Interactive Websites as Major Drivers of Growth and Innovation in Apparel Retail Industry

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Abstract: Interactive websites have become a critical component in driving growth and innovation in the apparel retail industry. The integration of interactive features such as virtual try-on, 360-degree product views, and personalized product recommendations has transformed the way customers engage with apparel retailers online. Interactive websites allow customers to experience the product and brand in a more immersive and engaging way. Virtual try-on, for example, allow customers to visualize how apparel items would look on them without physically trying them on. This feature has not only increased customer satisfaction but has also reduced the rate of returns, which can be costly for retailers. Interactive websites also facilitate the integration of augmented reality (AR) and virtual reality (VR) technology into the apparel retail industry. AR technology can provide customers with an immersive experience by overlaying digital elements onto the real world. For example, a customer could use AR technology to see how a piece of apparel would look in a specific environment, such as at a wedding or on a beach. VR technology, on the other hand, can provide customers with a fully immersive experience, allowing them to explore a virtual store and try on apparel in a simulated environment. This study is done primarily to identify the emerging trend of interactive websites among apparel retailers in India and to assess how it is enhancing consumers experience and impacting their purchase intention.

Keywords: Interactive websites, Apparel retail industry, Virtual try-on, 360-degree product views, Augmented reality (AR) and Virtual reality (VR).

1. Introduction

In today's digital age, interactive websites have become a driving force behind growth and innovation in various industries, including the apparel retail industry. As consumers increasingly turn to online shopping, businesses must adapt and leverage technology to capture their attention and drive sales. Interactive websites offer a dynamic and engaging platform for retailers to connect with their target audience, enhance the shopping experience, and foster innovation in the ever-evolving fashion landscape.

The apparel retail industry has witnessed significant changes due to advancements in technology and the growing popularity of e-commerce. The online fashion retail market share in India is expected to increase by USD 22.97 billion from 2021 to 2026, and the market's growth momentum will accelerate at a CAGR of 18.83%.

![Online Fashion Retail Market in India 2022-2026](image)

Source: https://www.technavio.com/report/online - fashion - retail - market - industry - in - India – analysis

The apparel retail industry has witnessed a significant transformation with the rise of e-commerce and the advent of interactive websites. These platforms go beyond the traditional online stores by incorporating interactive elements such as virtual try-on, personalized recommendations, interactive lookbooks, and user-generated content. They create a seamless and immersive shopping experience that replicates the in-store environment, ultimately driving growth and customer loyalty. One of the key roles of interactive websites in the apparel retail industry is to attract and retain customers. With the
vast array of options available online, consumers have become more discerning in their choices. Interactive websites allow retailers to differentiate themselves by offering unique features and personalized experiences. Virtual try-on, for instance, enable customers to virtually "try on" clothes and visualize how they would look before making a purchase, reducing uncertainty and enhancing customer satisfaction.

Moreover, interactive websites facilitate data collection and analysis, providing valuable insights into customer preferences and behavior. Retailers can gather information on browsing patterns, purchase history, and demographic data to tailor their offerings and marketing strategies accordingly. By leveraging this data, companies can deliver personalized recommendations, customized promotions, and targeted advertisements, effectively increasing customer engagement and conversion rates.

This paper aims to explore the role of interactive websites in transforming the online shopping experience for customers in the apparel retail industry.

2. Literature Review

Interactive websites have become a crucial driver of growth and innovation in the apparel retail industry. This literature review explores relevant studies and research to understand the role of interactive websites in driving growth and fostering innovation within the industry.

Interactive websites offer features that significantly enhance customer engagement in the apparel retail sector. Customers can actively participate in the shopping experience, exploring products, and interacting with various elements. The term interactive technology includes all the different forms of computer mediated technologies and digital environments (Javornik, 2016). Kwon and Lennon (2017) found that interactive technology features such as virtual try-ons and personalized product recommendations positively influence customer engagement by creating a more immersive and personalized experience. Singh and Jain (2018) highlighted that interactive websites enable apparel retailers to showcase their unique brand identity, communicate their values, and differentiate themselves through innovative features. The ability to offer a seamless and engaging online shopping experience sets innovative companies apart and allows them to attract and retain customers. Customers who engage with these interactive features are more likely to spend more time on the website, view a wider range of products, and have a higher likelihood of making a purchase.

2.1 Interactive websites features

Virtual Try-Ons

Virtual try-ons have emerged as a popular interactive feature in apparel retail websites. This technology allows customers to virtually try on clothing items without physically being present in a store. By leveraging augmented reality (AR) or virtual reality (VR) technology, virtual try-ons provide a realistic and immersive experience for customers.

Several studies have investigated the impact of virtual try-ons on customer behavior and satisfaction. A research study by Jung and Jin (2018) examined the effects of virtual fitting room technology on consumers' online purchase intentions. The study found that the use of virtual try-on significantly increased consumers' perception of fit, leading to higher purchase intentions. Another study by Yoo and Kim (2017) explored the effects of virtual fitting room experiences on customer satisfaction. The findings revealed that customers who used virtual try-on reported higher satisfaction levels compared to those who did not, indicating the positive impact of this interactive feature.

Augmented Reality and Virtual Reality:

The integration of augmented reality (AR) and virtual reality (VR) technologies in interactive apparel retail websites has transformative effects on customer engagement and purchase behavior. AR and VR allow customers to virtually try on clothing, visualize how products would look on them, and experience a simulated shopping environment. Chen et al. (2020) noted that the use of AR and VR technologies in interactive websites leads to higher levels of customer satisfaction, increased purchase intentions, and reduced product returns. These technologies provide a more immersive and realistic shopping experience, enabling customers to make more informed purchase decisions and reducing the uncertainty associated with online shopping. AR/VR and AR/VR fall under interactive technology.

360-Degree Product View

360-degree product views allow customers to examine apparel items from all angles, providing a comprehensive view of the product. This interactive feature allows customers to rotate and zoom in on the product, simulating an in-store experience where they can closely inspect the details and quality of the garment.

The integration of 360-degree product views has been shown to enhance customer engagement and decision-making. According to a study by Kim and Lennon (2015), the availability of 360-degree product views positively influences customers' perceived product quality and trust. Customers perceive products with 360-degree views as more transparent and trustworthy, leading to increased purchase intention.

In addition, research by Lee, Park, and Yoo (2019) examined the effects of 360-degree product views on online purchase intentions and found that customers who utilized this interactive feature were more likely to have higher purchase intentions compared to those who did not. The study highlighted the importance of providing a comprehensive view of products in enhancing customer satisfaction and driving online sales.

Personalized Product Recommendations

Personalized product recommendations leverage customer data and algorithms to provide tailored suggestions to customers based on their preferences, browsing history, and purchase behavior. This interactive feature offers customers a curated selection of apparel items that align with their individual tastes and preferences, enhancing the overall shopping experience.
Numerous studies have emphasized the significance of personalized product recommendations in driving customer satisfaction and purchase intentions. For instance, a study by Verhoef, Neslin, and Vroomen (2007) investigated the impact of personalized recommendations on customer responses. The findings revealed that personalized recommendations positively influenced customer satisfaction and purchase behavior, leading to increased sales and revenue for retailers.

Furthermore, a study conducted by Chen and Chen (2014) examined the effects of personalized recommendations on customer trust and purchase intentions in the apparel industry. The results indicated that personalized recommendations significantly influenced customers' trust, which, in turn, positively impacted their purchase intentions.

Customer Satisfaction & Purchase Intention

Research by Jung and Jin (2018) found that virtual try - ons significantly increased consumers' perception of fit and purchase intentions. This feature not only increases customer satisfaction but also reduces the rate of returns, saving costs for retailers.

Kim and Lennon (2015) demonstrated that the availability of 360 - degree product views positively influences customers' perceived product quality and trust. Customers who can closely inspect the details and quality of garments are more likely to make informed purchase decisions, leading to higher satisfaction and increased sales.

Interactive features on websites have a direct impact on customer purchase intentions in the apparel retail industry. Personalized product recommendations, driven by customer data and algorithms, offer tailored suggestions based on individual preferences. Verhoef, Neslin, and Vroomen (2007) highlighted the positive effects of personalized recommendations on customer satisfaction and purchase behavior. By providing customers with curated selections aligned with their preferences, retailers can increase purchase intentions and drive sales.

Furthermore, interactive websites contribute to building trust and confidence in customers, which influences their purchase intentions. Kim and Lennon (2015) found that the availability of interactive features, such as 360 - degree product views, positively affects customers' perceived trust in the retailer and the product.

3. Research Objectives

The primary objective of this research is to examine the role of interactive websites in driving growth and fostering innovation in the apparel retail industry. Specifically, the research aims to achieve the following objectives:

1) Identify the interactive features implemented in apparel retail websites.
2) Explore the adoption and implementation of interactive technologies in enhancing the interactive nature of these websites.
3) Assess the impact of interactive websites on customer engagement.
4) Evaluate the effects of interactive websites on customer satisfaction and purchase intentions.

4. Methodology

Secondary Data, Data was collected by reviewing all sources of literature, websites etc.

5. Findings

Interactive features implemented in apparel retail websites:

1) Virtual Try - On: Virtual try - on technology allows customers to virtually try on clothes, shoes, or accessories without physically visiting the store. Users can upload their photo or use their webcam to see how different garments or accessories would look on them. This feature helps customers make informed purchasing decisions and reduces the need for returns.

2) Augmented reality (AR) and virtual reality (VR) technologies: In recent years, augmented reality (AR) and virtual reality (VR) technologies have emerged as powerful tools for enhancing the shopping experience in the apparel retail industry. AR and VR offer interactive and immersive features that allow customers to engage with products in innovative ways, revolutionizing the traditional online shopping experience. This introduction provides an overview of the role of AR and VR in interactive apparel retail websites and highlights their impact on customer engagement, satisfaction, and purchase behavior.

3) AR technology overlays digital elements onto the real world, creating a blended experience where customers can visualize how apparel items would look on them or in different environments. By using a smartphone or wearable device, customers can virtually try on clothing, accessories, and even experiment with different styles, colors, and sizes. This interactive feature eliminates the need for physical fitting rooms and provides a convenient and personalized experience for customers.

4) On the other hand, VR technology creates a fully immersive virtual environment where customers can explore virtual stores, interact with products, and even simulate trying on clothing items. Customers can navigate through virtual aisles, examine products from different angles, and make purchasing decisions.

5) Product Customization: Many apparel retailers have embraced product customization as a way to cater to individual preferences and provide a unique shopping experience. Customization features enable customers to personalize items by selecting colors, patterns, or adding personalized elements such as monograms or graphics. The adoption of customization features varies across different retailers, with some offering extensive customization options, while others provide more limited choices.

6) 360 - Degree Product View: The implementation of 360 - degree product views has become increasingly common in apparel websites. This feature allows customers to interactively explore products from different angles, zoom in for closer inspection, and get a more detailed understanding of the design, fabric, and features. The adoption of 360 - degree product views is driven by the desire to provide customers with a more immersive and realistic online shopping experience.
7) User Reviews and Social Sharing: The integration of user reviews and social sharing features has become a standard practice for many apparel websites. User reviews provide valuable feedback and insights to potential customers, influencing their purchasing decisions. Social sharing features enable customers to share their favorite products on social media platforms, increasing brand visibility and potentially driving traffic to the website.

8) Personalized Recommendations: The adoption of personalized recommendation engines is on the rise in the apparel industry. By leveraging customer data and algorithms, retailers can provide tailored product suggestions based on a customer's browsing history, purchase behavior, and preferences. Personalized recommendations enhance the shopping experience by helping customers discover relevant products.

9) Interactive Lookbooks and Style Guides: Lookbooks and style guides showcase curated outfits or collections, providing fashion inspiration to customers. Interactive elements such as clickable hotspots, hover-over information, or embedded videos can be included to offer additional details about the featured products or styling tips.

10) Live Chat and Virtual Assistants: Interactive customer support features such as live chat or virtual assistants provide real-time assistance to customers. These features help shoppers with product inquiries, sizing questions, order tracking, and other concerns, improving the overall customer experience and increasing conversion rates.

11) Gamification and Rewards: Some apparel retail websites incorporate gamification elements to engage users and incentivize their shopping experience. This can include interactive quizzes, challenges, or loyalty programs that offer rewards, discounts, or exclusive access to limited editions or pre-sales.

These interactive features are just a few examples of how apparel retail websites strive to create engaging and user-friendly experiences for their customers. Implementing such features can differentiate a website from competitors, increase customer satisfaction, and ultimately drive sales.

6. Adoption of these Technologies

The adoption rate of interactive websites in the apparel industry has been steadily increasing in recent years. As consumers’ expectations for online shopping experiences have evolved, retailers are recognizing the value of incorporating interactive features into their websites.

1) Virtual Try - On: The adoption of virtual try-on features in apparel websites is also on the rise, driven by advancements in augmented reality (AR) and artificial intelligence (AI) technologies. According to a survey conducted by Gartner in 2020, around 15% of global retailers planned to offer virtual try-on options within the next three years. The COVID-19 pandemic has also accelerated the adoption of virtual try-on technology as a way to enhance the online shopping experience and reduce return rates.

2) AR/VR Technology: VR technology has been utilized by some apparel retailers to create virtual showrooms and virtual runway experiences. These immersive environments allow customers to explore clothing collections, view fashion shows, and get a more engaging and interactive experience than traditional static images or videos. VR can transport customers to a virtual fashion world, providing a unique and memorable engagement opportunity.

3) In-Store AR Experiences: Some apparel retailers have implemented AR experiences within their physical stores to enhance the shopping experience. These experiences can include AR mirrors that overlay digital information on top of physical products, such as displaying additional product details, styling suggestions, or virtual accessories. AR is used to blend the digital and physical worlds, providing an interactive and informative experience for customers.

4) 3.60 - Degree Product View: A study by Retail Perceptions found that 62% of consumers prefer to see products from multiple angles before making a purchase. This indicates the importance of 360-degree product views in apparel websites to provide customers with a comprehensive view of the product.

5) Product Customization: According to Deloitte's 2020 survey on consumer preferences, around 36% of consumers expressed interest in personalized products. This indicates the potential value of product customization features on apparel websites, allowing customers to tailor products to their preferences.

6) Social Sharing and User Reviews: A survey by BrightLocal in 2020 found that 87% of consumers read online reviews for local businesses, indicating the significance of user reviews in influencing purchase decisions. Social sharing buttons also encourage customers to share their favorite products, which can lead to increased brand visibility and organic reach.

7) Wishlist and Save for Later: According to an eMarketer report in 2020, around 62% of consumers use wishlists on e-commerce websites. Wishlists provide customers with a way to save and track products they are interested in, leading to potential conversions and repeat visits.

It's important to note that the adoption rate of interactive websites may vary among different retailers and regions. Larger, established brands often have more resources and capabilities to implement interactive features, while smaller retailers may take longer to adopt them due to various factors such as cost, technological readiness, and customer demand. Additionally, technological advancements and changing consumer expectations continue to drive the adoption of interactive features in the apparel industry. Some of the examples given below showcase the adoption and implementation of interactive features, and they highlight the potential impact on consumer response and business results. Here are a few examples:

1) Nike: Nike's website incorporates various interactive features to enhance the user experience. They offer a virtual try-on feature called "Nike Fit," which uses augmented reality to help customers find the right shoe size. Nike also provides 360-degree product views, allowing customers to see products from multiple angles. Additionally, they have a Nike By You
customization feature that enables customers to personalize and design their own shoes.

2) ASOS: ASOS, a popular online fashion retailer, utilizes several interactive elements on its website. They offer a 360-degree product view for many of their items, allowing customers to examine products in detail. ASOS also provides a Style Match feature that uses machine learning algorithms to suggest similar products based on an uploaded image or a selected product. This interactive feature helps customers discover relevant products and enhances the shopping experience.

3) H&M: H&M's website features a virtual dressing room called "Dress-Up," where users can select a model and try on various clothing items virtually. It allows customers to mix and match outfits, experiment with different styles, and see how the clothes would look when worn. H&M also incorporates customer reviews and ratings for products, providing valuable feedback to potential buyers.

4) Levi's: Levi's website offers a customization feature called "Customization at Levi's." It allows customers to personalize their denim products by selecting different washes, finishes, and customizing details like patches or embroidery. The interactive customization feature enables customers to create unique and personalized jeans.

5) Threadless: Threadless, an online apparel store specializing in graphic t-shirts, has an interactive community-driven design feature. They allow artists and designers to submit their artwork, and the community votes on the designs they want to see produced. This interactive element engages customers in the design process and fosters a sense of community and creativity.

These examples showcase how interactive features are integrated into the websites of prominent apparel retailers, aiming to enhance the user experience, provide personalization options, and encourage engagement and exploration. While these examples may not be specific to the Indian apparel retail industry, they demonstrate the possibilities and potential impact of interactive websites in the broader context of the apparel retail industry.

Interactive websites impact on customer engagement: Interactive websites had a significant impact on customer engagement in the apparel retail industry. By incorporating interactive features, retailers can provide a more immersive and personalized shopping experience, leading to increased customer engagement. Here are some key ways in which interactive websites impact customer engagement:

Interactive features such as 360-degree product views, zoom functionalities, and detailed product descriptions allow customers to thoroughly explore products online. This interactive experience replicates the in-store experience of physically examining garments, which can build customer trust and confidence in the purchase decision. Virtual try-on features and customization options enable customers to visualize how clothing items will look on them or tailor them to their preferences. These interactive tools provide a sense of personalization and allow customers to engage actively in the product selection process. This engagement can lead to higher satisfaction and conversion rates. User-generated content, such as customer reviews and ratings, also plays a crucial role in engaging customers and influencing their purchase decisions. Interactive websites leverage customer data and algorithms to provide personalized product recommendations. By tailoring recommendations based on a customer's preferences and browsing behavior, retailers can deliver more relevant and targeted suggestions, increasing the likelihood of customer engagement and conversion. Some interactive websites incorporate gamification elements or interactive content to engage customers. This can include quizzes, polls, contests, or interactive lookbooks. By making the shopping experience more interactive and entertaining, retailers can capture and maintain customer attention, leading to increased engagement and time spent on the website. Interactive websites that seamlessly integrate with other channels, such as mobile apps or physical stores, offer customers a consistent and connected experience. This omni-channel approach allows customers to engage with the brand across multiple touchpoints, deepening their connection and fostering long-term engagement.

Overall, interactive websites have revolutionized customer engagement in the apparel retail industry. The positive impact of interactive websites on customer engagement can lead to enhanced customer satisfaction and purchase intention.

Evaluation of the effects of interactive websites on customer satisfaction and purchase intentions:

Increased Customer Satisfaction: Interactive features on websites, such as personalized recommendations, virtual try-ons, 360-degree product views, and interactive product configurators, have been found to enhance customer satisfaction. These features provide a more engaging and personalized shopping experience, allowing customers to explore products, visualize how they look, and customize their choices. As a result, customers perceive higher value and satisfaction with their online shopping experience.

Enhanced Purchase Intentions: Interactive websites have been shown to positively impact customers' purchase intentions. Features like virtual try-ons and 360-degree product views allow customers to assess the fit, quality, and overall appeal of products before making a purchase. This increased visual and interactive experience helps customers make more informed purchase decisions, leading to higher purchase intentions.

It's important to note that the specific impact of interactive websites may vary depending on factors such as the nature of the interactive features, target audience, website design, and overall customer experience provided. Additionally, research in this field is ongoing, and new studies continue to explore the effects of interactive websites on customer satisfaction and purchase intentions in the apparel retail industry.
7. Conclusion

Interactive websites have revolutionized the apparel retail industry by providing customers with an immersive and engaging shopping experience. The integration of virtual try-ons, 360-degree product views, and personalized product recommendations has significantly impacted customer satisfaction and purchase intention. Furthermore, the integration of AR and VR technology offers endless possibilities for enhancing the online shopping experience. As the industry continues to evolve, it is essential for apparel retailers to embrace interactive websites and stay ahead of the competition to drive growth and innovation.

References