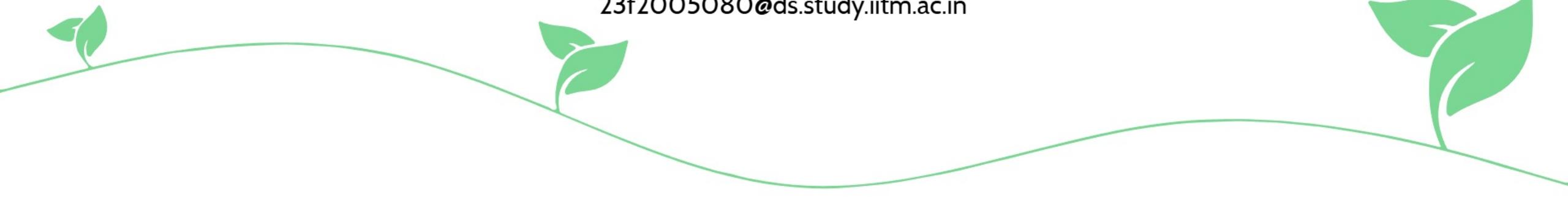




# BDM CAPSTONE

Advanced digital data management and demand forecasting framework  
for optimizing inventory & sales in women's boutique.

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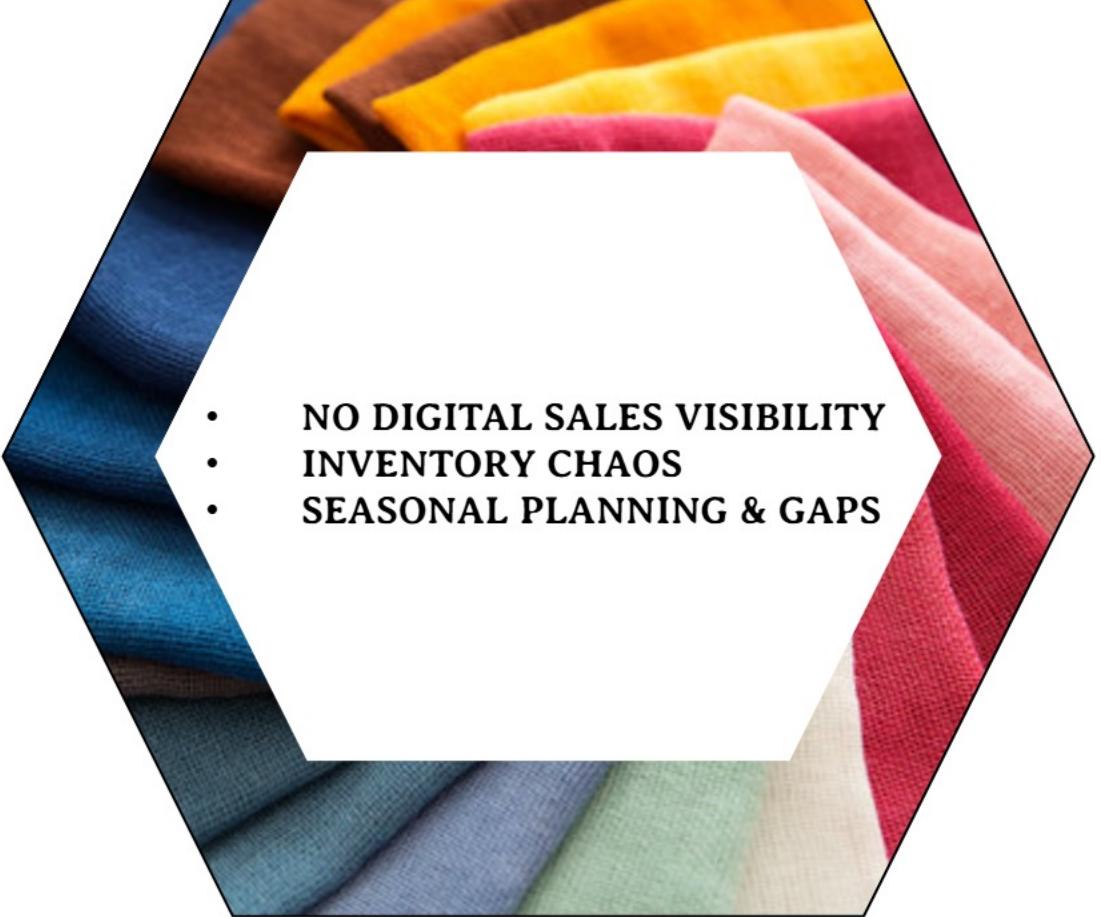
# ORGANIZATION BACKGROUND

- The company that I am working with is Pattern House women's clothing boutique founded in 2021 by Ms.Neelam Verma.
- Which is a for-profit corporation and b2c business.
- 3 types of main products that are dresses, fabrics and dress rental stuff.

Pattern House ,2nd floor Shanti tower,Beawar, Rajasthan  
Insta\_page : @pattern\_house\_

BDM CAPSTONE [23F2005080]



- 
- NO DIGITAL SALES VISIBILITY
  - INVENTORY CHAOS
  - SEASONAL PLANNING & GAPS

## PROBLEM STATEMENT

## DATA COLLECTION



 Sell  
 Customise Form

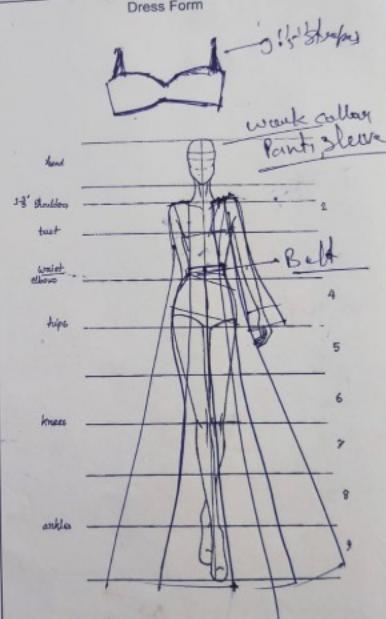
Form No. ....  
 Name Sonja .... Mob. ....  
 Dress. Yellow dress .... Amount. ₹ 200 .... Adv. 1STC .... Due. ....  
 Date 25/10/2023

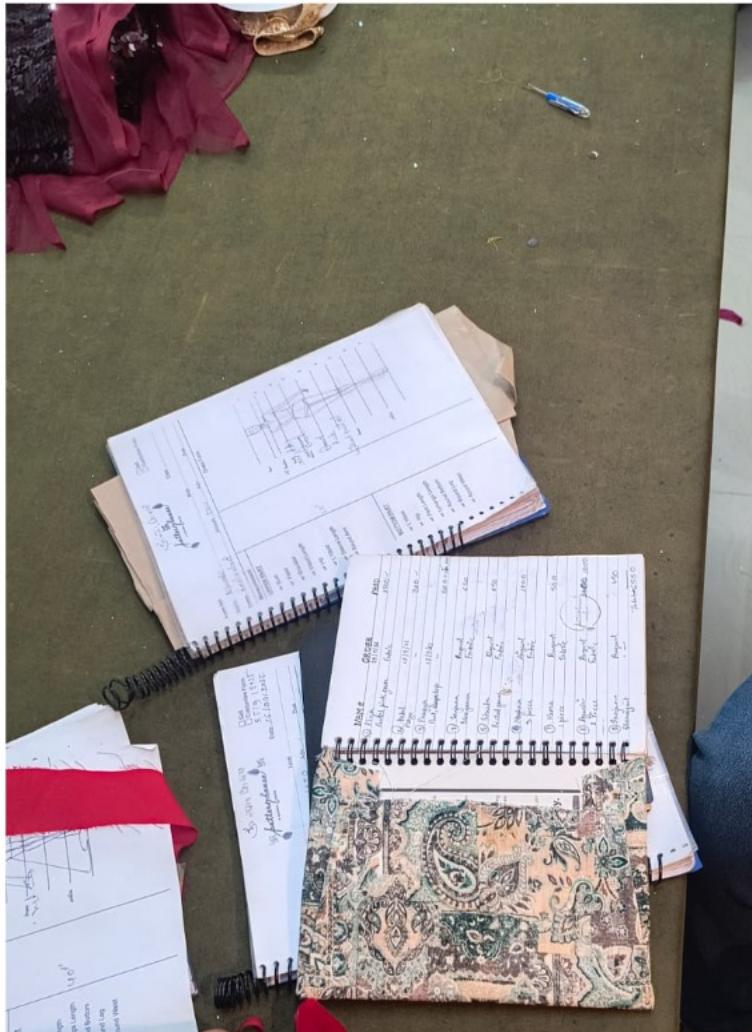
**Measurement :**

<u>UPPER PART</u>	
<input type="checkbox"/> Bust	46"
<input type="checkbox"/> Waist	41"
<input type="checkbox"/> Shoulder	15"
<input type="checkbox"/> Waist Length	16"
<input type="checkbox"/> Hip	48"
<input type="checkbox"/> L Waist	42"
<input type="checkbox"/> Sleeve Length	22" (16")
<input type="checkbox"/> Round Arm	
 Chest -	39"
 Jacket length	54"

<u>BOTTOM PART</u>	
<input type="checkbox"/> L Waist	
<input type="checkbox"/> Hip	
<input type="checkbox"/> Pant Length	41"
<input type="checkbox"/> Lehanga Length	
<input type="checkbox"/> Round Bottom	26"
<input type="checkbox"/> Round Leg	
<input type="checkbox"/> Round Waist	
Thigh -	30"
Knee	20"
Knee length	22"

**Dress Form**





# DATA DIGITALIZATION & PREPROCESSING

## DIGITALIZATION PROCESS

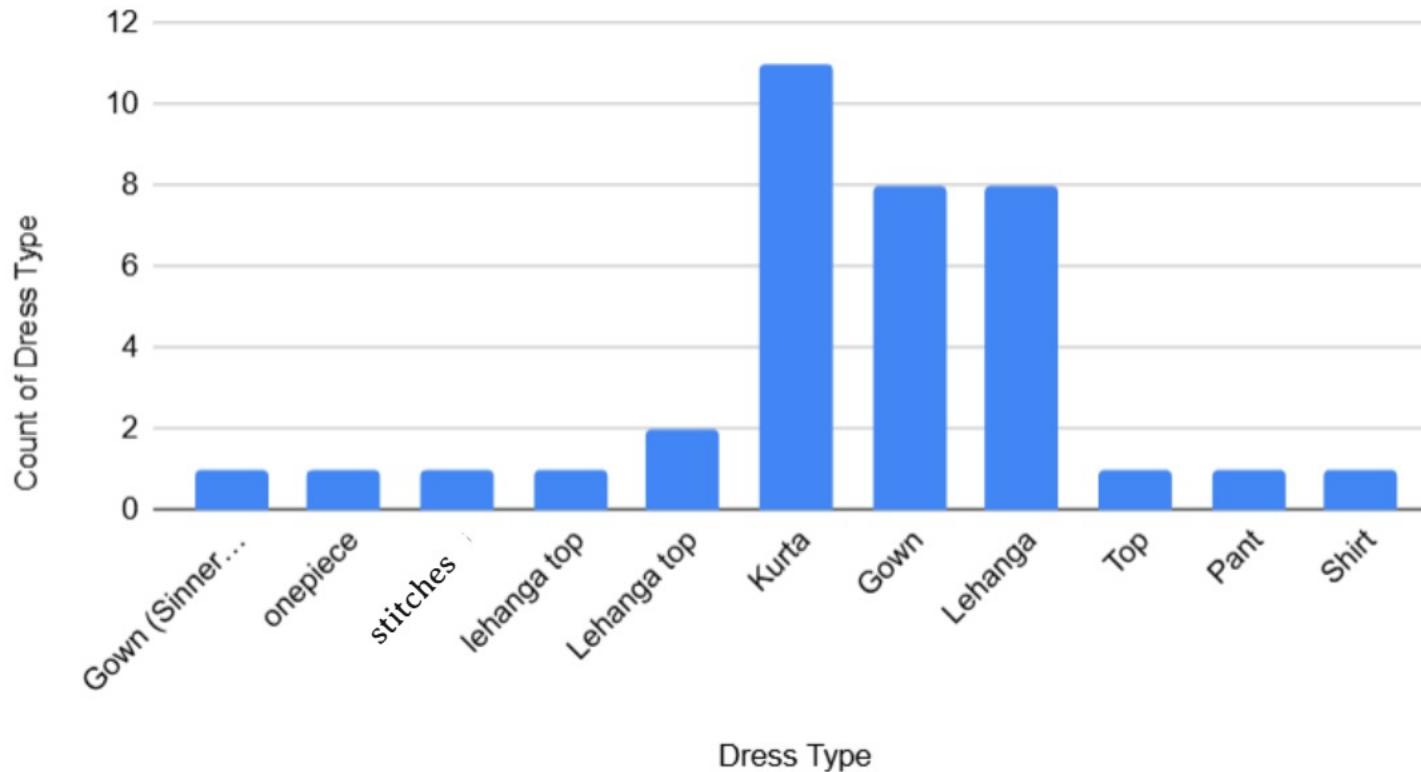
- Data Collected:
  1. Form numbers
  2. Customer names & contact details
  3. Booking & delivery dates
  4. Dress types (6 SKU categories)
  5. Order amounts, advances, pending balances
  6. Order type (Sell vs. Rent)
- 7. **Time duration:**  
July – October 2025 (4 months)

## PREPROCESSING

- Physical order diaries & measurement notebooks collected from shop.
- 1. Photography pages organize by month.
- 2. Manual data entry into Google sheet : Sr no. , name, order , date, etc
- 3. Data Cleaning in sheet: remove duplicates, fix dates, standardize dress names, fill missing fields.
- 4. Data transformation: add month column, tailor timing, due date, start date.
- 5. Analysis-ready dataset for season-wise trends, ABC analysis, forecast

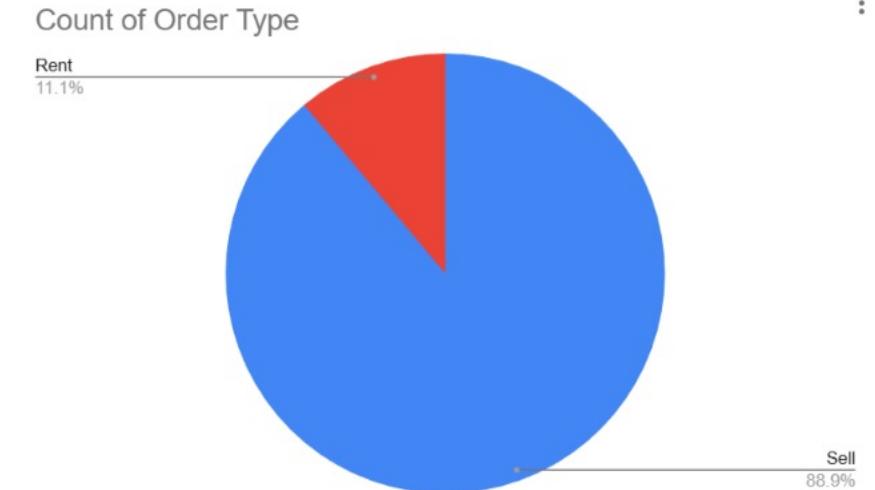
# DATA ANALYSIS - Inventory Optimization

## Best Selling Dress



**Focused resource allocation** Top-performing items Class A items (Kurta + Gown + Lehenga = 64% revenue).

**Slower-moving items** like Shirt, Top, One-piece show low volumes (1-4 units), indicating niche demand; these should be **made-to-order only** to avoid dead stock.



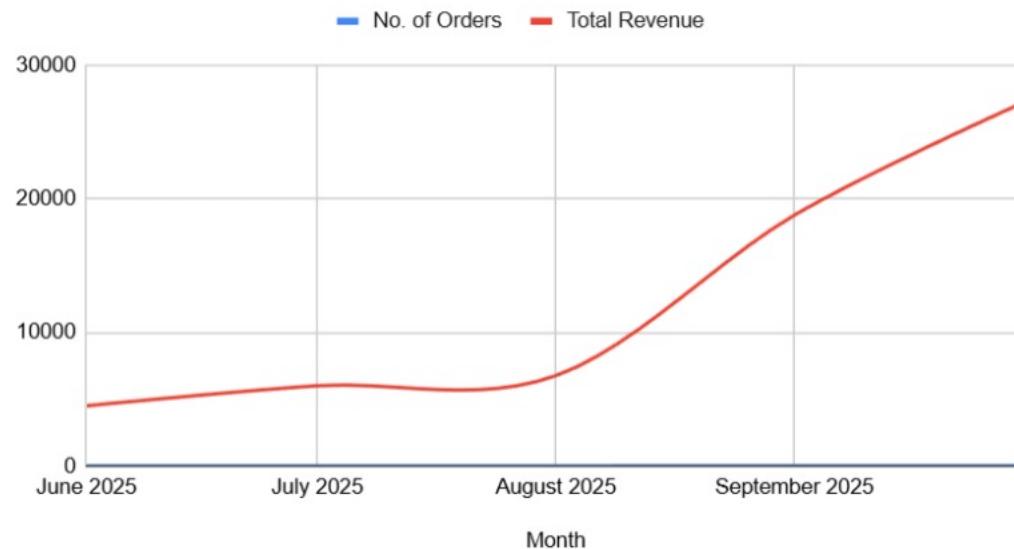
**Sell orders** dominate at 88.9% of total transactions, confirming that tailoring & ownership is the core business model.

**Rent orders** represent only 11.1%, indicating a small side business; focus remains on custom stitching and sales.

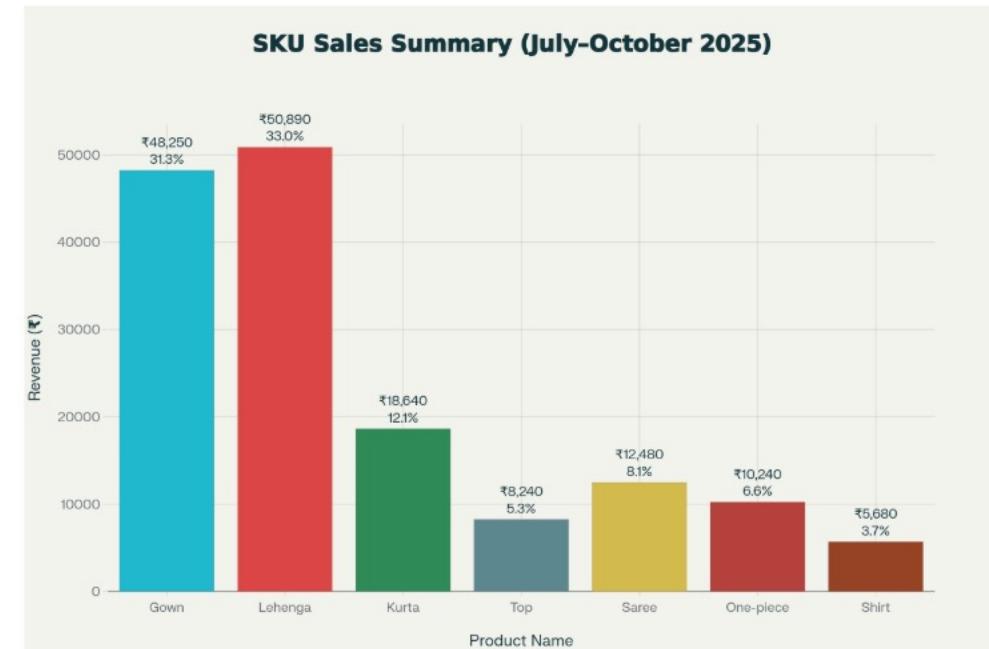
# DATA ANALYSIS - REVENUE TRENDS

Month	No. of Orders	Total Revenue	No. of Days of Operation	Avg. Revenue/Day
June 2025	4	4500	10	450
July 2025	7	6000	31	193.5483871
August 2025	8	6755	31	217.9032258
September 2025	11	18760	30	625.3333333
October 2025	16	27250	31	879.0322581
<b>TOTAL</b>	<b>46</b>	<b>63265</b>	<b>133</b>	<b>475.6766917</b>

No. of Orders and Total Revenue



SKU Sales Summary (July-October 2025)



## Key Feature:

1. Strong seasonal demand peak in Oct.
2. Premium items dominate revenue
3. Allocate 60% focus to Gown & Lehenga designs

# INTERPRETATION & KEY FINDINGS



## Sales Seasonality & Festival Impact:

- ❖ **Peak demand in Sept-Oct** during festival/wedding season; Gown & Lehenga orders.
- ❖ **Festival-driven growth confirmed** via trend analysis; 3-month moving averages smooth volatility and reveal consistent upward trajectory leading into Diwali.



## Inventory Efficiency Gains:

- ❖ **Turnover rate analysis** reveals Kurta (3.2x), Lehenga (2.8x), Gown (2.3x) as fast movers needing 8-12 ready units.
- ❖ **Optimized stock levels by category** reduce blocked capital and improve cash flow; focus deep inventory on A-items, semi-stock for B-items, minimal for C-items.



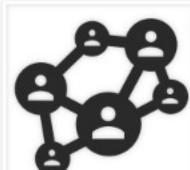
## Premium Product Dominance (ABC Insights):

- ❖ Top-performing items **Class A items ( Gown + Lehenga = 64% revenue)**.
- ❖ **Class B items Kurta + Saree = 20% revenue** with 26 units.
- ❖ **Class C items (One-piece, Top, Shirt = 15% revenue)** from 14 units.



## Revenue & Payment Behavior Insights:

- ❖ **High correlation between Gown & Lehenga sales** (both peak in Sept-Oct), confirming they respond to same seasonal triggers and should be procured as a single portfolio.
- ❖ **One piece & Top show negative correlation**, indicating substitution; bundling them can balance demand and clear slower items.



## Finalized Strategic Insights:

- ❖ **boutique** anchored in Gown & Lehenga (64% revenue) casual/experimental SKUs are supporting categories.
- ❖ **Digitalization from diary to Excel/Sheets** enables data-driven decisions on inventory, staffing, marketing and cash-flow planning vs. intuition-driven approach.

# STRATEGIC RECOMMENDATIONS



## Computerize Records

- Store the sku(stock keeping unit) for each item sold.
- Give every design a fixed SKU code and use it on all bills.
- Enter all diary orders into one Excel/Google Sheet.



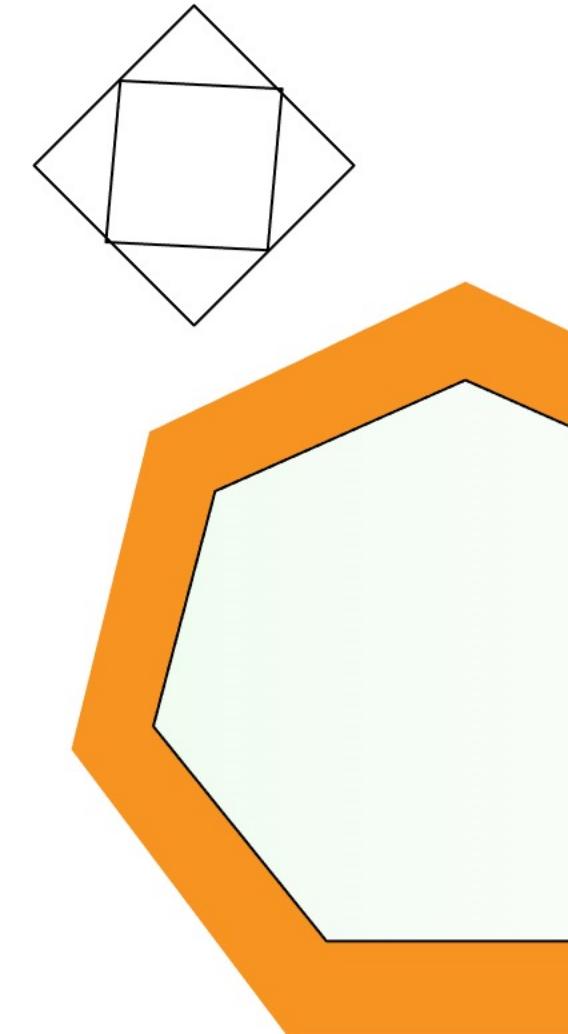
## Season-Wise Planning

- Use monthly sales to spot peak months for lehenga/gown.
- Stock up before festivals; focus on casual/clearance after.



## Customer & Order Analytics

- Maintain a customer list with contact and occasion.
- Apply ABC: A = Lehenga/Gown, B = Kurta/Saree, C = Top/One-piece/Shirt.
- Keep deep stock for A, moderate for B, minimal/made-to-order for C.





# Thank You

