

# Augmented Reality in E Commerce Literature Review

Posted on October 9, 2026

View this essay online:

<https://academic-master.com/augmented-reality-in-e-commerce-literature-review/>

## Introduction

This narrative literature review examines selected studies published between 2017 and 2023 on augmented reality in e-commerce, consumer engagement, virtual product presentation and supporting technologies. It synthesizes the supplied literature rather than reporting a new experiment or a systematic search. The studies cover different applications, methods and settings, so their findings should be interpreted within their individual contexts.

## Research on Augmented Reality and Online Retail

Adikari et al. (2020) [1] developed an augmented reality virtual dressing room using a Microsoft Kinect V2 depth sensor. The system measures body dimensions, including the chest, waist, hips, thighs and knees, to identify clothing sizes. A Windows Presentation Foundation application handles measurements, while Unity 3D overlays three-dimensional clothing on the user in real time. The prototype also supports gender identification and gesture-based interaction. The authors reported an average body-measurement error below 10%. This result concerns measurement accuracy; it does not establish consumer satisfaction or long-term purchasing outcomes. The study illustrates a depth-sensor approach to virtual fitting rather than a conventional webcam-based, two-dimensional web application.

Qiao *et al.* 2019 [2] suggested that as mobile Web AR can be created as a lightweight, cross-platform, and affordable solution for end-to-end delivery of MAR, MWAR had the potential to become a useful and common solution that can easily scale to millions of end users. The primary obstacles to the introduction of MWAR are a lack of standards, Web browsers' inefficient dense computing, and mobile networks' high real-time communication latency. The good news is that these issues may be substantially mitigated by the recently created 5G and Beyond 5G (B5G) cellular networks by leveraging techniques like network slicing, device-to-device communication, and mobile edge computing. examined the challenges and potential for MWAR in the 5G era. In order to provide a

scalable, adaptive, and straightforward to deploy MWAR solution, the design and development of a generic service-oriented architecture was then described. On a 5G experimental network that was really deployed using cooperative configurations, the performance of the MWAR5 system was assessed. discussed the lessons learned throughout development and deployment as addition to some exciting potential future strategies for MWAR over 5G and B5G networks.

Kowalczyk *et al.* 2021 [3] contrasted the benefits of augmented reality (AR) with the effectiveness of web-based product presentation. The researchers created a consumer response model and evaluated how IKEA Place app and mobile site customers behaved. The findings indicated that although web-based product displays are superior in terms of media usefulness, AR is superior in terms of immersion and enjoyment. The findings showed that emotional reactions have an impact on how people behave in response to AR features. Retailers could improve system quality, product informativeness, and reality congruence to promote media utility and engagement as reuse intents of AR apps develop from enjoyment and usefulness. High levels of purchase intent were obtained, and engagement increased. Product liking increases as a result of the greater contact, which in turn encourages trust in the products selected.

Turner 2022 [4] addressed some of the issues with epistemology that AR systems raise. the Real-World Web, a near-term augmented reality application that by integrating the virtual and physical worlds, has the potential to dramatically revolutionise how people engage with digital information. It was claimed that three current epistemic issues in the digital age—the issue of digital distraction, the issue of digital dishonesty, and the issue of digital divergence—could be made worse by the Real-World Web (RWW). The RWW is prepared to give updated versions of these issues in the shape of the problem of other enhanced minds, the augmented attention economy, and the augmented scepticism. To assist root and direct the discussion's speculative character, it provides a phenomenological description of virtual objects as perceptual affordances based on a variety of empirical experiments on augmented reality. A few proposals for design and policy were taken into account to lessen the epistemic hazards that AR technology poses.

Yim *et al.* 2017 [5] utilised Watches and eyeglasses are used to demonstrate how effective augmented reality (AR) is as an aid for online shopping. Study 1 compared an AR platform with a conventional website to assess the effectiveness of AR. By encouraging greater novelty, immersion, enjoyment, and utility, which results in favourable evaluations of the medium, the data showed that augmented reality (AR) offers superior communication benefits over web-based product presentations. With an emphasis on engagement and vividness, Study 2 contrasted consumer assessments of items using augmented reality vs. the web. Contrary to the web condition, where no significant paths between interactivity and immersion and between prior media experience and media

innovation are originated, it is found that immersion mediates the relationship between interactivity/vividness and two outcome variables—usefulness and enjoyment—in the AR condition. In order to comprehend consumer reactions to AR, opinion mining is performed to look at participants' subjective opinions about it.

Chandra and Kumar 2018 [6] evaluated using the technology-organization-environment (TOE) theoretical framework, and a number of factors influencing organisational adoption intentions of AR were offered. Analysis of organisational AR adoption for e-commerce will reveal key factors that companies took into consideration when integrating AR technology to enhance client purchase experiences. The study focused on the interactions between organisational, technical, and environmental factors that influence whether a corporation would use augmented reality for e-commerce. a sample of prospective adopters from India, Singapore, and the US were used to evaluate the suggested study approach. It has been demonstrated how significant factors including customer preparedness, competitive advantage, senior management backing, and technological know-how may affect a company's decision to adopt augmented reality for e-commerce. The discussion's ramifications for practises and research are also included.

Kumar 2022 [7] aimed to current works on AR in online procurement, identified the causes, motives, effects, typology, theoretical lenses and methodological tools. The education also meant to identify the key lines of inquiry for additional research. Findings: Customer experience mediates the process by having a considerable impact on, hedonic, perceived risk, utilitarian and experiential value, which in turn influences attitudes, support for decision-making, and behavioural intentions. The top journals, publications, theories, countries, and methodologies were also recognised in the study. The study provided a comprehensive framework for comprehending how customers interact with augmented reality when they purchase online. The study made suggestions for more studies in the fields of consumer engagement, augmented reality marketing, the social aspects of augmented reality, and its downsides.

Yavuz *et al.* 2021 [8] studied the issues affecting the utilisation of mobile augmented reality in Turkey. The application "Augment" was utilised throughout part of the research study's interviews, despite the fact that MAR and AR are often studied throughout the research period. comprised of experimental study with three distinct, quantitative components. At least a hundred variables were taken from published works. The findings indicated that security and privacy are the two main variables that affect how MAR apps are used. Following these two in significance are, in that order, simplicity of use, 3D model visual quality, and ease of learning. When creating a MAR application, it is advised that designers and developers take these five factors into account. centred on identifying the variables that affected how MAR apps were used. Performance speed, Security, display screen, and

location tracking are a few examples of current problems with MAR applications. User acceptability of the new skill is one of the issues asserting its acceptance in a rapidly developing sector like MAR. The structures that company and application developers consider were also highlighted by this investigation.

McLean and Wilson 2019 [9] researched to determine how augmented reality (AR) elements on retail mobile applications might increase [customer brand engagement](#). Augmented reality has arisen as a new tool for businesses to interact with customers as a result of the increasing usage of smartphones. Many forward-thinking companies have already implemented augmented reality (AR) technology into their mobile applications, despite the fact that consumer markets for AR are still in their infancy. The study identified the factors influencing brand engagement through merchants' mobile applications and the results of brand engagement connected to augmented reality using a web-based survey of 441 customers. In the study, a new set of augmented reality concepts, such as novelty, characteristics, interactivity, and vividness, were introduced. It then demonstrated how these characteristics affected subjective standards, perceived utility, and enjoyment—all essential components of a technology's acceptance. Brand engagement via the retailer's AR mobile application is influenced by favourable impressions of AR qualities and technological adoption factors. The results show that AR-enabled brand interactions increase consumer satisfaction with the app experience and future intents to utilise the brand. Major practical ramifications of the discovery include the potential application of augmented reality technology by merchants.

Kim *et al.* 2017 [10] described a range of new AR explorations, and topics pertinent to the current advancement of foundational technology and applications are examined. The majority of the literature is then historically reviewed, and this is reinforced by the mentioned articles in varied depths. The significant themes include taxonomy, the key tracking and detecting technologies, the secondary hardware and software podiums, and the domain-specific applications. This study provided an overview of the advantages and constraints of the competing and complementary technologies as well as the diversity of research in the arena of augmented reality. presented a significant problem with augmented reality systems—namely, how well the SW and HW platforms can be integrated with the actual world—and then displayed popular augmented reality apps for real-world interactions.

Caboni and Hagberg 2019 [11] researched on augmented reality (AR) in transaction by detailing, defining and debating meanings of Augmented Reality, requests of augmented reality that are pertinent for sellers, and the worth AR offers for sellers and customers. a review of the most recent AR applications in commerce, as well as research on AR in business-related literature. presented a succinct explanation of augmented reality (AR), a breakdown of its essential elements, and an explanation of how it varies from virtual reality. Additionally, it included instances of the in-store,

online web-based, and mobile app-based AR apps, which are the three primary kinds of AR requests utilised in transaction. The study also detailed the unique benefits that shops and customers may receive from AR applications. contributed a summary of a recently developed yet quickly spreading subject that hasn't been fully covered. Both scholars and retail professionals might benefit from it since it identifies areas that require more study.

Elveny *et al.* 2021 [12] investigated the product name, looked up and used as a guide for grouping the same goods from five separate websites. Jaro Winkler Distance was the technique used to categorise the items in online stores. developed a system that can aggregate items from five distinct websites with the highest degree of similarity product as the result. The online shop's product grouping's accuracy using Jaro-Winkler Distance was 81.27% out of 20 search test runs. Jaro-Winkler Distance is a precise approximation string-matching method that has never been applied to matching item names. Jaro-Winkler Distance is a string measure used to determine the editing distance between two strings. The amount by which a character is transposed to move from one word to another is the distance between two strings. If the string starts with the same character, Jaro Winkler Distance employs prefix scale to boost distance accuracy.

Ljubisavljević *et al.* 2021 [13] created an augmented reality-based online shop. The analysis of augmented reality technologies was done in the first section of the article. The investigation of the potential applications of augmented reality (AR-commerce) will be the main emphasis of the description of the ideas of e-commerce. It was also examined if it would be possible to include augmented reality into already implemented plans for the growth of electronic shops. The creation of an online store utilising WooCommerce solutions was demonstrated in the paper's practical section. The online store incorporated augmented reality-based services to aid clients in their online purchases. The performance of the designed system was monitored using the proper techniques.

Berman and Pollack 2021 [14] centred on a six-step methodology for the effective planning and execution of AR: Identified the ways in which AR might support the achievement of marketing goals; identified the relevant goods, distribution channels, and target markets for AR; made a choice between several AR application kinds; developed AR applications; assessed alternate AR organizational structures; and assessed the effectiveness of AR programmes. Marketers are given the data they need to organize and carry out a fruitful augmented reality (AR) strategy. discussed how marketers will be affected by AR's impending development.

Lam *et al.* 2021 [15] showed off the A2W browser, an AR to online content recommendation tool that is context-aware and integrated into a continuous user-centred internet surfing experience made possible by AR headsets. As a demonstration application to show the effectiveness and value of the

A2W framework, we created the A2W browser on an AR headset. According to our reference system's content-based sifting technique, users of the A2W browser should be able to see AR-driven web contents. 20 participants in the experiments found that utilising the A2W browser's adaptive UIs and recommendation engine might save up to 30.69% more time than using a smartphone. As a result, A2W-supported internet browsing on workplaces makes it easier to get the suggested information and does so 41.67% faster than normal web glancing.

Lixăndroiu *et al.* 2021 [16] examined the similarity in views between standard electronic internet buying and augmented reality-based electric trade. examined how the two modes of electronic trade were affected by personality factors and attitudes towards the Internet. demonstrated that the use of augmented reality dramatically increases internet shoppers' purchase intentions. Revealed relationships between personality characteristics and online shopping habits, with neurosis and directness to new knowledges being linked to a propensity to buy goods connected. A high external locus of control and low emotional stability, on the other hand, have been demonstrated to be personality qualities that may predict impulsive purchasing. The Zugara application served as the foundation for the quasi-experimental design. Because of its simplicity and lack of related costs, a browser-based tool for the AR dressing room was chosen. This technology allows users to manage the software with hand motions while away from their computers while also enabling them to see virtual clothing on themselves in our simulated world.

Cannavo and Lamberti 2020 [17] explored by existing AR, VR and Blockchain knowledges are outlined, demonstrating how they helped businesses and theoretical investigators address problems impacting outdated facilities and goods in a relatively diverse range of request sectors. Occasions that may encourage this fusion of technology and give them a boost are also highlighted. The selling and purchase of several items have been made easier thanks to the Blockchain. There is a case shown for integrating the technologies under discussion. It is suggested to use CryptoAR Wallett, which makes use of augmented reality to visualise items and bitcoin to control product sales. Early research revealed that the CryptoAR Wallet provided a better degree of engagement and the opportunity to visualise more information when compared to a typical wallet interface built on a 2D graphical user interface. Users became more confident and satisfied as a result of the better experience, which increased their willingness to utilise e-wallets and e-commerce services.

Pinaria *et al.* 2021 [18] aspired to develop a system that would make it possible for the neighbourhood to get information and purchase the food they want without having to leave their houses. Researchers may more easily design, create, and implement this culinary application for their study using the RAD approach. With the use of information technology and web-based applications, a system for purchasing and selling food in Manado City has been effectively created. The seller

(admin) and the customer (user) are the two halves of this system. Use the admin section to input, modify price, and add or remove food material data. Users are expected to peruse the data on food prices and make purchases in the interim. This application may help buyers and sellers of food make online purchases, as well as teach them how to use web browser technology and properly share sales and purchases.

Sadeeq *et al.* 2020 [19] recognised e-trade's development and impacts, as well as how they affect present business viewpoints and job creation. Thanks to mobile devices, web-based enterprises are growing swiftly on a global basis. Internet penetration over people's distinctive dimensions internationally is another factor. Studies done in industrialised nations still show benefits and gains-growth, but as enterprises shift to emerging and immature countries. E-commerce is making a channel for global trade, and analysts anticipate sustained future growth. The effects of globalisation have slowed down global fashion, increased data innovation, and diffused remote observer recovery learning. Despite the aforementioned, the way marketing is done and markets are run will be greatly influenced by e-business.

Munoz *et al.* 2023 [20] provided a synopsis of e-Commerce with an emphasis on academic research. Examine the historical background of e-commerce, discuss theoretical frameworks, and consider e-commerce models. addressed new trends as well as the most significant issues impacting the e-Commerce industry. This is made more challenging by the fact that the e-Commerce industry is global and ever-evolving, with innovative new business models and products being supplied quickly.

## Comparison of Selected Studies

The following table summarizes each cited study. Limitations describe the scope of the evidence and considerations when applying its findings.

| Citation | Author(s)           | Aim                                                                                                          | Technique Used                                                                                      | Limitation(s)                                                                                                                              |
|----------|---------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| [1]      | Adikari et al. 2020 | Develop an augmented reality virtual dressing room with body measurement and real-time 3D clothing overlays. | Microsoft Kinect V2 depth sensing, a WPF measurement application, Unity 3D and gesture interaction. | The reported error concerns body measurements. Consumer satisfaction and long-term purchasing outcomes are not established by that metric. |

|     |                       |                                                                                                                 |                                                                               |                                                                                                                                                                                                                                                                                                                        |
|-----|-----------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [2] | Qiao et al. 2019      | Investigate the potential of <a href="#">mobile Web AR (MWAR)</a> , as well as its difficulties and advantages. | addressed issues relating to the development of B5G and 5G networks.          | The study depends on the possibility of 5G and Beyond 5G networks to address issues with mobile Web AR, although the acceptance and implementation of these technologies may differ in practice. The study may not have taken into consideration regional differences in network architecture and technology adoption. |
| [3] | Kowalczyk et al. 2021 | Analyze customer reactions to both augmented reality and web-based product displays.                            | performed user trials and developed a model for customer reaction.            | The situation might affect consumer responses; therefore, the findings might not be generalizable.                                                                                                                                                                                                                     |
| [4] | Turner 2022           | Examine the epistemological problems that AR systems, particularly the Real-World Web, provide.                 | phenomenological analysis was done, and policy-based remedies were suggested. | The paper discusses hypothetical and speculative epistemological questions about the potential effects of AR technology. Although actual research is mentioned, the study itself is mainly concerned with theoretical debates and policy recommendations.                                                              |

|     |                        |                                                                                                            |                                                                                              |                                                                                                                                                                                                                                                                                                        |
|-----|------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [5] | Yim et al. 2017        | Examine the use of augmented reality as a tool for e-commerce and compare it to presentations made online. | conducted two investigations and used opinion mining to analyze user opinions.               | Various contextual elements, such as product kind, user demographics, and cultural variations, might have an impact on how users react to augmented reality.                                                                                                                                           |
| [6] | Chandra and Kumar 2018 | Analyze organizational influences on the adoption of augmented reality in e-commerce.                      | surveyed potential adopters and used the Technology-Organization-Environment (TOE) paradigm. | The adoption of augmented reality (AR) for e-commerce may be impacted by many circumstances in various nations and regions, hence the study's findings may not be applicable everywhere. The research is a snapshot in time and could not reflect changing trends and variables in the adoption of AR. |

|     |                        |                                                                                                       |                                                                                                |                                                                                                                                                                                                                                                                                        |
|-----|------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [7] | Kumar 2022             | Give a thorough analysis of AR in online shopping, including its causes and effects.                  | analyzed a variety of literature, identifying important directions for further study.          | A continually changing topic, augmented reality in online shopping may not completely reflect the most recent advancements and trends.<br>The study's conclusions might not be universally applicable to all AR applications and might only relate to particular types of AR features. |
| [8] | Yavuz et al. 2021      | Find out what influences mobile augmented reality use in Turkey.<br>.                                 | carried out a quantitative experimental investigation to pinpoint the main relevant variables. | The study focused on the issues moving the adoption of mobile augmented reality in Turkey, its findings might not be applicable to other regions or countries.                                                                                                                         |
| [9] | McLean and Wilson 2019 | Examine how augmented reality features in retailers' mobile apps influence customer brand engagement. | conducted an online poll to see how AR characteristics affect engagement.                      | The study focuses on augmented reality (AR) capabilities in store smartphone applications, which may not include all retail-specific AR implementations.<br>The conclusions are based on consumer impressions, which could not accurately reflect the retailer's viewpoint.            |

|      |                            |                                                                                                                         |                                                                     |                                                                                                                                                                                                                                                                   |
|------|----------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [10] | Kim et al.<br>2017         | Give a general review of the tracking, uses, and advantages and disadvantages of augmented reality technology.          | analyzed research on a range of AR subjects and technology.         | The majority of the research is based on surveys and summaries, which cannot provide thorough information on a specific AR technology or application. The study's summary may not include the most recent developments because AR technology is evolving rapidly. |
| [11] | Caboni and Hagberg<br>2019 | Give an overview of augmented reality (AR) in retail, including its uses and benefits to both businesses and customers. | reviewed AR research and categorized commerce AR application kinds. | The study may not apply to other industries because it primarily focuses on AR applications in the retail sector. The study's ideas of AR applications might swiftly become obsolete because augmented reality technology is developing quickly.                  |

|      |                            |                                                                                           |                                                                                                             |                                                                                                                                                                                                                                                                                     |
|------|----------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [12] | Elveny et al. 2021         | Create a method for classifying the items in an online store using Jaro-Winkler distance. | For the purpose of testing and product categorization, the Jaro-Winkler Distance method was used.           | The study's findings might not be applicable to other facets of e-commerce or AR because it concentrates on grouping items from online shops. Specific product naming practises may have an impact on the Jaro-Winkler Distance algorithm's accuracy.                               |
| [13] | Ljubisavljević et al. 2021 | Create an online electronic store with augmented reality elements.                        | augmented reality technologies were examined, added to an online store, and system performance was tracked. | The study created an electronic store with augmented reality characteristics; therefore, its conclusions might not apply to other kinds of augmented reality apps. WooCommerce was used for the study's execution, which can limit its applicability to other e-commerce platforms. |

|      |                         |                                                                                               |                                                                                  |                                                                                                                                                                                                                                                                       |
|------|-------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [14] | Berman and Pollack 2021 | Describe a six-step procedure for developing and putting into practice AR marketing strategy. | outlined the planning process' phases and spoke on how AR maturity affects them. | The research provides a planning method for AR strategies, although it may not take into account each person's particular circumstances and problems. The report examines the maturity of AR, however different businesses may see different rates of AR development. |
| [15] | Lam et al. 2021         | Create a context-aware content suggestion AR web browser for AR headsets.                     | A2W browser was implemented, and tests were done to gauge performance.           | Although the studies for the study were done in controlled environments, actual user experiences can differ. The A2W browser is made for AR headsets, which might not cover all possible uses for AR.                                                                 |

|      |                           |                                                                                                        |                                                                                 |                                                                                                                                                                                                                                                                                                              |
|------|---------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [16] | Lixăndroiu et al. 2021    | Examine opinions of both standard internet purchasing and e-commerce based on augmented reality.       | conducted a quasi-experimental study employing a personality-centric approach.  | <p>Personality factors are linked in the study to online purchasing activity, although individual tastes might differ greatly.</p> <p>The research may not encompass all AR applications because it is particularly focused on AR in retail scenarios.</p>                                                   |
| [17] | Cannavo and Lamberti 2020 | Discuss the potential applications of augmented reality, virtual reality and blockchain in e-commerce. | did a preliminary investigation and presented a case study of CryptoAR Wallett. | <p>The study suggests a prototype; therefore, its results could not accurately represent acceptance and usage in the actual world.</p> <p>The study's conclusions might not be applicable in other situations because its main objective is to combine VR, AR, and Blockchain for product visualisation.</p> |

|      |                        |                                                                                                          |                                                                                       |                                                                                                                                                                                                                                                   |
|------|------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [18] | Pinaria et al.<br>2021 | Create a web-based e-commerce platform for the purchase and sale of food, then evaluate its performance. | The food application was designed and implemented using the RAD technique.            | Because the study is specifically designed for Manado City, its results might not apply to other areas or places. The system that has been built is centred on purchasing and selling food, thus it might not handle other e-commerce industries. |
| [19] | Sadeeq et al.<br>2020  | Examine how e-commerce has evolved and what effect it has had on commerce and jobs.                      | investigated the expansion of e-commerce and its potential effects on labour markets. | The report very briefly touches on particular features of AR while discussing the overall effects of e-commerce on jobs and business. The study's findings might alter in the future as the e-commerce and AR environments develop.               |

|      |                   |                                                                                                                         |                                                                                                                    |                                                                                                                                                                                                                                                                                                |
|------|-------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [20] | Munoz et al. 2023 | Give a general review of e-commerce, including its basis in history, theoretical foundations, and current developments. | discussed the development of e-Commerce, its history, theoretical underpinnings, models, and current developments. | The study focuses largely on giving an academic overview of e-commerce, hence its conclusions could not completely account for the real-world difficulties that firms encounter. Since e-commerce is a dynamic industry, the report might not include the most recent trends and advancements. |
|------|-------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Conclusion

The reviewed literature links augmented reality with more immersive product experiences, enjoyment and consumer engagement, while also identifying practical constraints involving usability, network capacity, privacy and organizational adoption. Benefits vary with the application and the quality of the experience. Findings from small studies, specific retail platforms or regional samples should not be generalized to every e-commerce setting. The selected literature provides a historical foundation for further research into sustained use, purchasing outcomes and deployment across different devices and markets.

## References

Adikari, S.B., Ganegoda, N.C., Meegama, R.G. and Wanniarachchi, I.L., 2020. Applicability of a single depth sensor in real-time 3D clothes simulation: augmented reality virtual dressing room using kinect sensor. *Advances in Human-Computer Interaction*, 2020, pp.1-10.

Qiao, X., Ren, P., Nan, G., Liu, L., Dustdar, S. and Chen, J., 2019. Mobile web augmented reality in 5G and beyond: Challenges, opportunities, and future directions. *China Communications*, 16(9), pp.141-154.

Kowalczyk, P., Siepmann, C. and Adler, J., 2021. Cognitive, affective, and behavioral consumer responses to augmented reality in e-commerce: A comparative study. *Journal of Business Research*, 124, pp.357-373.

Turner, C., 2022. Augmented reality, augmented epistemology, and the real-world web. *Philosophy & Technology*, 35(1), p.19.

Yim, M.Y.C., Chu, S.C. and Sauer, P.L., 2017. Is augmented reality technology an effective tool for e-commerce? An interactivity and vividness perspective. *Journal of interactive marketing*, 39(1), pp.89-103.

Chandra, S. and Kumar, K.N., 2018. EXPLORING FACTORS INFLUENCING ORGANIZATIONAL ADOPTION OF AUGMENTED REALITY IN E-COMMERCE: EMPIRICAL ANALYSIS USING TECHNOLOGY-ORGANIZATION-ENVIRONMENT MODEL. *Journal of electronic commerce research*, 19(3).

Kumar, H., 2022. Augmented reality in online retailing: a systematic review and research agenda. *International Journal of Retail & Distribution Management*, 50(4), pp.537-559.

Yavuz, M., Çorbacioğlu, E., Başoğlu, A.N., Daim, T.U. and Shaygan, A., 2021. Augmented reality technology adoption: Case of a mobile application in Turkey. *Technology in Society*, 66, p.101598.

McLean, G. and Wilson, A., 2019. Shopping in the digital world: Examining customer engagement through augmented reality mobile applications. *Computers in Human Behavior*, 101, pp.210-224.

Kim, S.K., Kang, S.J., Choi, Y.J., Choi, M.H. and Hong, M., 2017. Augmented-Reality Survey: from Concept to Application. *KSII Transactions on Internet & Information Systems*, 11(2).

Caboni, F. and Hagberg, J., 2019. Augmented reality in retailing: a review of features, applications and value. *International Journal of Retail & Distribution Management*, 47(11), pp.1125-1140.

Elveny, M., Hardi, S.M., Jaya, I. and Gundari, P., 2021, June. Web-based E-Commerce Products Grouping. In *Journal of Physics: Conference Series* (Vol. 1898, No. 1, p. 012018). IOP Publishing.

Ljubisavljević, L., Milačić, D. and Ninković, M., 2021, September. Development of a web shop based on augmented reality. In *E-business technologies conference proceedings* (Vol. 1, No. 1, pp. 40-43).

Berman, B. and Pollack, D., 2021. Strategies for the successful implementation of augmented reality. *Business Horizons*, 64(5), pp.621-630.

Lam, K.Y., Lee, L.H. and Hui, P., 2021, October. A2w: Context-aware recommendation system for

mobile augmented reality web browser. In *Proceedings of the 29th ACM international conference on multimedia* (pp. 2447-2455).

Lixăndroiu, R., Cazan, A.M. and Maican, C.I., 2021. An analysis of the impact of personality traits towards augmented reality in online shopping. *Symmetry*, 13(3), p.416.

Cannavo, A. and Lamberti, F., 2020. How blockchain, virtual reality, and augmented reality are converging, and why. *IEEE Consumer Electronics Magazine*, 10(5), pp.6-13.

Pinaria, G.C., Rindengan, Y. and Najooan, X., 2021. Web Based E-Commerce Application Buying and Selling Food Ingredients for Manado City.

Sadeeq, M., Abdulla, A.I., Abdulraheem, A.S. and Ageed, Z.S., 2020. Impact of electronic commerce on enterprise business. *Technol. Rep. Kansai Univ*, 62(5), pp.2365-2378.

Munoz, F., Holsapple, C.W. and Sasidharan, S., 2023. E-commerce. In *Springer Handbook of Automation* (pp. 1411-1430). Cham: Springer International Publishing.