

OMNI-CHANNEL COMMERCE AND GENERATIVE AI

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ABSTRACT

Two of the buzzing words from the last 3 years or may I call the Post COVID era have been the Omnichannel Commerce Experience and GenAI(Generative AI). The COVID era presented challenges to the Retail giants to explore all their armors and bring the best user options and tie them together to create a unique experience of the technology boosted Digital Commerce and Fulfillment systems with a touch to the In Store Shopping satisfaction. Omnichannel Commerce was just being fruitful for Retailers now they are moving towards Omni Technology approach by using the capabilities and powers of enormous data-based Models and intelligence driven by GenAI. Chat GPT opened the box of pandora, and we can see the rush to uncover the hidden capabilities from GenAI has surpassed the Gold Rush of times. Some folks have already called out GenAI to be one of the biggest inventions of the current Century. Let's try to understand the initial reaction and impacts on the Omnichannel Commerce from GenAI.

Keywords: GenAi, GPT, Omni Commerce, Machine Learning, Models, Artificial Intelligence.

INTRODUCTION

Omnichannel commerce was an attempt by multiple retailers to make a stand and unique experience for the customers to provide providing seamless customer experiences across multiple channels often by creating technological and business bridges underneath the seamless shopping channel.

It boosted several times and now with the arrival of the GenAi, retailers are targeting another level of innovation and experience for the Customers. This time around it is an open discussion and decision for all retailers whether they invest more on the growth of technical capabilities or business perspectives and user experience. AI has been serving the retail industry for more than decade, but its use was limited to models for prospect business determination, fraud prevention models, relevance in search and optimized fulfilment options and routes for shipping etc. Now that the GenAI has presented itself with the potential to pretty much how oneself looks at each thing. It is kind of a time for retailers to introspect at their own businesses from scratch to discover potential use cases and deploy them before their competitors.

Early Exponents of Omnichannel Commerce:

There have multiple retailers or commerce industry exponents who have excelled their values by heavily investing in the potentials of creating the Omnichannel experience for their customers and stay in competitions with the E-Commerce digital giants like Amazon, eBay, Flipkart etc. Not that several industries tried to conceptualize and reap the benefit of the Omnichannel Commerce, Retailers from North America and others major markets

made a big stride with COVID. Examples of the Omni commerce excellence took the retail domain and technology platforms for Commerce industry flourished on creating Search, Inventory, Fulfillment, Rewards etc. with a view and capabilities of being channel agnostic. There are several examples where the Omnichannel experience helped the retailers to grow. Using local inventory from their nearest Physical stores to fulfill the online orders of the customers to improve the fulfillment time, Search capabilities to let the customer choose from specific channel and get fulfilled using the best channel from operations and cost effective for retailers made huge difference to their Profits and customer experience.

There are use cases of going way beyond these standard experiments like Online governance and scheduling of a Vaccines during the COVID by most of the pharmacy retailers. Letting the customer try their glasses and design as per the online measurements. Selling Cars online and delivering to the Home from remote fulfillment centers. Online Tele doctors paved way for safe and easy visit to doctors was also a classic example of how Omni Commerce platform got boosted in last decade.

As we have seen some examples of the OmniCommerce and we have an understanding of the enormous opportunities GenAI is presenting us with. Let's discuss some areas impact of GenAI is seen on OmniCommerce as well as what can be the potential targets.

a) Content Management

b) Personalization

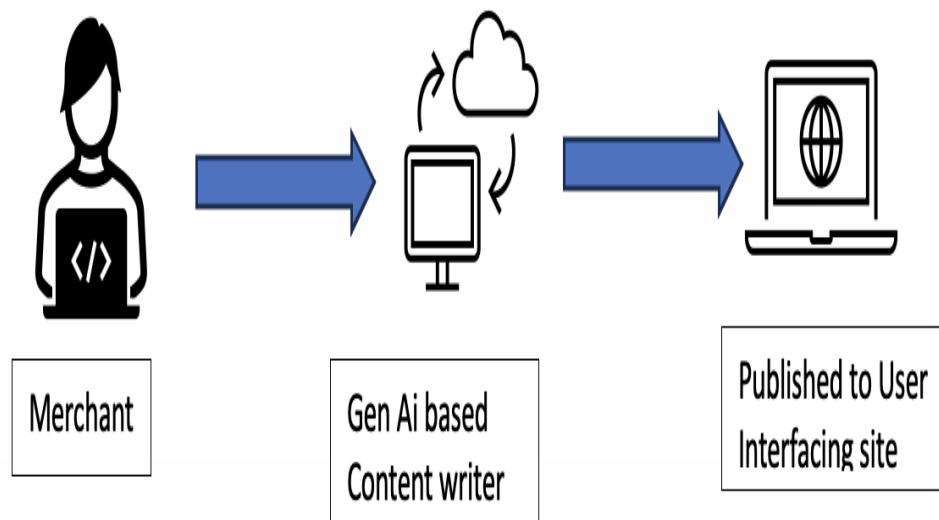
c) Fulfillment

d) Engineering and Resiliency

a) Content Management

Content Management is vastly classified as Text, images and videos for the OmniCommerce for now. Let's consider a typical Content writer or Content processing time for a product. A merchant team spends a good amount of time to enrich and get the text ready for publication with all rules, compliance, guidelines for location etc. Now with tool empowered by GenAI we do see the content writing has become easy and fast. Along with that it's rendering can be controlled and changed as per the location and guidelines of a Country, State, and County etc. This will make the like easy on one hand for Merchants to get their Products ready for market fast also if we look from the rendering point of view, we can have better layouts if it is governed by the Models having control on the user Experience based on the Geolocation of the user.

Below the Flow Diagram tries to just Outline the Flow how a GenAI transformer can be plugged in the content enrichment workflows for the Merchants and help them improve their relevance and compete with less time to market and fast and reliable content.

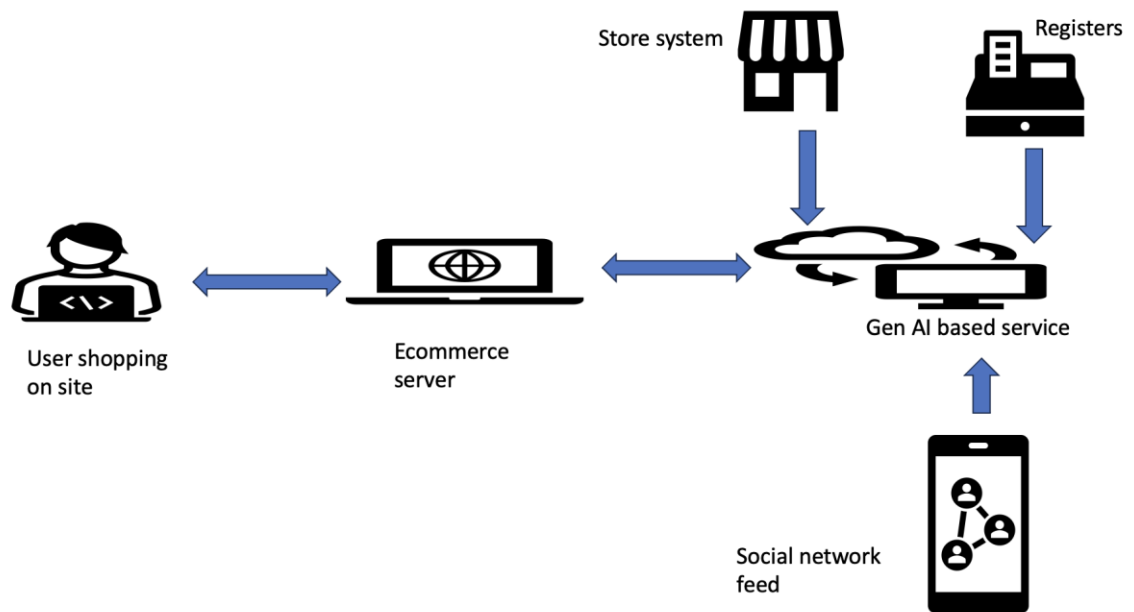


GenAI Based content publishing for Web sites.

b) Personalization

The whole concept of Customer obsession and retention takes its core idea how much Customer centric is the overall experience and often it's a take based on the customer distribution and majority trends based on location, mix of population, race, ethnicity takes preference. Consider watching a Football match and you see the adds Billboards reflect the Shops from your local city and supporting the local team for everyone. This seems a cool add and we can find it already tried and attempted for Media, same can be extended to the experience on a static site and you start getting the content and product alignments which makes ease for you and are relevant in your locality. This will help to make those outlying customers who get neglected and will help in overall retention and customer experience. The experience can be categorizing the key product, hierarchy change for the Departments and Search relevancy etc. Personalization is more often limited in thought process to Search and relevance products based on Purchase history or past patterns. But it can be well extending the umbrella to go more realistic and user centric, using the integration of Geo location and weather for instance, you don't want to serve Cold drinks where the Weather suddenly drops.

Eg Models can be tuned to a level where a particular city browsers online gets their teams merchandise and party stuff pushed to them while shopping if the model can keep an eye of the Games happening and standings of teams from cities.



The Personalized shopping experience based on Omni shopping and browsing history

c) Fulfillment

Fulfillment and User Experience while shopping are key components, and their success defines the level of success and depth of a retailers Omnichannel journey. The Fulfillment channels were aggressively invested and exploited during Pandemic and now we see various mixed approaches by retailers and other commerce industry giants being used with ease. Video doctor visit, Touchless Delivery, Delivery using multiple fulfillment channels mixed together looks a norm now. It is apparent the necessity to fulfill led to these Innovations, but now with GenAi at hand we do expect new explorations, like Drones are being tested and used for Shipping, Robotics delivering to the cars in parking. Innovative ideas of Robots performing Wallet parking etc. All these might now see a big jump with the GenAi making available the data and LLM powers to them. The Fulfillment needs make way for multiple other industries involved to evolve and innovate, like the Transportation and logistics industry is looking to use AI to optimize and organize their Routes and shifts to perfection to deliver in the least time with best quality.

d) Engineering and Technology

Engineering is generally linked and restricted to Software when we talk about GenAi, but it is a wrong perception. The vast data set and capabilities provided by GenAi can be used to take the manufacturing and processing industry components to next level. Automation and reuse can be the backbone to fight the high demand and keep the price in check. Software industry looks to be first one to embrace the challenge of GenAi and exploring the same. Cyber Security and Fraud prevention was always boosted with the developments in the AI space. Now we see Chatbots and other customer facing tools evolving rapidly and reaching a point where they can help a customer with as much ease as a Manual

intervention can. Tools based on LLM's are explored to make changes and software's more fast, reliable, and affordable. We might see the System monitoring and maintenance might soon be automated to next levels using the GenAi based Models which will eventually help the Software developers to focus more on the Innovations and new developmental work.

CONCLUSION

While we touched all the positive impact GenAi can bring to the Omnichannel Industry, let's talk some of the fears being thought of. The risk of Fraud and Cyber-attacks have multiplied, Data privacy and breach of confidentiality is another suspecting thing. So, the balance lies in using GenAi with Responsibility and hence it is power and will depend on which hands it goes into. There is a considerable push to make sure the GenAi and AI in general remains safeguarded and a responsible use of AI is used to help Humanity overall. The GenAi will provide enough change and momentum to the ever-evolving Commerce industry in coming days and might change the way we shop soon.

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