

- **Global Examples**

1. **Target (E- Commerce company)** - Target partnered with Pinterest to integrate Pinterest's Lens into their app so people can use their smartphones to snap a photo of something they like and have the Target app show them a similar item available for purchase. It was the first time Lens was integrated into another brand's app. As an example of omnichannel marketing, this is a way to offer a seamless experience for a customer who sees something they want to buy and they can immediately discover whether or not Target sells something similar—and order it right then and there. Moreover, using this strategy Target was able to increase its sales to almost 10%.

Where they are using ML and AI?

- They have more than 5 channels through which they interact with users. So , it become complex to keep a track of all the channels manually.
- Machine learning(ML) and artificial intelligence (AI) that are not only robust enough to siphon through increasing levels of unstructured digital information(like customer reviews or feedback), but continues to learn from previous computations, improving the level of data analysis.
- Running daily and weekly tests, machine learning has helped the chain to optimize operations based on insights derived through tests.

Future Investments using ML and AI-

- Target should be seeking the level of automation at which a customer browsing for items on Target's website or mobile app can trigger a demand forecast that, along with the corresponding projected inventory levels of said products at the customer's nearest store, triggers a fulfillment order from the closest distributor. By a similar process, Target could guarantee it has an item in stock locally and ready for pickup or delivery before the customer has even completed the purchase decision.
- Better store layouts, smarter delivery models, and autonomous warehouses are all technology-enabled improvements to Target's

supply chain. Differentiating innovation requires more than these incremental and individual improvements; lasting success calls for a system-wide digital transformation that shrinks the entire supply chain.

Sources-

<https://www.moengage.com/blog/7-brands-who-mastered-omnichannel-marketing-campaigns/>

<https://digital.hbs.edu/platform-rctom/submission/shrinking-the-supply-chain-target-needs-an-integrated-digitalization-strategy-to-thrive-as-an-omnichannel-retailer/>

<https://chainstoreage.com/technology/discounter-uses-machine-learning-stay-target-shopper-demand>

2. **Singapore Airlines** - It's not only retailers (or e-tailers) who can become master of omni experience but aviation companies as well. Singapore Airline sets a good example of offering a seamless experience to their customers. They have always been lauded for their innovation, and for a while, they are creating a powerful, customer-oriented omni experience. This flagship airline is partnering with AOE integrated airports and shopping malls by fusing online and offline experience. With this partnership, the customers can easily shop, pre-book, enhance in-flight options and earn loyalty in real-time.

Where they are using ML and AI technology -

- Artificial intelligence analyzes experiences based on historical data as well as real-time and predictive data to deliver a highly personalized user experience across the platform.

To personalize effectively, Singapore Airlines focuses on the end-to-end customer experience, not just one component. For this, the airline uses [Insider's Growth Management Platform](#) that delivers the customer intelligence to power the personalization. Insider enables it to treat all passengers as individuals no matter what devices they are using.

→ The airline also can use AI to increase revenue by maximizing the average order value through ancillary products and services that go beyond the revenue generated from the airline ticket itself.

For example: if I were a Singapore Airlines customer, then I could expect the airline to suggest a specific seat for me when I'm booking a flight and notify me of select sporting events at my destination, enabling me to purchase tickets that give the airline a referral fee that increases its revenue while simultaneously enhancing my customer experience.

Sources-

<https://www.kpitaraget.com/how-singapore-airlines-uses-ai-to-personalize-air-travel/>

<https://www.moengage.com/blog/7-brands-who-mastered-omnichannel-marketing-campaigns/>

<https://www.reutersevents.com/travel/social-media-and-marketing/how-singapore-airlines-using-artificial-intelligence-build-its-brand-and>

- **AI and ML uses in omni channel supply chain -**

→ **Recommendation Engines** - This is one of the classic use cases of big data tech in retail (albeit mostly in ecommerce settings).

- Parameters-

History of his search.

Behaviour of similar users.

→ **Customer 360** - Since not every one orders on the same time , as we are using a lot of channels for our e-commerce so we need customer support round the clock which is tedious job when done manually. ML and AI could be one of the possible solutions for this.

- Parameters-

Feedback and customer review after selling of each product.

Complaints while giving for servicing or using warranty.

→ **Path to Purchase** - As we provide both online as well as offline services so we should be precise which commodities should be available in offline stores and which ones in the centralised inventory that should be delivered online.

- Parameters-

- ML can use the various spanning tree and find the smallest route possible.

→ **Social Listening for Trend Forecasting** - “As a retailer, if you’re not at least listening to social media at this point – let alone actively engaging with them on Instagram or Twitter – then you’re missing out on a slew of free and potentially invaluable information that can help you spot trends.”

It was also described in yesterday’s slide of forecasting.

→ **Price Optimization** - Instead of manually calculating prices of the commodities . It should be done using ML and AI as it takes into account the factors such as route conditions, labour cost and even recent events such as elections which play an important role in final price of the product.

- Parameters-

- After using the spanning price calculation can be done accordingly keeping in the mind the labour and other similar charges.

→ **Inventory Optimization** - Using AI and ML over a period of time will tell how customers respond to a particular season or event, so we can optimize our inventory according to that.

- Parameters-
 - Customer needs and demands can be recorded over a period of time.
 - Sales record of retail stores before becoming a part of omni channel supply chain .

→ **Fraud Detection** - Big data analytics can help retailers fight fraud in a number of ways. For starters, they can use predictive capabilities to create a baseline sales forecast at the SKU level. If a product deviates noticeably outside of that range, it could indicate some fishy business. Fraud committed by employees can be tough to stop. But with the power of big data tech, internal controllers may be able to create more transparency into internal activities.

- Parameters-
 - Customer points can be awarded which will help the machine to learn about his previous track record which in turn help us detect fraudism.
 - Sales of a particular product should be kept on track so that it would aware us from possible fraudism.

Sources -

<https://enterrasolutions.com/blog/artificial-intelligence-and-omni-channel-operations/>

<https://www.forbes.com/sites/louiscolumbus/2019/02/17/10-ways-ai-machine-learning-are-revolutionizing-omnichannel/?sh=cec713e11815>