Use of Augmented Reality and Virtual Reality in E-Commerce



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# Short Profile

Saurabh Kumar is currently working as Assistant Professor at Indian Institute of Management Indore in Information Systems area. He is working in the field of data mining and business analytics. Have worked earlier as a Visiting Research Scholar at Beedie School of Business (Simon Fraser University), Canada. Undergone Doctoral Studies in IT& Systems area of IIM Lucknow. Have publications in reputed journals like Industrial Marketing Management (ABDC-A\*), IEEE Transactions on Engineering Management (ABDC-A), Behaviour and Information Technology (ABDC-A), Journal of Enterprise Information Management (ABDC-A) and so on.

**Aarushi Jain** holds her Ph.D. in Management Information Systems (MIS) from the Indian Institute of Management (IIM), Indore. Prior to this, she completed her B.Tech from Krishna Institute of Engineering & Technology (KIET), Ghaziabad. She has also worked as Software Development Engineer (SDE) at Fiserv India Pvt. Ltd, Noida. She has published her research paper in Journal of Retailing and Consumer Services. She has presented research papers in several reputed national and international conferences in the MIS domain. She has also published a book chapter published in Elsevier, Netherlands. Her research interests include online word of mouth, business analytics & machine learning.





#### Agenda

- Introduction
- Literature Review
- Research Gap
- Contribution
- A Case Study of Clothing Industry
- Implications

# Augmented Reality

- Augmented reality (AR) is a technology that allows users to experience a computergenerated virtual environment that is overlaid on top of the real world.
- It is achieved by using a combination of hardware and software, such as cameras, sensors, and display devices, to superimpose digital information onto the user's view of the physical world.
- AR can be experienced through a variety of devices, including smartphones, tablets, smart glasses, and headsets.
- AR enhances the user's perception of reality by adding digital objects, images, or information to the real-world environment.
- AR can be used in various applications, such as gaming, education, entertainment, and retail.
- In retail, AR technology can be used to create immersive shopping experiences for customers, allowing them to preview products in a virtual environment, try on clothes or accessories, and see how furniture or decor items will look in their homes.

#### Research Gap

- The existing studies cover a range of AR applications, including education and training, cultural heritage, design and manufacturing, retail and marketing, maintenance and repair, healthcare, remote collaboration, training and simulation.
- However, there are not many studies which talks about the applications of Augmented reality in retail settings and that too in mobile devices.

#### Contribution

- The current study attempts to bridge the gap and proposes a tool for customers in e-commerce domain.
- Customers are required to enter the details, including their size, colour preferences and design preferences.
- The automated recommender tool will then provide the best-fit recommendations for the customers. The customers can also provide the images, which will be used to recommend a specific product to the customer.
- The 3-D mapping technology is used to display the look and feel of the product on the image provided. These tools can change how shopping for clothing is done on the e-commerce platform.

## Practical Application in Clothing Industry

- The fashion retailer ASOS has implemented an AR tool on its mobile app that uses 3-D mapping technology to enable customers to virtually try on clothes before making a purchase.
- The tool, called "See My Fit," allows customers to enter their height, weight, and body shape, and it generates a 3-D model of the customer that can be used to show how the clothes will fit and look on them.
- Customers can also see how the clothes will move and adjust as they move, giving them a more realistic and immersive shopping experience.
- The tool has been well-received by customers, with many reporting that it has helped them make more informed purchase decisions and reduced the need for returns.

### Implications

- The study has important implications for category managers on ecommerce platforms.
- The tool can help category managers identify customer preferences and tailor their product offerings accordingly.
- It can also help managers optimize their inventory management by tracking customer preferences and stocking products accordingly.
- Additionally, the tool can help managers track customer satisfaction and make improvements to their offerings based on customer feedback.

# Thank You!

Questions