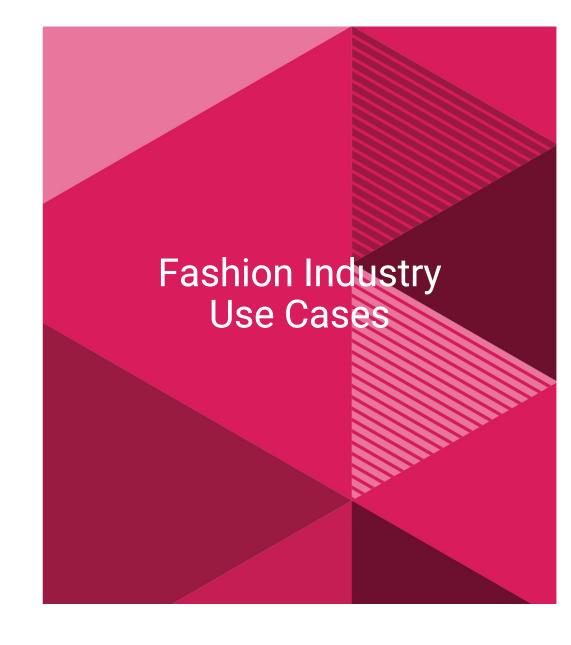


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### **Inventory Management**

Managing diverse products and brands to maintain optimal stock, reduce carrying costs, and minimize stockouts or overstock.

### **Demand Forecasting**

Predicting the right quantity of materials based on historical sales data and future trends.

### **Supplier Reliability**

Ensuring suppliers provide quality materials on time, especially when dealing with global supply chains.

## Optimization Issues in Fashion Industry

### **Cost Efficiency**

Striking a balance between the quality of materials and the cost, to maintain a desirable profit margin.

### **Real Estate Optimization**

With the e-commerce surge, there's a need to evaluate the profitability of physical stores, decide on store closures, or repurpose them for other functions like fulfillment centers.

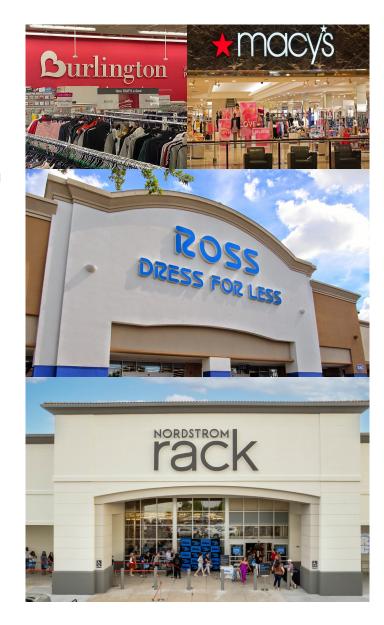
### **Omnichannel Strategy**

As shopping habits evolve, retailers need to blend online and in-store experiences, keeping prices, product stocks, and service consistent.

# Areas where SimpleRose can help

- ▶ Resource Allocation: Recommending the best distribution of resources, like warehouse staff, based on upcoming stock.
- Scenario Analysis: Evaluating the results of different purchasing tactics to select the best approach.
- Seasonal Buying: Deciding quantities for seasonal items by analyzing past sales patterns.
- Markdown optimization: Proposes the best discount strategies and timing to reduce unsold inventory losses.
- **Dynamic Pricing:** Suggesting the price tweaks based on sales data and stock, maximizing revenue, especially for season-end items.







# **Use Cases**





### **Problem Statement:**

- 1) Effective distribution of limited inventory across Zara's stores.
- 2) Addressing short product life cycles in fast-fashion.
- 3) Policy of removing articles from display when a key size stocks out.

### **Methods Used:**

- 1) Used time series analysis to predict forecast demand for each product at each store.
- 2) Applied linear programming model to optimize the allocation of inventory to stores, taking into the account of demand forecasts and inventory costs.
- 3) Tested the system with simulations to see the performance of the inventory management system under different scenarios.

### **Outcomes:**

- 1) Zara used the new model to improve inventory distribution.
- 2) Pilot test showed sales grew by 3-4%, earning an extra \$275M in 2007.
- 3) A reduction in transshipments was observed.
- 4) Zara's items stayed on display longer



### **Problem Statement:**

- 1) Need for a consistent and efficient method to evaluate and select suppliers.
- 2) Requirement to incorporate various factors such as lead time, quality, sustainability, and price in the selection process.

### **Methods Used:**

- 1) Digitally streamlines supplier evaluations.
- 2) Rates suppliers on lead time, product quality, sustainability, and pricing.
- 3) Uses digital platforms for transparent and standardized negotiations.

### **Outcomes:**

- 1) Identified top suppliers, boosting alignment with brand values by 25%.
- 2) Enhanced purchasing decisions, leading to a 15% increase in optimized buys.
- 3) Strengthened trust, fostering 20% more long-term supplier partnerships.

### References

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