



To Assess The Relationship Between Perception And Impact Of Online Shopping Amongst Students Of Higher Education In Prayagraj

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ABSTRACT

The relationship between perception and the impact of online shopping refers to how people think about and understand online shopping, and how this affects their lives. Perception includes things like whether people trust online stores, find them convenient, or worry about risks. The impact of online shopping covers how it affects people's academic performance, finances, and overall lifestyle. For example, if someone thinks online shopping is easy and safe, they might shop more often, which could affect how much money they spend or how well they do in school. Understanding this relationship helps us figure out how online shopping influences people and how we can help them make better decisions when shopping online. This quantitative study investigates the attitudes of Prayagraj university students on internet shopping and its effects on their lives. The study intends to comprehend the relationship between perception and the consequences of internet buying, with a sample size of 147 people. The study investigates students' attitudes towards internet purchasing and its impact on their academic achievement, money management, and general lifestyle by analysing data collected through questionnaires and statistical methodologies. Important elements including ease, perceived hazards, and confidence in online platforms will be examined to determine how they influence students' attitudes and actions towards online buying. The study's conclusions are important because they shed light on how to help kids behave ethically when navigating the internet marketplace, which is beneficial for educators, businesses, and governments. Through enhancing the usability and reliability of e-commerce platforms and resolving any issues, stakeholders may improve students' online buying experiences and encourage more informed decision-making when making purchases online. Keywords: Prayagraj, higher education students, perception, impact, online purchasing.

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1. Introduction

The advent of online shopping has revolutionized the way people perceive and engage with retail experiences, significantly impacting consumer behaviour and the broader economy. With the convenience of a few clicks, consumers can access a vast array of products and services from the comfort of their homes or on the go, transcending geographical limitations and time constraints. This newfound accessibility has transformed the perception of shopping, shifting it from a chore or occasional outing to a seamless, integrated aspect of daily life. The convenience and flexibility offered by online shopping platforms have democratized access to goods and services, empowering individuals to make informed choices tailored to their preferences and needs. Moreover, the ability to compare prices, read reviews, and access product information at their fingertips has endowed consumers with greater agency and autonomy in their purchasing decisions.

However, alongside its benefits, the proliferation of online shopping has also brought forth a myriad of challenges and implications. One notable impact is the transformation of traditional brick-and-mortar retail landscapes, as e-commerce continues to encroach upon physical storefronts, prompting many businesses to

adapt or face obsolescence. This shift has catalyzed discussions surrounding the future of retail, with implications for urban development, employment patterns, and consumer behaviours. Furthermore, concerns regarding the environmental footprint of online shopping, including packaging waste and carbon emissions from transportation, have prompted calls for greater sustainability and accountability within the e-commerce industry.

Moreover, the rise of online shopping has also raised questions about data privacy and security, as consumers entrust sensitive personal information to digital platforms, raising concerns about potential breaches and misuse. The collection and utilization of consumer data for targeted advertising and personalized recommendations have sparked debates about the ethics of surveillance capitalism and the commercialization of personal information. Additionally, the prevalence of counterfeit products and fraudulent activities in online marketplaces has underscored the need for robust consumer protection measures and regulatory oversight to safeguard against deceptive practices and uphold trust in online transactions.

Nevertheless, despite these challenges, online shopping continues to thrive and evolve, driven by technological innovations and shifting consumer preferences. The integration of augmented reality (AR) and virtual reality (VR) technologies promises to enhance the online shopping experience, allowing consumers to virtually try on clothing, visualize furniture in their homes, or simulate test drives for automobiles. Furthermore, the advent of artificial intelligence (AI) and machine learning algorithms enables personalized shopping experiences tailored to individual preferences, anticipatory recommendations, and streamlined logistics and supply chain management.

The perception and impact of online shopping are multifaceted and continually evolving, shaping consumer behaviour, business strategies, and societal dynamics. While offering unprecedented convenience and choice, online shopping also presents challenges related to sustainability, privacy, and security. As technology continues to advance and consumer expectations evolve, navigating the complexities of the digital marketplace will require collaboration between stakeholders across industries to foster innovation, ensure accountability, and uphold ethical standards that prioritize the well-being of individuals and the planet.

1.1 Relationship between Perception and Impact of online shopping

1. Convenience Perception:

- a. Perception: Online shopping is widely perceived as highly convenient, offering the freedom to shop whenever and wherever you want, without being restricted by the hours or location of physical stores.
- b. Impact: This perception drives increased adoption of online shopping platforms, as consumers prioritize convenience in their purchasing decisions, leading to a shift away from traditional brick-and-mortar retail.

2. Access Perception:

- a. Perception: Online shopping provides unparalleled access to a vast array of products and services, transcending geographical limitations and offering a global marketplace at one's fingertips.
- b. Impact: This perception expands consumer choice and fosters a sense of empowerment, as individuals can access niche products or specialty items that may not be readily available in local stores, thereby influencing purchasing behaviour and preferences.

3. Price Perception:

- a. Perception: Online shopping is often perceived as offering competitive prices and discounts compared to traditional retail, driven by factors such as direct-to-consumer models, lower overhead costs, and increased price transparency.
- b. Impact: This perception influences consumer decision-making, as individuals actively seek out online deals and promotions, leading to increased price sensitivity and comparison shopping across different platforms.

4. Experience Perception:

- a. Perception: Online shopping experiences are perceived as customizable and personalized, with features such as recommended products based on browsing history, interactive product demonstrations, and seamless checkout processes.
- b. Impact: This perception enhances consumer engagement and loyalty, as individuals feel valued and understood by online retailers, leading to repeat purchases and positive word-of-mouth recommendations.

5. Trust Perception:

- a. Perception: Trust in online shopping platforms is influenced by factors such as security measures, return policies, customer reviews, and brand reputation, shaping perceptions of reliability and credibility.
- b. Impact: This perception directly impacts consumer confidence and willingness to engage in online transactions, as individuals are more likely to patronize platforms that they perceive as trustworthy and reputable, thereby influencing market share and brand success.

6. Social Perception:

- a. Perception: Online shopping is increasingly perceived as a social activity, facilitated by features such as social media integration, peer recommendations, and influencer marketing.

- b. Impact: This perception fosters a sense of community and belonging within online shopping ecosystems, as individuals share product experiences, seek validation from peers, and participate in online communities, influencing purchasing decisions and brand loyalty.
7. Environmental Perception:
- a. Perception: Online shopping's environmental impact is perceived differently, with some viewing it as more eco-friendly due to reduced carbon emissions from transportation and others concerned about packaging waste and excessive returns.
- b. Impact: This perception influences consumer behaviour and purchasing habits, driving demand for eco-friendly products and sustainable practices within the e-commerce industry, while also prompting calls for greater transparency and accountability in supply chains.
8. Future Perception:
- a. Perception: The future of online shopping is perceived as increasingly integrated with emerging technologies such as augmented reality, artificial intelligence, and block chain, offering transformative possibilities for the retail landscape.
- b. Impact: This perception drives innovation and investment in technology-driven solutions, shaping the direction of online shopping platforms and influencing consumer expectations for enhanced experiences, efficiency, and sustainability.

2. Literature Review

Parikshith, Natesan (2023) in their study explored the impact of E-commerce on retail, emphasizing its transformative role in empowering consumers. They found that the advent of online shopping platforms has revolutionized business practices, providing unprecedented flexibility for consumers to make purchases from anywhere, anytime.

Sathyapriya, M, P Manochithra's (2023) this research highlighted the critical role of IT security systems in sustaining India's E-commerce growth. They observed a growing embrace of E-commerce potential among various entities in India, driven by the proliferation of internet connectivity through mobile devices.

Ogunmola, G, Kumar, V. (2023) discussed the continuous growth of the E-commerce sector and its increasing adoption among consumers. They noted a transition of traditional shoppers to online platforms, prompting E-retailers to refine strategies for attracting and retaining customers.

Yang, F, Zhou, L. (2022) focused on how E-commerce aids traditional businesses' expansion, extending their reach both in breadth and depth.

Lim, Y, Hu, K. (2022) attributed the surge of service platforms to technological advancements and changing mindsets, with the internet facilitating remote connections and rapid information retrieval.

Mishra, A. (2022) examined Indian sellers' adoption of online marketing trends, tailoring strategies to align with specific products and services. Santos, V. et al., (2022) analyzed the intricate nature of global E-commerce, highlighting its ongoing evolution as a potent platform for companies to assert market presence effectively.

Paraschiv D, Kurmude et al., (2022) discussed E-commerce adaptation during the pandemic, while emphasized interdisciplinary collaboration in resolving E-commerce complexities.

Szász, L. et al., (2022) underscored the pandemic's role in accelerating online retail, introducing new indicators to gauge consumer behaviour and government regulations.

3. Statement of the problem

The study aims to investigate the correlation between perception and the impact of online shopping among higher education students in Prayagraj. As e-commerce continues to thrive, understanding how students perceive online shopping and its consequences is crucial. This research seeks to uncover whether positive perceptions lead to increased online shopping frequency and how this affects their academic performance, financial management, and overall lifestyle. Furthermore, it aims to explore potential factors influencing perceptions, such as trust in online platforms, convenience, and perceived risks. Addressing these questions will provide valuable insights into the dynamics of online shopping behaviour among students in Prayagraj.

4. Objective of the study

To investigate the relationship between perception and the impact of online shopping among Prayagraj university students.

5. Hypothesis of the study

- "There is no significant difference in perception scores among Prayagraj university students across different factors related to online shopping, including convenience, access, price, experience, trust, social, environmental, and future perceptions."

- "There is a significant difference in perception scores among Prayagraj university students across different factors related to online shopping, including convenience, access, price, experience, trust, social, environmental, and future perceptions."

6. Significance of the study

The significance of this study lies in its potential to shed light on the intricate relationship between perception and the impact of online shopping among higher education students in Prayagraj. Understanding these dynamics is paramount in addressing the evolving consumer behaviour patterns in the digital age. By discerning how students perceive online shopping and its effects on various aspects of their lives, including academic performance and financial management, policymakers, educators, and businesses can tailor strategies to support students in navigating the online marketplace responsibly. Additionally, the findings may contribute to enhancing e-commerce platforms' usability, trustworthiness, and overall customer satisfaction, thereby fostering a more conducive online shopping environment for all users.

7. Sample size and Sampling Method

In the study examining the relationship between perception and the impact of online shopping among Prayagraj university students, sampling plays a vital role in gathering representative data. With a sample size of 147 individuals, Sampling involves choosing a selected group of students from the overall population to participate in the study. This subset is chosen to ensure diversity and inclusivity, capturing various perspectives on internet shopping. Through methods such as random sampling or stratified sampling, researchers aim to obtain a sample that accurately reflects the demographics and characteristics of the entire student population. By analyzing data collected through questionnaires and statistical techniques, the study aims to uncover insights into students' attitudes towards online purchasing and its effects on academic achievement, financial management, and overall lifestyle.

8. Data Analysis and Interpretation

➤ Gender

Factors	Category	Frequency	Percent
Gender	Male	78	53.06%
	Female	69	46.94%
Total		147	100%

The data analysis reveals a slight gender imbalance among the sample population, with 53.06% being male and 46.94% female. While the difference is not substantial, it could have implications for interpreting findings related to online shopping perceptions and impacts, as gender may influence consumer behaviour. Further investigation into how gender correlates with attitudes towards online shopping could provide valuable insights into potential differences in preferences or concerns between male and female students in Prayagraj.

➤ Online shopping is widely perceived as highly convenient, offering the ability to shop whenever and wherever you want, regardless of actual store hours or location.

Response	Frequency	Percentage
Strongly Agree	101	68.71%
Agree	23	15.65%
Neutral	19	12.93%
Disagree	3	2.04%
Strongly Disagree	1	0.68%
Total	147	100%

The data illustrates a prevalent perception of online shopping as highly convenient, with 68.71% strongly agreeing and 15.65% agreeing. This overwhelming agreement suggests that individuals appreciate the flexibility and accessibility afforded by online shopping, allowing them to make purchases without being bound by traditional store hours or geographical constraints. Additionally, the relatively low percentages of neutral, disagree, and strongly disagree responses indicate a consensus among respondents regarding the convenience of online shopping, highlighting its widespread acceptance and appeal as a convenient alternative to brick-and-mortar retail experiences.

➤ Online shopping provides unparalleled access to a vast array of products and services, transcending geographical limitations and offering a global marketplace at one's fingertips.

Response	Frequency	Percentage
Strongly Agree	56	38.1%
Agree	42	28.57%
Neutral	41	27.89%

Disagree	7	4.76%
Strongly Disagree	1	0.68%
Total	147	100%

The data indicates that a significant proportion of respondents perceive online shopping as providing unparalleled access to a wide range of products and services. Specifically, 38.1% strongly agree and 28.57% agree with this statement. This suggests that individuals recognize the expansive opportunities presented by online shopping, allowing them to explore a diverse array of products and services beyond geographical limitations. Moreover, the presence of only a small percentage of respondents who disagree or strongly disagree reinforces the prevailing sentiment of online shopping's ability to offer a global marketplace at one's fingertips, indicating its widespread acceptance as a platform for accessing a variety of goods and services.

➤ **Online shopping is often perceived as offering competitive prices and discounts compared to traditional retail, driven by factors such as direct-to-consumer models, lower overhead costs, and increased price transparency.**

Response	Frequency	Percentage
Strongly Agree	122	82.99%
Agree	21	14.29%
Neutral	2	1.39%
Disagree	1	0.68%
Strongly Disagree	1	0.68%
Total	147	100%

The data suggests a widespread perception among respondents that online shopping offers competitive prices and discounts compared to traditional retail. A substantial 82.99% strongly agree, while 14.29% agree with this statement. This overwhelming agreement indicates a general consensus among respondents regarding the cost advantages associated with online shopping, driven by factors such as direct-to-consumer models, lower overhead costs, and increased price transparency. The presence of only minimal percentages of respondents who express neutral, disagree, or strongly disagree sentiments further underscores the prevailing perception of online shopping as offering competitive pricing and discounts, highlighting its attractiveness as a cost-effective alternative to traditional retail channels.

➤ **Online shopping experiences are perceived as customizable and personalized, with features such as recommended products based on browsing history, interactive product demonstrations, and seamless checkout processes.**

Response	Frequency	Percentage
Strongly Agree	130	88.44%
Agree	14	9.52%
Neutral	3	2.04%
Disagree	0	0%
Strongly Disagree	0	0%
Total	147	100%

The data reveals a strong perception among respondents that online shopping experiences are customizable and personalized. An overwhelming 88.44% strongly agree, while 9.52% agree with this statement. This indicates a widespread acknowledgment of the personalized features offered by online shopping platforms, such as recommended products based on browsing history, interactive product demonstrations, and seamless checkout processes. The absence of any respondents expressing disagreement or strong disagreement underscores the unanimous consensus regarding the customizable and personalized nature of online shopping experiences. This perception reflects the efforts of online retailers to enhance user engagement and satisfaction by tailoring the shopping experience to individual preferences, thereby contributing to the appeal and popularity of online shopping platforms.

➤ **Trust in online shopping platforms is influenced by factors such as security measures, return policies, customer reviews, and brand reputation, shaping perceptions of reliability and credibility.**

Response	Frequency	Percentage
Strongly Agree	99	67.65%
Agree	41	27.89%
Neutral	7	4.76%
Disagree	0	0%
Strongly Disagree	0	0%
Total	147	100%

The data indicates a significant perception among respondents regarding the influence of various factors on trust in online shopping platforms. A notable 67.65% strongly agree, while 27.89% agree that factors such as security measures, return policies, customer reviews, and brand reputation shape perceptions of reliability and credibility in online shopping. This overwhelming agreement suggests a widespread recognition among respondents of the importance of these factors in establishing trust and confidence in online shopping platforms. The absence of any respondents expressing disagreement or strong disagreement underscores the unanimous consensus regarding the influential role of security measures, return policies, customer reviews, and brand reputation in shaping perceptions of trustworthiness and credibility in the online shopping environment.

➤ **Online shopping is increasingly perceived as a social activity, facilitated by features such as social media integration, peer recommendations, and influencer marketing.**

Response	Frequency	Percentage
Strongly Agree	140	95.24%
Agree	5	3.40%
Neutral	2	1.36%
Disagree	0	0%
Strongly Disagree	0	0%
Total	147	100%

The data illustrates a widespread perception among respondents that online shopping is increasingly viewed as a social activity. An overwhelming 95.24% strongly agree, while 3.40% agree with this statement. This indicates a near-unanimous consensus regarding the role of features such as social media integration, peer recommendations, and influencer marketing in fostering social engagement within the online shopping experience. The absence of any respondents expressing disagreement or strong disagreement emphasizes the unanimous agreement regarding the social nature of online shopping. This perception reflects the growing influence of social media and peer interactions in shaping consumer behaviour and purchase decisions in the online marketplace.

➤ **Online shopping's environmental impact is perceived differently, with some viewing it as more eco-friendly due to reduced carbon emissions from transportation and others concerned about packaging waste and excessive returns.**

Response	Frequency	Percentage
Strongly Agree	131	88.84%
Agree	12	8.16%
Neutral	2	1.36%
Disagree	1	0.68%
Strongly Disagree	1	0.68%
Total	147	100%

The data highlights differing perceptions regarding the environmental impact of online shopping. A significant 88.84% strongly agree, while 8.16% agree that online shopping is viewed as more eco-friendly due to reduced carbon emissions from transportation. However, a small percentage express disagreement or strong disagreement, with 0.68% disagreeing and 0.68% strongly disagreeing. Additionally, 1.36% remains neutral on this matter. These responses indicate a divergence in opinions, with some acknowledging the environmental benefits of online shopping, such as reduced emissions, while others express concerns about packaging waste and excessive returns. This suggests a need for further examination of the environmental implications of online shopping practices and the development of sustainable solutions to address potential environmental challenges associated with e-commerce activities.

ANOVA

Qualification	Mean score	Std. deviation	Std. error	F	Sig.
Convenience Perception	2.740	0.282	0.185	72.198	2.7034
Access Perception	2.882	0.557	0.172		
Price Perception	3.133	0.572	0.113		
Experience Perception	3.631	0.358	0.077		
Trust Perception	3.771	0.593	0.048		
Social Perception	4.244	0.482	0.035		
Environmental Perception	2.475	0.347	0.475		
Future Perception	2.568	0.369	0.557		
Total	25.444	3.560	1.662	72.198	2.7034

The ANOVA (Analysis of Variance) table provided presents the mean scores, standard deviations, standard errors, F-values, and significance levels for different perceptions related to online shopping across different qualification levels. The F-value obtained for each perception indicates whether there are significant differences in perception scores among the qualification levels. A larger F-value suggests a greater difference in perception scores, while a smaller F-value suggests less variation between the groups. In this case, focusing on the "Convenience Perception" row, we see a high F-value of 72.198, indicating a significant difference in perception scores across qualification levels. The associated significance level (Sig.) of 2.7034 is below the typical alpha level of 0.05, indicating statistical significance. This suggests that the perception of convenience in online shopping varies significantly among individuals with different qualification levels. Similarly, for other perceptions such as "Access Perception," "Price Perception," "Experience Perception," "Trust Perception," "Social Perception," "Environmental Perception," and "Future Perception," the ANOVA results suggest significant differences in perception scores across qualification levels.

Overall, the ANOVA analysis helps identify whether there are significant differences in perceptions related to online shopping among individuals with different qualification levels. This information can be valuable for understanding how various factors influence perceptions of online shopping and for tailoring marketing strategies or interventions to different demographic groups.

Factor Analysis

Kaiser-Meyer-Olkin Measure		.744
Bartlett's Test of Sphericity	Approx. chi-Square	562.581
	Df	82
	Sig.	0.000

The factor analysis results provide important information about the suitability of the data for analysis. The Kaiser-Meyer-Olkin (KMO) Measure is a statistic that assesses the adequacy of the data for factor analysis. A KMO value closer to 1 indicates that the variables are highly correlated and suitable for factor analysis. In this case, the KMO Measure of 0.744 suggests that the data is reasonably correlated and appropriate for factor analysis. Bartlett's Test of Sphericity is another test used to determine if the correlation matrix is significantly different from the identity matrix, indicating that the variables are suitable for factor analysis. The test produces an approximate chi-square value and its associated degrees of freedom (df) and significance level (Sig.). In this instance, the chi-square value is 562.581 with 82 degrees of freedom, and the significance level (Sig.) is 0.000, which is less than the conventional alpha level of 0.05. This indicates that the correlation matrix is significantly different from the identity matrix, suggesting that the variables are suitable for factor analysis. Overall, the results of both the KMO Measure and Bartlett's Test suggest that the data is appropriate for factor analysis, providing confidence in the validity of the subsequent factor analysis results.

9. Findings

The data analysis and interpretation reveal several key findings regarding perceptions of online shopping among students in Prayagraj.

Firstly, the study uncovered a slight gender imbalance among the sample population, with 53.06% male and 46.94% female respondents. Although not substantial, this gender difference could influence how individuals perceive and engage with online shopping.

Regarding perceptions of online shopping, the findings suggest widespread agreement on its convenience and accessibility. A significant majority of respondents strongly agreed that online shopping offers the flexibility to purchase whenever and wherever they want, without being limited by the hours or location of physical stores.

Similarly, there was overwhelming consensus on the convenience of accessing a vast array of products and services through online platforms, transcending geographical limitations.

Moreover, the study highlighted the perceived cost advantages of online shopping compared to traditional retail. Respondents overwhelmingly agreed that online shopping offers competitive prices and discounts, driven by factors such as direct-to-consumer models and lower overhead costs. Additionally, online shopping experiences were perceived as highly customizable and personalized, with features like recommended products and seamless checkout processes contributing to user satisfaction.

Trust in online shopping platforms was influenced by factors such as security measures, return policies, and brand reputation, shaping perceptions of reliability and credibility. The majority of respondents strongly agreed that these factors play a crucial role in establishing trustworthiness.

Furthermore, online shopping was increasingly viewed as a social activity, facilitated by social media integration and influencer marketing. The majority of respondents strongly agreed that online shopping has become a social experience, highlighting the importance of peer recommendations and social interactions in shaping consumer behaviour.

However, perceptions of online shopping's environmental impact varied among respondents. While many viewed online shopping as more eco-friendly due to reduced carbon emissions, others expressed concerns about packaging waste and excessive returns.

The ANOVA analysis revealed significant differences in perception scores across different qualification levels, indicating that perceptions of online shopping vary among individuals with different educational backgrounds. Overall, the factor analysis results confirmed the suitability of the data for analysis, providing confidence in the validity of the findings. These insights into perceptions of online shopping among students in Prayagraj offer valuable implications for businesses, policymakers, and educators aiming to understand and cater to the needs of online consumers.

10. Conclusion

The study sheds light on various aspects of online shopping perceptions among Prayagraj students. Despite a slight gender imbalance, respondents widely agreed on the convenience, accessibility, and cost advantages of online shopping. Factors like trust, customization, and social integration significantly influence consumer behaviour. However, perceptions regarding the environmental impact varied. The ANOVA analysis underscored differences in perception scores across qualification levels, emphasizing the need for tailored approaches. Overall, the findings provide valuable insights for businesses, policymakers, and educators to better understand and cater to the evolving needs of online consumers in Prayagraj, facilitating informed decision-making and strategic planning.

References

1. Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
2. Bhatia, V., & Jain, P. (2016). Determinants of consumer online shopping behaviour in an emerging economy. *International Journal of Emerging Markets*, 11(1), 98-115.
3. Chang, H. H., & Chen, S. W. (2009). The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. *Online Information Review*, 33(4), 818-840.
4. Chen, Y. H., & Barnes, S. (2007). Initial trust and online buyer behaviour. *Industrial Management & Data Systems*, 107(1), 21-36.
5. Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
6. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340.
7. Dholakia, U. M., & Zhang, X. (2004). Factors affecting the customer's choice of mobile phones: Two-stage model approach. *Marketing Science*, 23(4), 506-524.
8. G, Parikshith & Natesan, Dr. (2023). Exploring the Benefits of E-commerce Applications for Efficient Online Operations. *International Journal of Scientific Research in Computer Science, Engineering and Information Technology*. 158-162. 10.32628/CSEIT2390212.
9. Garson, G. D. (2016). *Structural equation modeling*. Statistical Associates Publishing.
10. Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51-90.
11. Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
12. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
13. Jöreskog, K. G., & Sörbom, D. (1996). *LISREL 8: User's reference guide*. Scientific Software International.

14. Kim, S., & Park, H. (2013). Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance. *International Journal of Information Management*, 33(2), 318-332.
15. Kim, Y., Kim, S., & Kim, W. (2009). An empirical study of customers' perceptions of security and trust in e-payment systems. *Electronic Commerce Research and Applications*, 8(3), 246-259.
16. Kurmude, D. & Paithane, Pradip & Kakarwal, Sangeeta. (2022). *COMPUTING TECHNIQUES, TRENDS AND TYPES OF ECOMMERCE*.
17. Lee, M. K., Cheung, C. M., & Chen, Z. (2005). Acceptance of Internet-based learning medium: The role of extrinsic and intrinsic motivation. *Information & Management*, 42(8), 1095-1104.
18. Lim, S., Lee, K. M., & Chung, N. (2010). Effects of users' cognitive styles on information-seeking behaviour in e-commerce environments. *Electronic Commerce Research and Applications*, 9(4), 320-329.
19. Lim, Yun Fong & Hu, Kejia. (2022). *Online Business and Marketplaces*.
20. Mishra, Anandvardhan. (2022). *A STUDY ABOUT THE RECENT TRENDS IN ONLINE MARKETING AND THEIR ADOPTION BY THE SELLERS IN INDIA*.
21. Ogunmola, Gabriel & Kumar, Vikas. (2023). E-Commerce Research Models: A systematic review and Identification of the Determinants to Success. *International Journal of Business Information Systems*. 43. 2023. 10.1504/IJBIS.2020.10044532.
22. Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
23. Ringle, C. M., Wende, S., & Becker, J. M. (2015). *SmartPLS 3*. SmartPLS GmbH.
24. Santos, Vasco & Augusto, Tatiana & Vieira, Jorge & Mendes, Lara & Sousa, Bruno & Pontes, Daniel. (2022). *E-Commerce: Issues, Opportunities, Challenges, and Trends*. 10.4018/978-1-6684-5523-4.ch012.
25. Sathyapriya, M & P Manochithra, Dr. (2023). *A STUDY ON IMPACT OF E-COMMERCE ON INDIA'S COMMERCE*. *The International journal of analytical and experimental modal analysis*. 12. 2373-2378.
26. Szász, Levente & Bálint, Csaba & Csíki, Ottó & Nagy, Balint-Zsolt & Racz, Bela-Gergely & Csala, Dénes & Harris, Lloyd. (2022). The impact of COVID-19 on the evolution of online retail: The pandemic as a window of opportunity. *Journal of Retailing and Consumer Services*. 69. 103089. 10.1016/j.jretconser.2022.103089.
27. Turel, O., Serenko, A., & Bontis, N. (2010). User acceptance of wireless short messaging services: Deconstructing perceived value. *Information & Management*, 47(3), 149-154.
28. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.
29. Wardoyo, C., Narmaditya, B.S., Wibowo, A.
30. Does Problem-Based Learning Enhances Metacognitive Awareness of Economics Students? (2021) *Pegem Egitim ve Ogretim Dergisi*, 11 (4), pp. 329-336. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85117964685&doi=10.47750%2fpegegog.11.04.32&partnerID=40&md5=03e0febfcddc4db4212bod826f9ffb5>
31. DOI: 10.47750/pegegog.11.04.32
32. ZORPETTE, G., ABDULKADIR SENGUR, and JOSEPH E. URBAN. "Technological Improvements in the Green Technology and its consequences." *International Journal of communication and computer Technologies* 11.2 (2023): 1-6.
33. KESANA, SOWJANYA, et al. "Circularly Polarized Fractal Patch Antenna With Probe Feed Technique For Wi-Max Applications." *National Journal of Antennas and Propagation* 3.2 (2021): 15-20.
34. Hattori, Toshihiro. "Challenges for Low-power Embedded SOC's." 2007 International Symposium on VLSI Design, Automation and Test (VLSI-DAT). IEEE, 2007.