

Innovations in E-Commerce

Dr.T.VINILA

Assistant Professor of Commerce

Smt.N.P.Savithamma Govt Degree College(G) Chittoor.

Email : vinila_thadipalli@rediffmail.com

Abstract

Every day, new stores and business ideas emerge in the e-commerce industry, which is rapidly evolving. Consumer trends are constantly changing, especially in today's digital age. Retailers are becoming more aware of trends and using them to determine how to improve their products and services. To be successful in this new e-commerce environment, you must think and act creatively. To stay ahead of the competition and be successful in their e-commerce business, companies must be aware of the latest trends and be able to capitalize on them. Here is a list of current and emerging trends that will shape the industry in the coming years. Staying current allows you to remain agile, adapt, and evolve without falling behind. The eCommerce equation Revenue = Traffic X Conversion Rate X Average Order Value Using AI-powered analytics, businesses can gain valuable insights into consumer behaviour and preferences rapidly. For example, knowing which channels have better conversion rates can help you fine tune your strategy for those channels. Armed with this knowledge, personalized recommendations and offers can be created, reaching out to customers in a contextual manner that resonates with their needs. And when your customers think that you understand them, they'll prefer sticking to you.

This paper studies about retailing in E commerce, omni channel retailing, evolution of e commerce logistics.

Keywords: Innovation Retail, Commerce, Business.

Introduction:

With the advent of eCommerce, the retail landscape underwent a remarkable upheaval, changing how customers purchase and businesses run. Because of the digital revolution, convenience and accessibility now control the world's marketplace. However, in order to properly leverage the power of eCommerce, businesses must master the challenging realm of logistics. Modern logistics entails more than just transporting products; it also includes inventory management, providing rapid last-mile deliveries, simplifying returns, and getting data-driven insights. Thus, retailers must deal with a complex logistical environment as e Commerce grows, as this will determine their success or failure in this fast-paced era. According to Allied Market Research, the projected value of the worldwide logistics industry, which was estimated to be worth \$9,833.8 billion in 2022, is expected to rise to \$16,794.7 billion by 2032, increasing at a CAGR of 5.6% from 2023 to 2032.

Objectives of the study:

- Importance of e - Commerce
- Evolution of e - commerce logistics
- Advantages and disadvantages of E Commerce
- Issues faced by the consumers.

Need for the study:

To emphasises the need for such research to determine the present trend on e commerce with that of consumers.

Methodology:

Data and information is collected from various articles, websites , journals.

New trends and importance of eCommerce :

- **Omni channel Retail in E-commerce** : Brands are attempting to implement a smart strategy of providing customers with multiple channels to provide as seamless an experience as possible, from browsing to receiving their order, as one of the upcoming e-commerce trends in 2023. Many businesses now offer this type of experience in shopping, so businesses that cannot keep up may be left behind. To personalize successfully, merchants must focus on providing a consistent experience across multiple platforms.

- **Artificial Intelligence and Augmented Reality in Online Shopping :** Many customers are still reluctant to shop in-store because of the pandemic. Businesses have adapted to a more digital approach as a result of this hesitation. Visual commerce has addressed this concern about internet shopping by increasing the brand's visual appeal in order to increase sales. It enables brands to provide a more intuitive and engaging visual shopping experience, allowing customers to interact with products in a more immersive manner. That is why a significant increase in the use of augmented reality (AR) for products and services is anticipated, particularly in specific industries such as lifestyle and home decor, where customers can get a better feel of the product without having to see it in person.
- **Mobile Commerce is Driving the Market :** Allowing customers to shop using mobile devices is no longer an exception, but rather the new norm. In fact, it appears that the number of people using their smartphones to make purchases has steadily increased over the last few years. It is also expected that mobile commerce will be seen as one of the most important e-commerce development trends shaping the future. Shopping via mobile device is convenient. Customers can make purchases from any location, which is critical in today's world. Customers can easily conduct product research, compare prices, and make payments while on the go.
- **Multiple Paying Methods -** With today's rapid technological advancement, it is reasonable to anticipate that there will be even more ways to pay for goods and services online in the future. The need for faster, more secure transactions is driving this trend. Offering a variety of payment options is an excellent way to increase conversion rates. Furthermore, if customers can save their payment information on your website (and this process is secure), the next time they make a purchase, they will be able to check out faster.
- **Voice Search Commands for a Seamless Experience -** Voice search is quickly becoming one of the most popular methods of conducting online searches. It is an important aspect of e-commerce because it allows customers to discover products that they would not have discovered otherwise. This is especially useful for shoppers who don't know much about the product they're looking for but know what features they want. Voice-activated smart home appliances, which are part of e-commerce trends this year and in the near future, make it easier to conduct efficient searches. As a result, e-commerce retailers that use voice search technology are expected to advance in the coming years.

The Evolution of eCommerce Logistics :

In the early days of eCommerce, logistics operated as a basic support function, focusing primarily on the movement of goods from sellers to buyers. However, due to the increasing consumer expectations and the desire for personalised experiences the logistics landscape transformed dramatically into a complex ecosystem. Today, an accurate balance between technology advancement, strategic alliances, and a customer-centric mindset is required for effective eCommerce logistics. Technological advancements have revolutionised the sector, ushering in an era of smart warehouses, automated fulfilment, and real-time tracking. The shift towards customer-centricity has elevated expectations, demanding seamless last-mile deliveries and hassle-free returns.

Strategic alliances have emerged as a key driver, enabling businesses to leverage expertise and resources globally. Collaborations between eCommerce giants and logistics providers have streamlined operations and optimised supply chains. This transformation has led to an increased demand for logistics services that can adeptly navigate this intricate ecosystem. From predictive analytics for demand forecasting to eco-friendly packaging solutions, modern eCommerce logistics demands innovation and efficiency, underscoring its vital role in shaping the future of retail.

Challenges in eCommerce Logistics :

- **Inventory Management and Warehousing :** Within the logistical framework for eCommerce, smart warehousing, and efficient inventory management have become key foundations. Today's merchants use real-time data insights to optimise inventory levels across numerous locations, replacing static stockpiles. Processes for stock replenishment are streamlined by automated warehouse systems, which are supported by innovations like RFID tagging and AI-driven analytics. In addition to preventing stock outs and excess inventory, processes like demand forecasting, just-in-time inventory, and effective storage also offer a smooth customer experience and operational agility in the fast-paced world of online retail.
- **Last-Mile Delivery :** The last mile of the delivery route, also referred to as last-mile delivery, is a crucial area of conflict in the world of eCommerce logistics. Innovative solutions are needed during this crucial stage to overcome obstacles like urban congestion, delivery time windows, and rising customer expectations. Retailers are currently investigating novel approaches including utilising crowd

sourced networks, drone delivery, and autonomous vehicles. In addition, they can drastically lower operational costs and environmental impact while improving consumer satisfaction by optimising this complex network of effective routes and delivery methods.

- **Data-Driven Decision-Making :** In the dynamic realm of eCommerce, data-driven decision-making has emerged as a guiding star for successful logistics operations. The proliferation of data from various touch points offers invaluable insights, aiding retailers in optimising routes, predicting demand fluctuations, and fine-tuning delivery timelines. Cutting-edge data analytics and AI-powered tools empower retailers to unlock hidden patterns, enhancing operational efficiency and responsiveness. By harnessing this wealth of information, retailers can elevate their logistics strategies, offering customers expedited deliveries, personalised experiences, and a seamless journey through the digital marketplace.

Strategies for Successful eCommerce Logistics

- **Integrated Technology Solutions:** Effective eCommerce logistics management is now built on integrated technology solutions. Retailers now rely on thorough platforms that synchronise order processing, inventory control, and delivery tracking. They can take preventative actions, respond quickly to potential issues, and guarantee a flawless consumer experience thanks to this real-time synergy. The interconnection of these technologies provides unmatched visibility into operations, paving the path for improved supply chain management, streamlined logistics, and ultimately higher levels of consumer satisfaction in the always-changing world of online retail.
- **Collaborative Partnerships:** In order to effectively deal with the complex eCommerce logistics landscape, partnerships must be fostered. Retailers are forming strategic partnerships with suppliers, fulfillment centers, and logistics companies. These alliances enable smooth communication, speed up order processing, and build a strong supply chain network. Retailers can manage complicated issues, optimise inventory flow, and guarantee on-time delivery by combining their resources and experience. In the fast-paced world of eCommerce, this symbiotic relationship gives businesses a competitive edge, improves operational efficiency and responsiveness, and ultimately provides great customer service.

- **Sustainability and Eco-Friendly Practices:** Sustainability and eco-friendly practices have become non-negotiable requirements in eCommerce logistics in the era of increased environmental consciousness. Retailers are adopting environmentally friendly packaging strategies, enhancing delivery routes to reduce carbon emissions, and investigating alternative energy sources. Consumers who care about the environment respond favourably to these sincere efforts, enhancing company loyalty and reputation. Retailers can support a greener future and position themselves as responsible caretakers of the environment by integrating sustainable practices into their logistics strategy. This will help them achieve their business objectives while also advancing broader ecological objectives.

The Roadmap to eCommerce Logistics Victory: Retailers have been thrust into a dynamic environment where mastering logistics is essential to success as a result of the expansion of the eCommerce industry. Effective inventory management, cutting-edge last-mile solutions, data-driven insights, and cooperative partnerships are essential as digital shopping continues to redefine consumer expectations. Retailers can negotiate the challenging logistics environment by embracing technology, sustainability, and strategic alliances, assuring flawless consumer experiences while advancing their businesses towards long-term success in the midst of the eCommerce boom. Thus, recognising that in this dynamic ecosystem, logistics excellence is the real force behind retail success and the key to long-term growth.

In 2013, an eCommerce company had to spend just \$9 on acquiring new customers. They now spend almost \$30 — that is a 222% increase in CAC. While we've seen exponential growth in the eCommerce industry, with rapid expansion comes intensified competition, making it challenging for brands to stand out.

In the race to capture consumer attention and secure a market share, businesses often find themselves targeting the same audience with similar products or services. As a result, customer loyalty to brands has seen a steady decline. And this declining customer loyalty and skyrocketing CAC is the reason why eCommerce brands must prioritize customer retention. By focusing on retention, the customer lifetime value increases, which helps fight CAC. And the more customers purchase from you, the more loyal they become.

There are many ways to improve the retention rate, like having an omnichannel communication strategy. It's essential because modern consumers interact with brands through various touch points, such as social media, search engines, and websites. And you

never know from which channel they might buy your product. So you must create a seamless and consistent experience across all channels.

eCommerce brands should also leverage analytics and Artificial Intelligence (AI) to revolutionize how they understand and engage with their customers. Imagine if you could govern your business with mathematical certainty. If you had a formula to break down the business and help you understand what levers to pull for better performance.

Gamified loyalty programs also work wonders in retaining customers. Injecting an element of fun into your loyalty program entices customers to stay engaged with your brand, unlocking rewards and benefits as they progress through the levels. This fosters a sense of excitement and exclusivity, increasing the likelihood of repeat purchases.

eCommerce business owners must also understand that loyalty is no longer just about purchasing products; it's about creating a sense of belonging and involvement. And how do you create a sense of belonging? By building a thriving community. You should encourage user-generated content, facilitate discussions, and seek customer feedback to strengthen the bond between your brand and its community. The more engaged they are with you, the more they'll come back to you.

Long story short, customer retention and acquisition are not mutually exclusive concepts but rather two sides of the same coin. While acquisition efforts drive new customers to your business, retention strategies keep them coming back for more. By striking the right balance between the two, eCommerce brands can create a virtuous cycle that propels their growth in the fiercely competitive industry. Prem Bhatia, CEO and Co-Founder, Graas
Prem Bhatia is the CEO and Co-Founder of Graas, a company offering Growth-as-a-Service to eCommerce businesses worldwide. Prem is a serial entrepreneur and investor, with a career spanning over 20 years. He has worked closely in the areas of advertising, media and technology in several countries, including USA, UK, India, UAE, Singapore, and China.

Imagine stepping into a new city, an uncharted territory waiting to be discovered and explored. As you venture forth, picture yourself immersing in the vibrant culinary scene, ready to unlock a world of flavours and sensations. However, this time, a delightful twist awaits. Gone are the hours spent meticulously researching and explaining your vegan preferences, contemplating which cuisine would satisfy your discerning palate, or pondering over menu options that align with your dietary choices.

Through harnessing the power of generative AI (GenAI), quick service restaurants (QSRs) can now tailor personalised menus that effortlessly guide you to an array of delectable food options. Whether you find yourself amid a bustling metropolis or a charming town, this AI-enabled dining experience eliminates the worry of finding suitable food choices, allowing you to focus your attention on what truly matters to you.

With this ground-breaking technology, QSRs can go beyond simply providing food and cross instead into the realm of crafting memorable experiences. GenAI empowers restaurants to design seamless and personalised journeys that elevate their offerings and deliver high customer satisfaction, making each dining experience truly exceptional and unforgettable for every guest.

How Can GenAI Transform the QSR Industry

GenAI has emerged as a disruptive technology poised to reshape the QSR industry. While it is still in its early stages of adoption, the potential impact it holds is becoming evident. Forward-thinking QSRs have a unique opportunity to embrace this cutting-edge technology, leveraging it to proactively meet the ever-evolving expectations of consumers and gain a significant competitive edge in an increasingly crowded market.

By incorporating GenAI into their operations, QSRs can unlock a host of benefits. AI algorithms can analyse vast amounts of data, including customer preferences, purchasing patterns, and feedback, to generate tailored recommendations that resonate with individual tastes. This level of personalisation enhances the dining experience, fostering customer satisfaction and loyalty, and having the potential to revolutionise customer service.

Self-Service Redefined: GenAI empowers QSRs to implement self-service kiosks equipped with advanced speech and video recognition capabilities. Through this cutting-edge technology, customers can be effortlessly identified, enabling the system to recommend personalised menu items based on their unique profiles and past transactions. This seamless blend of self-service and personalisation delivers memorable dining experiences.

Streamlined Operations: With GenAI, the process of generating receipts and kitchen orders can be automated. By incorporating customer preferences into the system, orders can be swiftly and efficiently processed, leading to streamlined operations and accurate billing. Automation can transform and optimise the restaurant's workflow, enhancing efficiency, mitigating errors, and improving productivity.

Unleashing Customisation: QSRs can tap into the power of GenAI to curate unique combos that cater to individual preferences. By leveraging the potential of this technology, restaurants can deliver customised experiences that delight and satisfy their customers. This remarkable ability to cater to particular tastes not only sets these establishments apart, but also cultivates a loyal customer base.

Real-Time Menu Optimisation: Gen AI can enable dynamic menu optimisation in real time. By considering essential factors such as customer preferences, ingredient availability, and pricing, restaurants can maximise sales while minimising waste. This data-driven approach ensures that menus are continuously fine-tuned to meet customer demand and drive profitability.

Innovating for Success: By embracing the transformative potential of GenAI, QSRs can delve into uncharted waters and introduce unique and innovative food combinations that captivate customers craving novel dining experiences. This focus on innovation could differentiate these establishments from their competitors and position them as trailblazers in the industry.

The blend of Gen AI and advanced personalisation unlocks a world of possibilities for QSRs. Not only are restaurants able to deliver next-level culinary experiences to their customers with unlimited food options, combinations, and flavours, but they can also enhance their operational efficiency and tap into new revenue streams with customised offerings that cater to individual preferences. Additionally, real-time menu optimisation empowers these forward-thinking establishments to create a synergy of technology, customisation, disruption, and stellar dining experiences, placing them at the forefront of innovation and enabling them to attract and retain customers searching for novel and exceptional culinary adventures.

What must QSRs(quick-service restaurant. QSRs are also called fast-food restaurants. QSR is the acronym for a quick-service restaurant.) **do to embrace Gen AI.**(Generative artificial intelligence (also generative AI or GenAI) is artificial intelligence capable of generating text, images, or other media, using generative models.

Food giants, for example, can enhance their menus with customisation, add new recipes, and craft intriguing and viral marketing campaigns using just Chat GPT answers. They can utilise Gen AI like no other. While the potential of this technology is limitless, to stay relevant and increase brand loyalty, QSRs need to leverage Gen AI at the first level of

customer interaction when they walk in. Some of the ways in which this can be done are as follows:

Virtual Sales Ops for Improved Speed and Ease of Order Placement

Chatbot: QSRs can install speech- and text-enabled chatbots for registering orders. The orders will automatically be placed by the bots through an interactive online conversation wherein the relevant details will be captured. To further enhance the experience, the bots can also be enabled with recommendations and order-tracking features. **Self-Service Kiosk:** QSR users can enjoy automated order placement and bill generation through speech- and UI-enabled kiosks at restaurants. A recommendation engine can be integrated at the backend, offering custom recommendations based on user profile.

Accentuated Customer Delight with Personalised and Immersive Experiences

Personalised Recommendation: QSRs can create custom menus and offer personalised food recommendations to the customers via the website/ app, chatbots or even kiosks, based on their preferences, purchase behaviours, and market basket analysis.

Personalised Delivery Note: QSRs can provide personalised text notes to customers with food delivery/pick-up options, providing a delightful experience.

Live Order Image Generation: QSRs can create immersive experiences for the customers by generating order images as customers keep adding food items in the cart/kiosk.

Product Ideation for Increased Customer Satisfaction and Revenue

Combo Curation: Based on food items frequently bought together at the QSR, custom combos can be created for the customers as per their preferences and ongoing trends data. Even new product packaging or new recipes can be developed using GenAI to deliver customer satisfaction and profits.

Offer Curation: Based on latest customer behaviour, orders, and market trends, QSRs can curate new offers best suited for the customer base. The offer display can include text descriptions, images, and suggested discounts, depending on the business goals.

Marketing/Merchandising for Effective Brand Awareness and Reach

Creative Generation: GenAI can be used to make visually appealing content (image, text, videos) to reach more customers and drive sales by developing a holistic marketing strategy including collaterals such as digital and print ads, banners, kiosk displays, social media campaigns, and captions.

GenAI has the potential to redefine the future of QSRs by turning diner experiences into a sustainable advantage. However, before businesses capitalise on GenAI's unique mix of potential business impact and technology disruption, they need to understand the technology's complexities. The buzz is out there—and so is the potential. By developing a fuller understanding of GenAI's unique combination of problem-solving, engineering, and science, QSRs can be better prepared to make informed, grounded decisions and maximise the ROI. Muthumari S, Global Head of Data and AI Studio, Brillio Muthumari S is the head of Data Science at Brillio. She is a seasoned Analytics professional with a decade of experience enabling better decision-making for sales and marketing functions across industries such as eCommerce, Media, Manufacturing, Logistics, and High Tech.

References:

Achtenhagen, L., Melin, L., & Naldi, L. (2013). Dynamics of business models—strategizing, critical capabilities and activities for sustained value creation. *Long Range Planning*, **46**(6), 427–442.

Akturk, M., Ketzenberg, M., & Heim, G. (2018). Assessing impacts of introducing ship-to-store service on sales and returns in omnichannel retailing: A data analytics study. *Journal of Operations Management*, **61**, 15–45.

Alexander, B., & Cano, M. (2020). Store of the future: Towards a (Re) invention and (Re) imagination of physical store space in an omnichannel context. *Journal of Retailing and Consumer Services*, **55**, 101913.

Alonso, R., Dessein, W., & Matouschek, N. (2008). When does coordination require centralization? *American Economic Review*, **98**(1), 145–179.

Amit, R., & Zott, C. (2012). Creating value through business model innovation. *MIT Sloan Management Review*, **53**(3), 41–49.

Arend, R. J. (2013). The business model: Present and future – beyond a Skeumorph. *Strategic Organization*, **11**(4), 390–402.

Asmare, A., & Zwedle, S. (2022). Omnichannel retailing strategy: A systematic review. *The International Review of Retail, Distribution and Consumer Research*, **32**(1), 59–79.

Attaran, M. (2020). Digital technology enablers and their implications for supply chain management. *Supply Chain Forum: An International Journal*, **21**(3), 158–172.

Baldwin, C. Y., & Clark, K. B. (1997). Managing in an age of modularity. *Harvard Business Review*, **75**, 84–93.

Barbosa, J., & Casais, B. (2022). The transformative and evolutionary approach of omnichannel in retail companies: Insights from multi-case studies in Portugal. *International Journal of Retail & Distribution Management*, **50**(7), 799–815.

Bell, D., Gallino, S., & Moreno, A. (2014). How to win in an omnichannel world. *MIT Sloan Management Review*, **56**(1), 45–53.

Bell, D., Gallino, S., & Moreno, A. (2018). Offline showrooms in omnichannel retail: Demand and operational benefits. *Management Science*, **64**(4), 1629–1651.
