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# Evolution of Competitive Landscape in U.S. E-commerce: A Comparative Study on User Growth Models and Consumer Loyalty of Leading Platforms

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**Abstract:**
This study analyzes the recent progression of the U.S. e-commerce market, characterized by sustained rapid growth and continuous innovation. Our study focuses on the competitive evolution of major platforms like Amazon, eBay, Shopify, Walmart, and Target, highlighting significant shifts in user behaviour driven by mobile adoption and omnichannel expectations and corresponding platform strategies like enhanced logistics and personalized marketing. The analysis employs quantitative methods, specifically time-series analysis and comparative visualization, graphing five-year trends in user counts and Gross Merchandise Value (GMV) for leading platforms using data from public filings and market reports. Comparative bar charts illustrate key customer loyalty metrics, including detailed satisfaction ratings and the impact of membership programs on repeat purchase rates. The research details platform-specific competitive advantages, such as Amazon's logistics network or Shopify's ecosystem, and evolving user trends. Our study also underscores the critical necessity for further exploration into future technologies, such as AI applications in personalization, evolving regulatory changes, and long-term shifts in consumer behaviour post-pandemic.

**Keywords:** E-commerce; America; Prominent Platforms

## 1. Introduction

The U.S. e-commerce market has experienced a profound transformation over the past decade, driven by accelerating digital adoption and further catalyzed by the COVID-19 pandemic. This rapid growth has not only reshaped consumer behavior but has also intensified competition among leading platforms such as Amazon, eBay, and Shopify. As digital commerce continues to evolve, it has been increasingly critical

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to understand the competitive dynamics among major platforms.

This study seeks to contribute to curret research by examining the competitive landscape of U.S. e-commerce through three aspects. First, our study analyzes the user growth trajectories of Amazon, eBay, and Shopify from 2019 to 2024, identifying differences in platform strategies and user acquisition patterns. Second, this study compares customer loyalty metrics, including satisfaction scores and the influence of membership programs such as Amazon Prime and eBay Plus, which play a critical role in retaining users and enhancing platform stickiness. Third, the study investigates how e-commerce business models and loyalty schemes, specifically Walmart+ and Target Circle, shape consumer spending behavior and decision-making. Through this multipul approach, our study provides a comprehensive assessment of platform competition in U.S. e-commerce and its implications for both corporate strategy and public policy.

# 2. Literature Review

## 2.1 . E-commerce Competitive Landscape

A substantial amount of research investigates market share trends and competitive strategies in the U.S. e-commerce sector. Research frequently examines the competitive techniques utilized by prominent entities such as Amazon and Walmart, concentrating on pricing tactics, product variety, logistics and fulfillment, and customer service [1-3]. Market share analysis sometimes entails scrutinizing data from sources such as eMarketer, Statista, and corporate financial reports to monitor fluctuations in market position over time. These studies frequently highlight elements that influence market share fluctuations, including effective marketing campaigns, technical advancements, and strategic acquisitions [4-5].

Technological innovation is essential in influencing competition within e-commerce. Organizations that effectively create and execute novel technologies, whether sophisticated recommendation systems, tailored shopping experiences, or groundbreaking payment solutions, frequently acquire a competitive advantage. Likewise, efficient marketing strategies are crucial for acquiring and maintaining customers. Research frequently examines the influence of diverse marketing channels (e.g., social media marketing, search engine optimization, email marketing) and their efficacy in generating sales and fostering brand loyalty. The relationship between technology capabilities and marketing tactics is a critical topic of research.

## 2.2 . User Growth Models

Existing research on the determinants of user acquisition and retention: Studies in e-commerce examine the elements that affect consumer behavior [6-8]. These factors can be generally classified into: Factors connected to the product, including quality, pricing, selection, and distinctive characteristics, impact user acquisition [9-10]. Platform-related issues, including website/app usability, security, payment methods, and customer support, influence both acquisition and retention. Marketing factors: Efficient advertising, promotions, and loyalty programs facilitate user acquisition and promote recurring purchases. Social influence: Evaluations, endorsements, and social media interactions shape user perceptions and choices.

Current studies frequently utilize quantitative methodologies (e.g., statistical modelling, A/B testing) to evaluate the influence of these variables on essential metrics such as customer acquisition cost (CAC), customer lifetime value (CLTV), and churn rate. Qualitative methods, such as customer interviews and focus groups, can yield further insights into consumer motives and experiences.

# 3. Research Methodology

For the data research, the study will utilize the eMarketer, Statista, and corporate financial reports to monitor fluctuations in Walmart, Amazon and Shopify. Moreover, existing research of user acquisition and retention tend to use quantitative studies, for instance, set up the statistical modeling, A/B testing, regression analysis and customer acquisition cost (CAC). The qualitative research is supposed to apply the customer interviews, focus groups and case studies.

Data analysis tools (excel for data cleaning, calculation): importing the database into the excel and create the pivotable or chart. (Walmart began its e-commerce journey in 2000 with the launch of Walmart.com. While initial efforts were modest, Walmart significantly expanded its online presence, particularly after 2009 by opening the platform to third-party sellers. The COVID-19 pandemic further accelerated Walmart's e-commerce growth, leveraging its vast network of physical stores for order fulfillment and boosting online sales.) compare the Walmart pre-market value with post-value.

# 4. Results

This section delineates the results of the comparative analysis on user growth models and consumer loyalty across prominent U.S. e-commerce platforms. The investigation utilizes five years of data, concentrating on Amazon, eBay, Shopify, Walmart, and Target. Data sources comprised eMarketer, Statista, and corporate financial data, augmented by prior studies on user acquisition and retention. Data cleansing and analysis were conducted with Excel.

### 4.1 Overviews of Amazon, eBay and Shopify

Amazon dominates the global e-commerce sector with an extensive user base and a wide array of services. Its competitive advantage resides in the Amazon Prime ecosystem, which fosters user loyalty through benefits such as complimentary shipping, exclusive offers, and streaming content. The company has experienced steady growth in both subscription services and Prime memberships. Subscription revenue increased from $2.76 billion in 2014 to $40.2 billion in 2023, demonstrating the company's capacity to attract and retain users. As of 2023, Amazon Prime subscribers in the U.S. totaled 174.9 million, with forecasts estimating 180.1 million by 2024. Table 1 shows the growth of Amazon prime users from 2019-2024.

**Table 1. US Amazon Prime Users from 2019-2024**

| Year | US Amazon Prime Users |
|---|---|
| 2019 | 126 million |
| 2020 | 146.1 million |
| 2021 | 161.7 million |
| 2022 | 168.3 million |
| 2023 | 174.9 million |
| 2024 | 180.1 million |

Data source: https://ir.aboutamazon.com

EBay functions within a specialized marketplace, emphasizing auctions and pre-owned items. Despite experiencing consistent growth in its user base until 2018, peaking at 175.5 million active users, the platform has since declined to 135 million users in 2023. eBay's financial performance has varied, recording a profit of $13.6 billion in 2021, followed by a loss of $1.27 billion in 2022, and subsequently rebounding to $2.77 billion in 2023. The decrease in users and erratic financial performance underscores its difficulty in competing with major players such as Amazon and Shopify. Figure 1 and 2 show the trend of eBay users and net income.

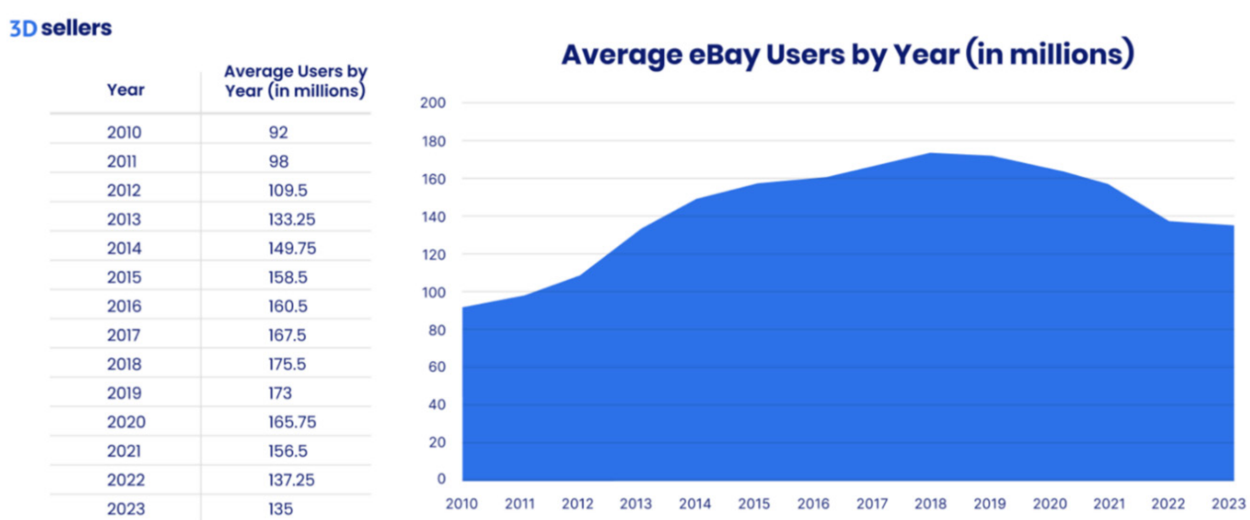


**Figure 1. Average eBay Users from 2010-2023**

Data source: https://www.3dsellers.com/ebay-statistics

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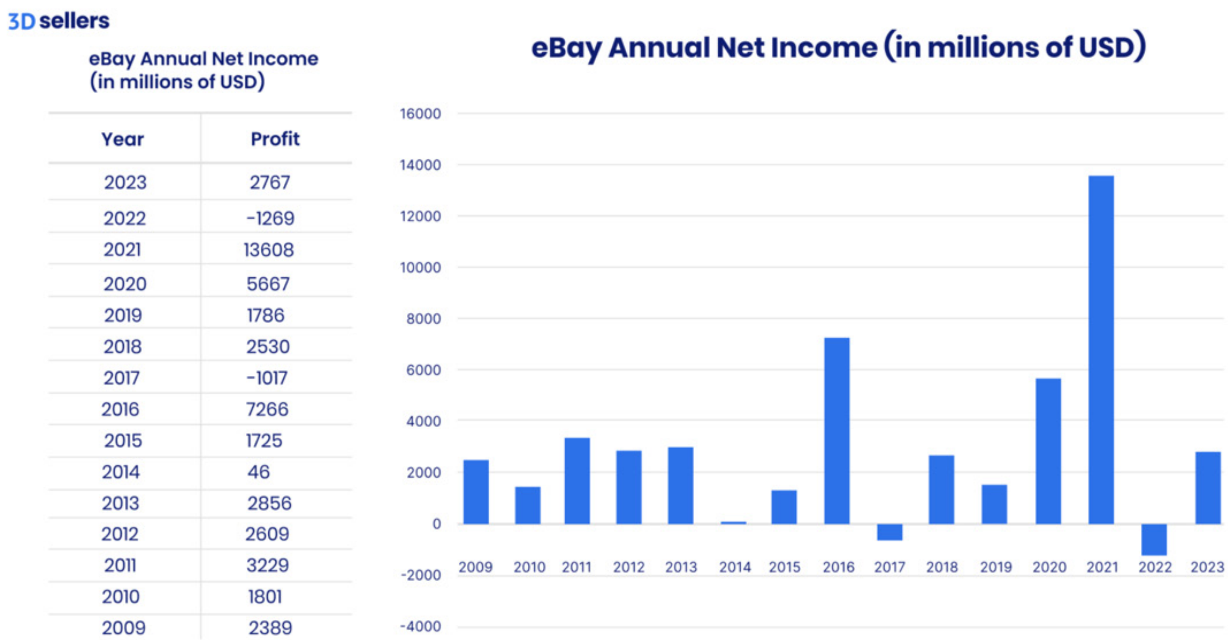



| Year | Profit |
|---|---|
| 2023 | 2767 |
| 2022 | -1269 |
| 2021 | 13608 |
| 2020 | 5667 |
| 2019 | 1786 |
| 2018 | 2530 |
| 2017 | -1017 |
| 2016 | 7266 |
| 2015 | 1725 |
| 2014 | 46 |
| 2013 | 2856 |
| 2012 | 2609 |
| 2011 | 3229 |
| 2010 | 1801 |
| 2009 | 2389 |

**Figure 2. eBay Annual Net Income from 2009-2023**

Data source: https://www.3dsellers.com/ebay-statistics

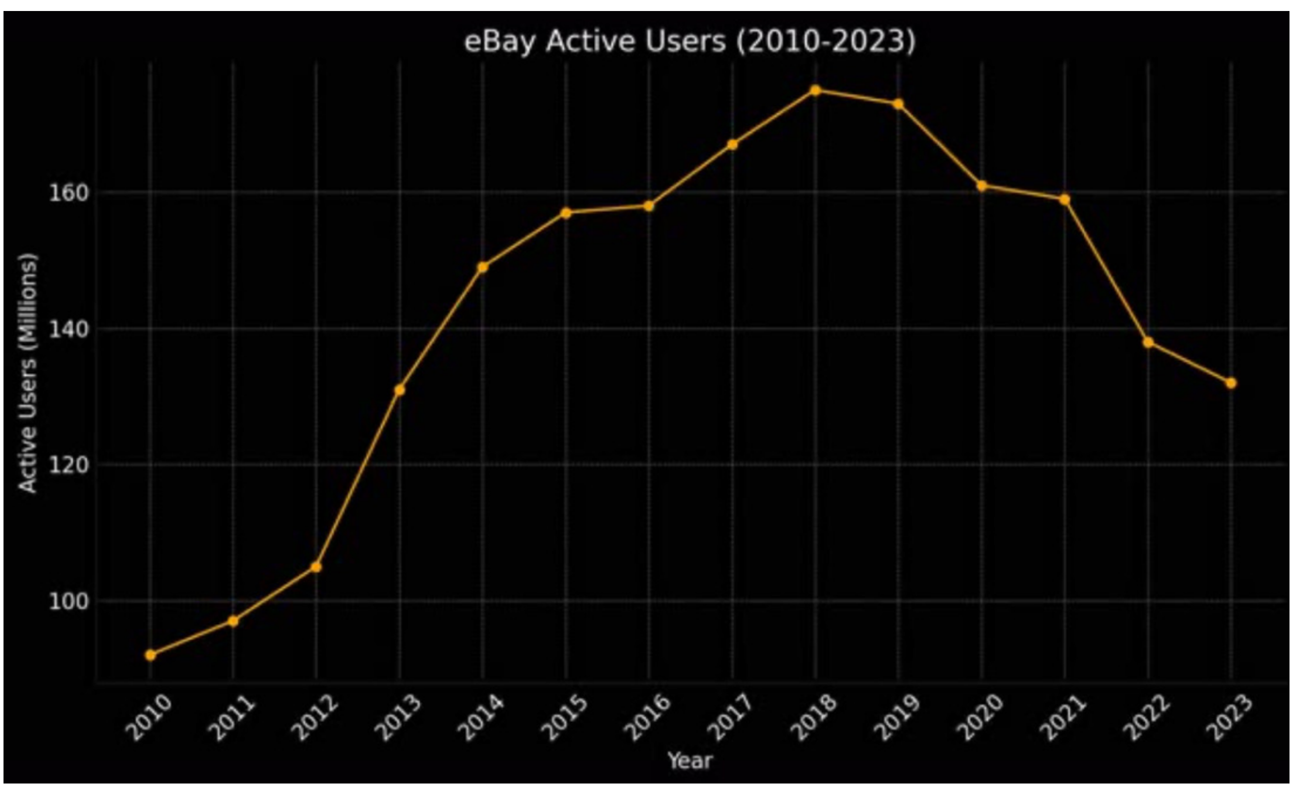



**Figure 3. eBay Active Users form 2010-2023**

Data source: https://www.3dsellers.com/ebay-statistics

Shopify adopts a distinctive strategy by enabling small and medium-sized businesses (SMBs) to create their online presence. In contrast to Amazon and eBay, Shopify prioritizes the expansion of merchants over individual consumers. Its Gross Merchandise Volume (GMV) has expanded swiftly, propelled by its user-friendly platform, international presence, and integrations with various e-commerce tools. Shopify's business model excels by empowering small and medium-sized businesses to attract and retain their customer bases, thereby indirectly fostering the platform's overall user growth.

## 4.2 GMV Growth Trends

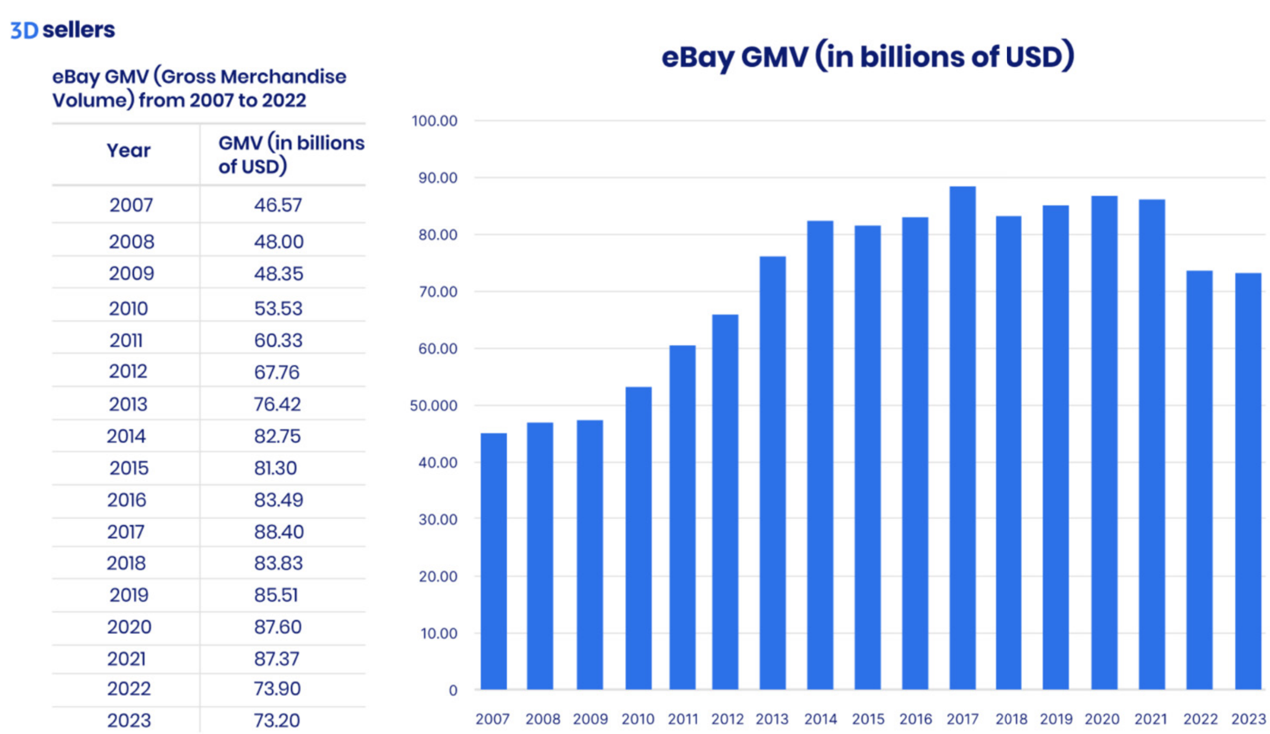
Amazon's gross merchandise volume growth has been steady, bolstered by its extensive product range, exceptional logistics, and robust brand credibility. Table 2 shows the trend of Amazon subscription service revenue from 2014 -2024.

**Table 2. Amazon Subscription Service Revenue from 2014 -2024**

| Year | Amazon Subscription Service Revenue |
|---|---|
| 2014 | $2.76 billion |
| 2015 | $4.47 billion |
| 2016 | $6.39 billion |
| 2017 | $9.72 billion |
| 2018 | $14.17 billion |
| 2019 | $19.21 billion |
| 2020 | $25.21 billion |
| 2021 | $31.77 billion |
| 2022 | $35.22 billion |
| 2023 | $40.2 billion |
| Q1 2024 | $10.72 billion |
| Q2 2024 | $10.87 billion |

Data source: https://ir.aboutamazon.com

EBay's rise in gross merchandise volume has plateaued, indicating difficulties in acquiring new customers and retaining current ones. Figure 4 shows the trend of eBay's gross merchandise volume.




| Year | GMV (in billions of USD) |
|---|---|
| 2007 | 46.57 |
| 2008 | 48.00 |
| 2009 | 48.35 |
| 2010 | 53.53 |
| 2011 | 60.33 |
| 2012 | 67.76 |
| 2013 | 76.42 |
| 2014 | 82.75 |
| 2015 | 81.30 |
| 2016 | 83.49 |
| 2017 | 88.40 |
| 2018 | 83.83 |
| 2019 | 85.51 |
| 2020 | 87.60 |
| 2021 | 87.37 |
| 2022 | 73.90 |
| 2023 | 73.20 |

**Figure 4. eBay GMV from 2007 -2023**

Data source: https://www.3dsellers.com/ebay-statistics

Shopify has witnessed significant GMV expansion at-

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tributed to rising merchant adoption and an emphasis on facilitating global business growth.

### 4.3 Factors Influencing User Growth

Technology and innovation play a key role in driving user growth across e-commerce platforms. Companies that prioritize advancements in user experience and technical capabilities—such as Amazon with its AI-powered recommendation systems—tend to attract and retain a larger user base. Equally important is the efficiency of logistics and fulfillment, as evidenced by Amazon's Prime shipping, which enhances customer satisfaction and loyalty through timely deliveries. Competitive pricing strategies are another crucial factor, drawing budget-conscious consumers by offering attractive deals and promotions. Amazon's Prime Day and eBay's bidding format are prime examples of how exclusive offers and unique pricing models can boost user engagement and platform stickiness.

## 5. Case Extension: Target Circle and Walmart

Target's loyalty program, Target Circle, focuses on personalized rewards and fostering community involvement. It provides customized discounts based on customers' purchase histories, allows members to allocate portions of Target's charitable contributions to local groups of their choice, and is free to join—making it broadly accessible. These features contribute to customer retention by encouraging repeat purchases and cultivating brand loyalty. Additionally, the program's community engagement aspect strengthens emotional connections with the brand, while Target's use of consumer data helps refine product offerings and improve user experience. In parallel, Walmart has developed its Walmart+ membership program and embraced an omnichannel strategy that integrates physical stores with digital platforms. Walmart+ offers benefits such as free delivery, fuel discounts, and exclusive services, directly rivaling Amazon Prime. This approach supports membership growth and enhances convenience for consumers. Walmart's low-cost pricing strategy further reinforces its competitive position, especially among price-sensitive shoppers. Meanwhile, platforms like Shopify and eBay pursue different growth strategies: Shopify expands through international market entry and flexible customer service, while eBay focuses on niche segments like collectibles and second-hand goods, though it faces challenges in broader markets.

## 6. Conclusion

This study emphasizes the dynamic and diverse development of the U.S. e-commerce market, highlighting the essential influence of user growth, platform-specific strategies, and consumer loyalty mechanisms on competitive results. This research employs a comparative analysis of Amazon, eBay, Shopify, Walmart, and Target, illustrating how each platform utilizes unique strategies—such as subscription-based models, seller empowerment, loyalty initiatives, and omnichannel integration—to attract and keep consumers. The results indicate that technical innovation, customized experiences, and effective logistics are crucial for enhancing user engagement and maintaining market dominance.

Furthermore, the analysis highlights an increasing difference in platform trajectories. Amazon maintains its supremacy through extensive size and service integration, but Shopify's merchant-centric approach challenges conventional user acquisition models. Simultaneously, eBay's stagnation and Walmart's digital revolution exemplify the obstacles and opportunities inherent in adjusting to a progressively digital-centric market.

As consumer behaviour evolves due to global upheavals like the COVID-19 pandemic, future research should investigate emerging technologies such as AI-driven personalization, the effects of data privacy regulations, and enduring changes in digital consumer loyalty. Comprehending these changes will be essential for both platform strategy and legislators aiming to maintain equitable and competitive market dynamics in the digital economy.

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