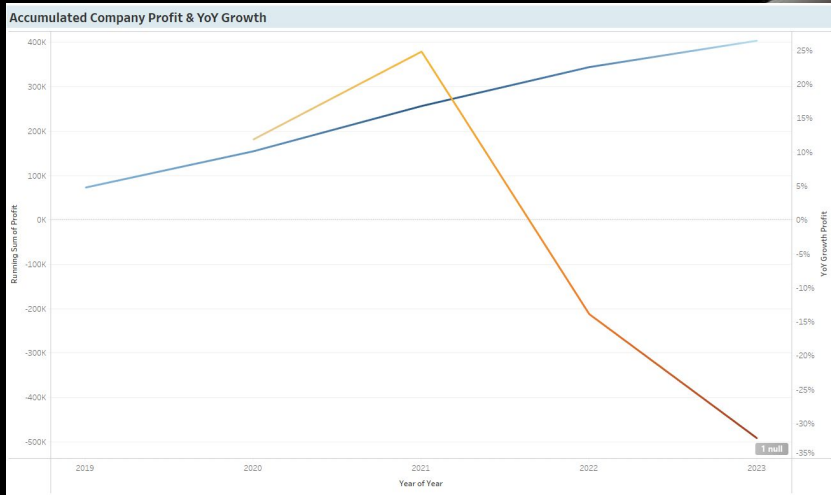
Recommendations

Target This Segment for Upselling or Loyalty Programs:

These are your most engaged users—consider offering them early access, premium features, referral bonuses, or loyalty rewards to retain and further monetize them.



Company Profit and YoY Growth



Insight

Sharp Decline in YoY Growth After 2021:

The Year-over-Year (YoY) growth drops dramatically post-2021, eventually turning negative and hitting approximately -30% by 2023. Despite this, the accumulated profit line continues to rise, though likely due to earlier gains.

Recommendations

If growth is declining due to customer churn, launch retention campaigns or loyalty programs. Review customer satisfaction metrics.

Correlation

Average Monthly Purchase vs Customer Income

Insights

Concentration of Low Spenders:

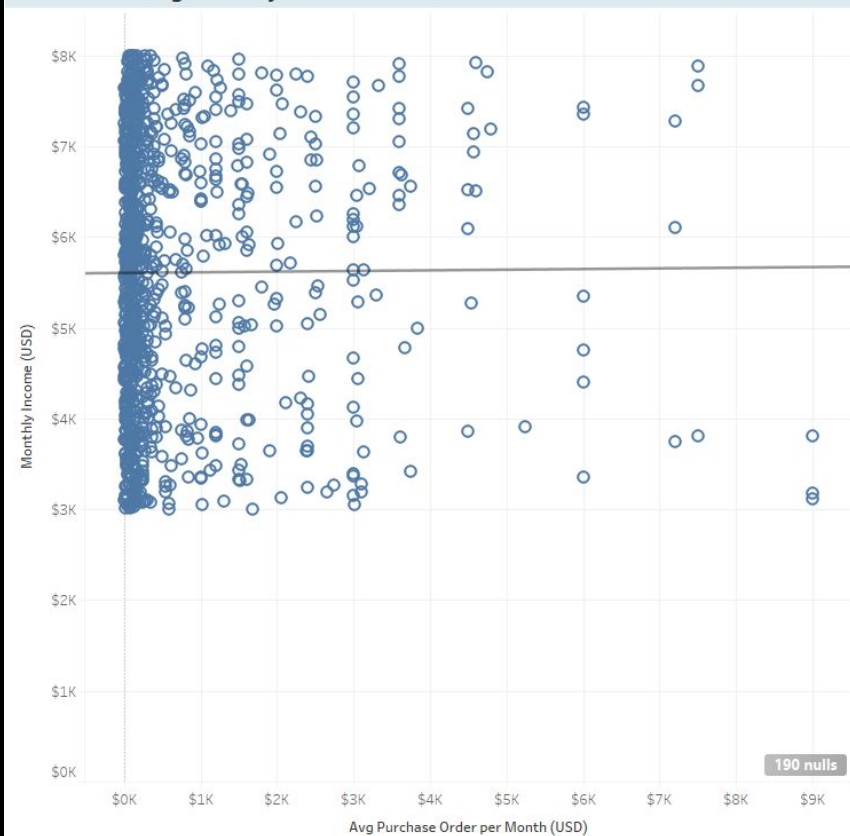
A large cluster of customers spend less than \$1K per month, regardless of income. This indicates that **most customers are spending cautiously**, even those with higher income.

Recommendations

Segment by Behavior, Not Just Income:

Since income doesn't drive spending clearly, consider behavioral segmentation—**group customers by** purchase frequency, product interest, or basket size instead of income tiers.

Correlation: Avg Monthly Purchase vs. Customer Income



Total Sales and Share (Country)

Insights

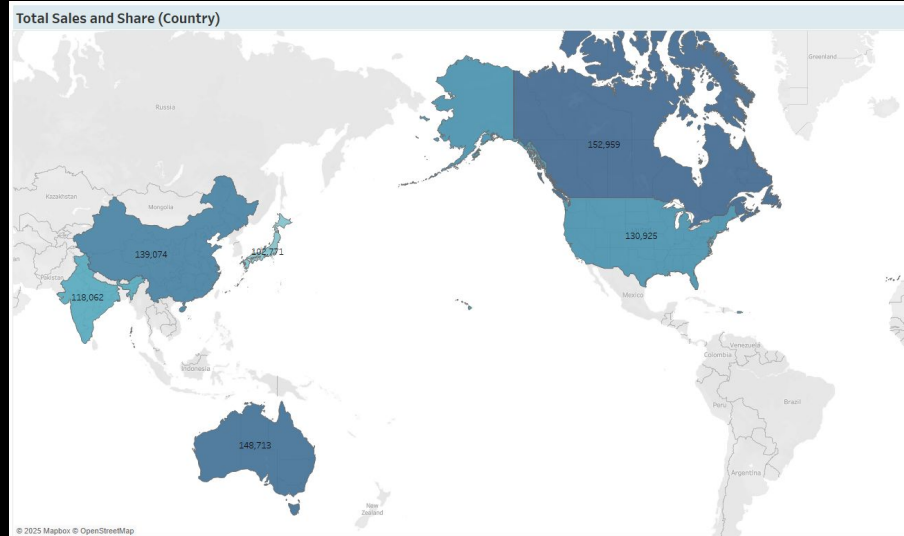
Top Performers:

- Canada (152,959) and Australia (148,713) lead in total sales among the countries shown.
- China (139,074) and USA (130,925) follow closely, indicating strong but slightly lower market engagement.

Recommendations

Double Down on High Performers (Canada, Australia):

- These countries are currently leading. Continue investment in customer retention, loyalty programs, and premium product offerings.
- Consider new product launches or pilot programs in these markets first due to higher responsiveness.



Let's work together

Conclusion

- The data reveals a classic case of **strong engagement** but **poor monetization and regional imbalance**. You need to realign your growth strategy by:
- **Tightening** profitability levers.
- **Shifting** from demographic to behavioral segmentation.
- **Focusing** on countries and regions with the highest ROI potential.



Thank you

Ready for what's next?

Let's talk

Ligasyah Arnanda Primadana

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