

## A08 Retail Industry Class Notes

### 1. Personalized Recommendation

Based on your recent algorithm, new items are suggested to consumers. AI is used to recommend your next purchase because of what the user has been viewing. Each user's history is sold.

### 2. Dynamic Pricing

Retail price is set for every item that is sold so a general price is set for every item based on the general market price. The more serious a customer is about browsing an item in a day and still does not buy, the algorithm price for that specific item is adjusted and lowered to lure the customer into buying the product on their platform. AI adjusts to the need of the customer in order for the customer to successfully buy the item they were searching for.

### 3. Inventory Management

When the items are adjusted based on sold inventory. It readjusts the quantity needed based on the history of purchased items from a specific time frame.

### 4. Customer service

AI helps track an order or the history and answer any questions the consumer has without needing a person on the other side to help. AI agents are taking over these jobs to make the service faster and efficient since they are pre-trained models for this specific job.

### 5. Fraud Detection

AI is working in retail not finance to prevent fraud. Verify with the account holder based on the location the purchase was made and where the consumer is now to suspect potential fraud. Also based on the location of searches and where previously delivered packages.

### 6. Visual Search

Once an item is purchased and delivered successfully, it notifies the company that the item was from and the statistics start. A visual search is performed by AI to search all social media platforms in the area zip code to track down who is liking/ loving the product that another person bought and posted. From there that person that liked the post or commented will get ads to target them and lure and persuade them to buy the item. This happens thanks to AI tracking and performing a visual search.

### 7. Supply Chain Optimization

Optimizes the supply chain data and AI does the research because it has access to all the data on the internet. Investigates the best option for their buck on quality to price ratio in order to have the best product possible for a profitable price. Also includes the shipping time and resources for the product.

### 8. Systematic Analysis

AI agents are constantly running on customer feedback to optimize their purchases. Enhance productivity on certain products consumers are or have searched for which artificial intelligence has analyzed.

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#### 9. Store Layout Customization

Essentials are designed to be at the end of the store to trap the customer or it is a trap pod. Meanwhile as the customer walks through the store and is tempted with sales to get people to buy anything and everything they did not come to the store to get but now somehow in their mind now need for whatever reason. AI studies people's behaviors to produce new ways to change the layout of stores based on customers' decisions in a store.

#### Problems Yet to be Solved

- Data privacy concerns
- Bias taught to AI models
- Integration challenges: people's reviews that the engines work with everyday
- Customer trust: dynamic pricing

#### Problems created by AI

- Job displacement: Easy jobs like customer service
- Over personalization: people feel discomfort for anything that is viewed on the internet.
- Ethical concerns: Customers feel manipulated because of one click.