

# Significance of E-commerce in Healthcare Sector

Prof. (Dr.) Suhas Dhande<sup>1</sup>, Ms. Sneha Yadav<sup>2</sup>, Ms. Sushmita Ghosh<sup>3</sup>, Mr. Manish Ganga<sup>4</sup>,  
Dr. Deepak Shah<sup>5</sup>

<sup>1</sup>Principal & Professor of Commerce, Chameli Devi Institute of Professional Studies, Indore, (M.P),  
e-mail: [suhasdhande472@gmail.com](mailto:suhasdhande472@gmail.com)

<sup>2</sup>Research Scholar, School of Commerce, Devi Ahilya Vishwavidyalaya, Indore, (M.P),  
e-mail: [snehay2202@gmail.com](mailto:snehay2202@gmail.com)

<sup>3</sup>Research Scholar, School of Commerce, Devi Ahilya Vishwavidyalaya, Indore, (M.P),  
e-mail: [ghoshsushmita0211@gmail.com](mailto:ghoshsushmita0211@gmail.com)

<sup>4</sup>Research Scholar, School of Commerce, Devi Ahilya Vishwavidyalaya, Indore, (M.P.),  
e-mail: [manish25p@gmail.com](mailto:manish25p@gmail.com)

<sup>5</sup>Principal & Sr.Lecturer MOM, Jija Mata Government Polytechnic College, Burhanpur, (M.P.),  
e-mail: [deepakshah73.ds@gmail.com](mailto:deepakshah73.ds@gmail.com)

## ABSTRACT

*E-commerce's explosive rise has drastically changed the healthcare industry by enhancing the availability, effectiveness, and calibre of medical care. Online pharmacies, digital health marketplaces, and electronic procurement systems are examples of e-commerce in the healthcare industry that allow consumers and providers to get medical supplies via digital channels. This paper investigates the significance of e-commerce in the healthcare sector and emphasises how it can improve patient convenience and increase access to care. The study also addresses how e-commerce promotes more individualised healthcare services and improved price transparency. Additionally, it looks at elements like technical readiness, awareness, simplicity of use, and trust that affect users' adaptation.*

*Keywords: E-commerce, Healthcare sector, Online healthcare products, Patient accessibility*

**How to cite this article:** Dhande S, Yadav S, Ghosh S, Ganga M, Shah D. Significance of E-commerce in Healthcare Sector. *Int J Drug Deliv Technol.* 2026;16(40s): 701-709. DOI: 10.25258/ijddt.16.40s.67

**Source of support:** None **Conflict of interest:** None

## Introduction

Innovative technologies have had a revolutionary impact on improving world health in recent years (Schwalbe & Wahl, 2020). The last two decades have witnessed a tendency towards different technological changes, not just in industry, but also in public services and on the individual level (Brem et al., 2021; Jafari-Sadeghi et al., 2021).

E-commerce is the carrying out of business transactions via the Internet or in a digital format. E-commerce gives businesses the chance to expand and thrive (Koe & Sakir, 2020). It has been shown to favourably impact economic growth regardless of a nation's degree of development (Kabir et al., 2020; Myovella et al., 2020). The significance of e-commerce sites that enable online communication and provide insightful and educational product information (Chandna and Salimath, 2018; Li et al., 2020). Developing nations usually have trouble embracing and adjusting to new technologies, such as e-

commerce, due to concerns with the internet, trust, and security in online payment systems (Mthembu et al., 2018; Murthy et al., 2021; Sila, 2019). Because e-commerce platforms enable businesses to retain existing customers, attract new ones, create social groups, and ensure compatibility with legacy systems, they can boost sales revenue (Lee et al., 2018). According to certain research, a positive (i.e., enjoyable, addictive, and fulfilling) online customer shopping experience may boost consumers' engagement with the purchasing process (Anshu et al., 2022). This basic knowledge is especially crucial for online e-commerce managers, who must strike a balance between the pressure to boost sales and the need to behave morally and appropriately and avoid taking advantage of consumers' impulsive shopping tendencies, which are linked to negative consumer-side effects like overconsumption, sustainability issues, and potential financial consequences from

careless spending ([Bleier et al., 2019](#); [Kuppelwieser and Klaus, 2020](#); [Novak et al., 2000](#); [Rose et al., 2012](#)). Innovative technologies have had a revolutionary impact on improving world health in recent years ([Schwalbe & Wahl, 2020](#)). The promotion of telemedicine and e-health solutions, which will enhance access to medical care in remote areas, is a prominent aspect of innovative technology ([Konduri et al., 2018](#)). People all over the world can seek guidance, diagnosis, and treatment without having to physically travel to a medical centre because of telecommunications and mobile health applications ([Olu et al., 2019](#)). The worldwide healthcare e-commerce market is expanding due to ongoing developments in the e-commerce sector and online drug sales. E-commerce companies have created a new healthcare market as customers look to the web for their medical requirements. Several of healthcare distribution of goods is done through e-commerce channels, and the healthcare e-commerce business is approaching maturity. Therefore, it is expected that the worldwide healthcare e-commerce market's overall revenue volume will increase in the upcoming years ([Yadav et al., 2022](#)).

## Review of Literature

([Hendricks et al., 2024](#)) the factors influencing e-commerce adoption in underdeveloped nations and accomplished that by figuring out the advantages and difficulties of e-commerce adoption in developing nations. This was done through the approach of thematic analysis by systematically examining and synthesising all pertinent literature on the topic from four academic journal databases (Ebsco host, SpringerLink, Google Scholar and ScienceDirect) as well as a report search on Google. Through this process, five main themes were found in the literature, including technological factors, organisational factors, environmental factors, performance, and customer trust factors. The elements found Perceived compatibility and adaptability, were among these themes. internet connectivity, electronic payment methods, management attitude and assistance, the presence and maintenance of government infrastructure, competitive pressure, customer trust, readiness, and performance. To capture social influence in online purchases, ([Li et al., 2013](#)) suggest a social recommender system for e-commerce that incorporates user preference similarity, trust in recommendations, and social links. The usefulness of the suggested strategy for assisting electronic retailers in more effectively promoting goods and services is demonstrated by experimental results, which show that it works better than conventional recommendation systems. Discount framing ([Agmeka et al., 2019](#)) in e-commerce has a considerable impact on consumers' purchasing intentions and actual buying behaviour. The findings demonstrate how discount framing influences consumers' propensity to buy by influencing elements like brand image and reputation. In order to increase generalisability, the study recommends that future

research replicate the model across various industries and provides insights for e-commerce enterprises on how to effectively leverage discounts. By combining important aspects ([Hwangbo et al., 2018](#)), such as the use of both offline and online click data, time-based decay of customer preferences, and purchase intentions related to product substitution or supplementation, this study suggests an improved fashion product recommendation system that goes beyond conventional collaborative filtering. The system outperformed a standard collaborative filtering approach in terms of clicks and purchases when tested in an actual online shopping mall; complementary product recommendations were outperformed by substitute ones.

According to ([Bortoló et al., 2023](#)), during the early stage of the pandemic, the adoption of new technologies has been crucial to the survival of nations as well as the continuation of commercial and educational endeavours. Use has been widespread, and digitalisation has occurred in every nation, albeit it has been more intense in some than others, such as in Western nations as opposed to those in Africa and South America. While small businesses have had to reinvent themselves through collaborative methods and distance selling, multinationals and major firms have been able to promote the use of new technology through teleworking and e-commerce. The study ([Guthrie et al., 2021](#)) looks at the online behaviour of both new and current users of a significant French healthcare e-commerce platform during COVID-19. It confirms the applicability of the react-cope-adapt framework in an online setting by demonstrating that consumers respond, cope, and adapt to stressful events in predictable stages based on theories of consumer behaviour and limited consumption. The results lay the groundwork for future causal studies on consumer behaviour during stressful times and give merchants useful advice on how to modify promotions, product assortments, and distribution during emergencies. Using diffusion of innovation theory as its basis, ([Modgil et al., 2022](#)) explore innovation-driven digital entrepreneurial potential that arose during COVID-19. It finds and categorises important regions with significant potential for digital entrepreneurship using a semi-structured, three-stage theme analysis. The results discuss how traditional to digital entrepreneurship changed during the pandemic, emphasise the part innovation diffusion played in this change, and provide theoretical and practical guidance for business owners and digital platforms looking to stay competitive through creative technology use.

## Objectives

1. To study the role and significance of e-commerce in the healthcare sector.
2. To analyse users' adaptability towards e-commerce services in the healthcare sector.

## Research Methodology

## Significance of E-commerce in Healthcare Sector

The current study is entirely dependent on primary data sources. To find answers to the research questionnaire, a method of quantitative analysis was applied in the study. The questionnaire made on google form were send to approximately 300 prospective responders utilising different e-commerce

platforms for purchasing healthcare products, out of which we have received 203 responses, but to make the calculations more precise and accurate, we have taken responses of only 200 respondents for this study. A structured questionnaire was employed to gather explanatory data.

### Data Analysis

**Table 1 Demographic division of respondents**

Basis	Division	Frequency	Percentage	Cumulative Percentage
Gender	Male	112	56	56
	Female	88	44	100
Age	18-25	64	32	32
	26-35	84	42	74
	36-45	35	17.5	91.5
	46-55	10	5	96.5
	above 56	7	3.5	100
Education Qualification	High School	7	3.5	3.5
	Intermediate	4	2	5.5
	Graduation	89	44.5	50
	Post Graduation	79	39.5	89.5
	Professional	21	10.5	100
Occupation	Student	34	17	17
	Self Employed	86	43	60
	Employed	75	37.5	97.5
	Retired	5	2.5	100
Income	Less than Rs. 2 Lakh	36	18	18
	Rs.2 Lakh - Less than Rs. 5 Lakh	67	33.5	51.5
	Rs. 5 Lakh -Less than Rs. 10 Lakh	72	36	87.5
	Rs. 10 Lakh and above	25	12.5	100
	Total	200	100	

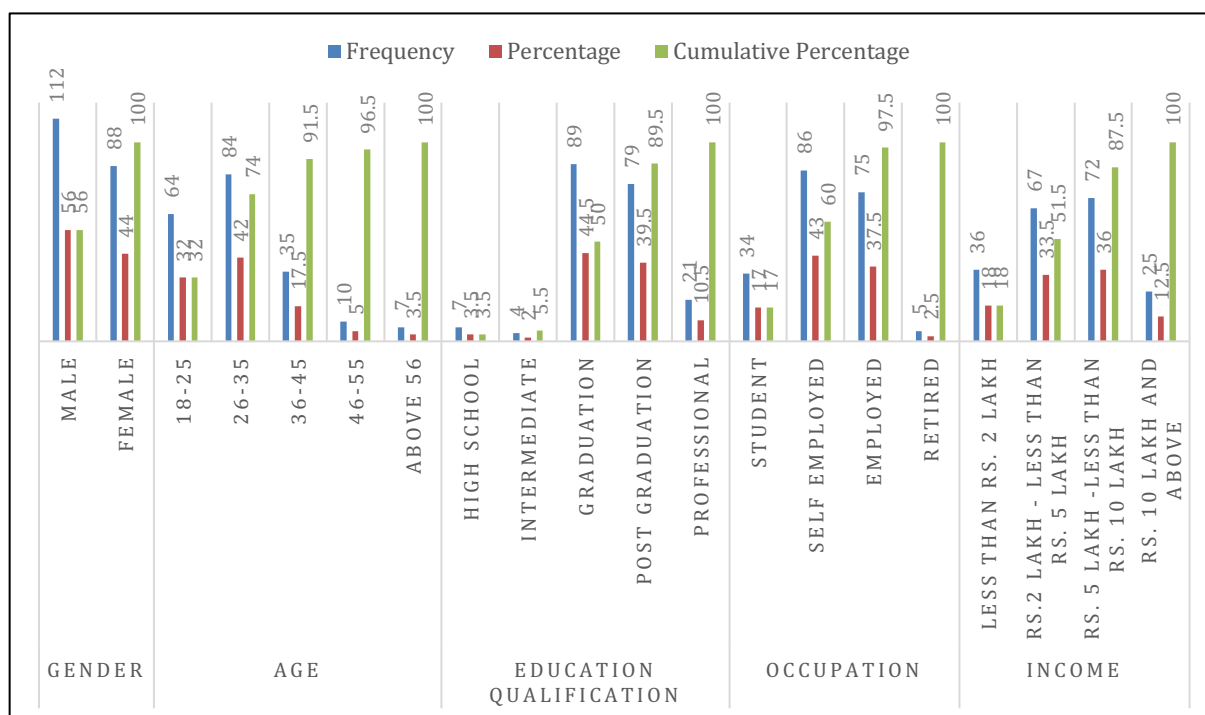


Fig. 1 Demographic division of respondents

### Analysis

# Significance of E-commerce in Healthcare Sector

Table 1 and fig. 1 are categorized survey by gender, age, education qualification, occupation and income. According to gender, (112, 56%) of responders are men, while (88, 44%) are women.

Based on an age-wise study, 74% of respondents are in the 18–35 age range, indicating that the bulk of respondents are young. The age group with the largest presence is 26–35 age that is 42%, followed by 18–25 age, which is 32%. 17.5% of responders are middle-aged, 36–45.

The majority of responders are well educated in the above table 1 and fig. 1. Graduates making up the largest group at 44.5%, and postgraduates at 39.5%. Only 5.5% of those surveyed have finished high school and intermediate school, compared to 10.5% who are professionals.

According to occupation, self-employed respondents make up the largest group with 43%, followed by employed people with 37.5%. Retired respondents make up a very small proportion with 2.5%, while students make up 17% of all respondents. In general, respondents who are economically active comprise most of the sample.

According to the income, the bulk of respondents fall into the middle-income categories. 36% among the respondents make between Rs. 5 lakh and less than Rs. 10 lakhs, while 33.5% make between Rs. 2 lakh and less than Rs. 5 lakhs. 18% of respondents make less than Rs. 2 lakh, and 12.5% make more than Rs. 10 lakhs.

**Table 2 E-commerce sites make it easier to obtain medical supplies for healthcare products.**

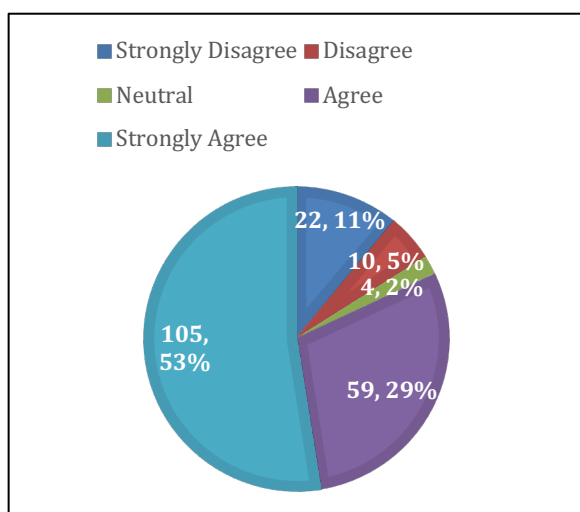


Fig. 2 E-commerce sites make it easier to obtain medical supplies for healthcare products.

### Analysis

Table 2 and fig. 2 show an extremely positive view on e-commerce in the medical field. The great majority of those surveyed either agree or strongly agree with 82% that e-commerce sites make it simpler to obtain

medical supplies. Just 16% respondent are disagreeing with this opinion, and only 2% are neutral.

	Frequency	Percentage	Cumulative Percentage
Strongly Disagree	22	11	11
Disagree	10	5	16
Neutral	4	2	18
Agree	59	29.5	47.5
Strongly Agree	105	52.5	100
Total	200	100	

**Table 3 E-commerce make it easier for me to compare medical products.**

	Frequency	Percentage	Cumulative Percentage
Strongly Disagree	24	12	12
Disagree	8	4	16
Neutral	4	2	18
Agree	61	30.5	48.5
Strongly Agree	103	51.5	100
Total	200	100	

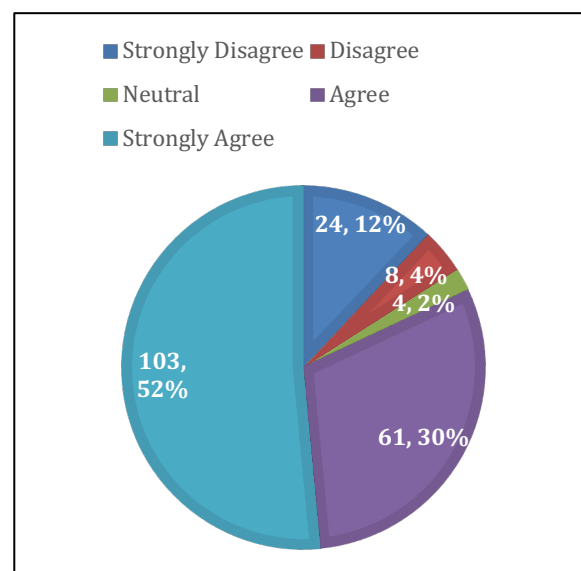


Fig. 3 E-commerce make it easier for me to compare medical products.

### Analysis

Table 3 and fig. 3 exhibits a high level of agreement that comparing medical products is made easier by e-commerce. For the most part of 82% responders either strongly agree or agree. Just 12% of responder's strongly disagree, 4% disagree, and 2% are neutral.

**Table 4 E-commerce are of a high caliber in healthcare products.**

	Frequency	Percentage	Cumulative Percentage
Strongly Disagree	15	7.5	7.5
Disagree	10	5	12.5
Neutral	5	2.5	15
Agree	51	25.5	40.5

## Significance of E-commerce in Healthcare Sector

<b>Strongly Agree</b>	119	59.5	100
<b>Total</b>	200	100	

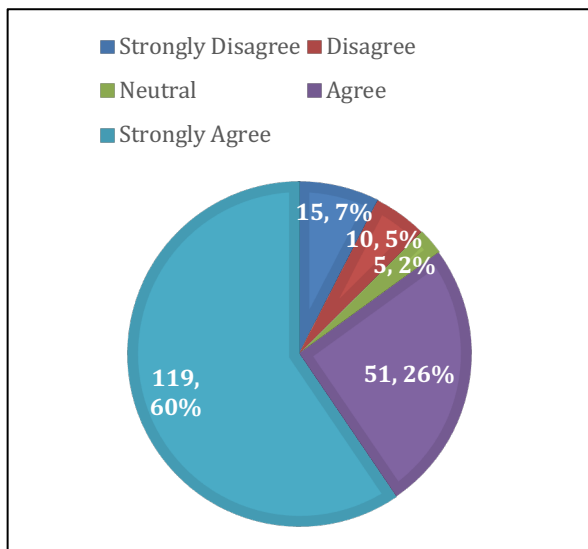


Fig. 4 E-commerce are of a high caliber in healthcare products.

### Analysis

Table 4 and fig. 4 reflect a strong level of faith in the caliber of healthcare products purchased online. A clear majority of 85% respondents either strongly agree or agree. Only 12.5% of the responder's conflict with the opinion, while 2.5% respondents are unable to express their clear views.

### Table 5 E-commerce has made healthcare products more affordable.

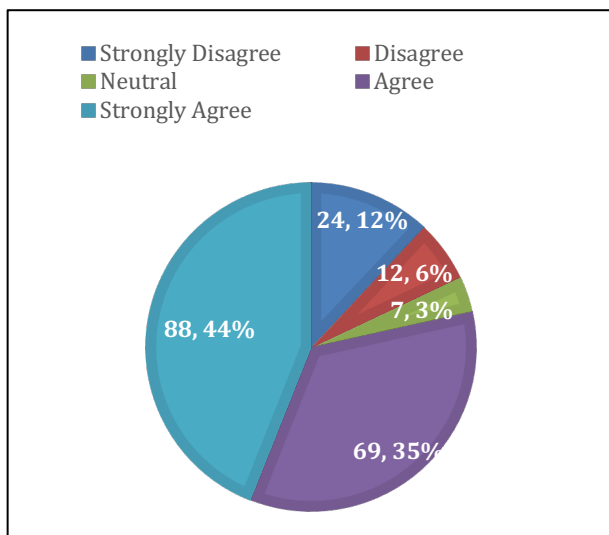


Fig. 5 E-commerce has made healthcare products more affordable.

### Analysis

As stated by table 5 and fig. 5, most of the responders think that e-commerce makes healthcare products more affordable. Most of the responders either strongly agree with or agree with 78.5%. A little percentage of 3.5% are neutral, while about 18% disagree with this viewpoint.

### Table 6 Compared to traditional purchasing methods, using e-commerce for healthcare purchases saves me time.

	Frequency	Percentage	Cumulative Percentage
<b>Strongly Disagree</b>	30	15	15
<b>Disagree</b>	19	9.5	24.5
<b>Neutral</b>	6	3	27.5
<b>Agree</b>	52	26	53.5
<b>Strongly Agree</b>	93	46.5	100
<b>Total</b>	200	100	

	Frequency	Percentage	Cumulative Percentage
<b>Strongly Disagree</b>	19	9.5	9.5
<b>Disagree</b>	10	5	14.5
<b>Neutral</b>	4	2	16.5
<b>Agree</b>	55	27.5	44
<b>Strongly Agree</b>	112	56	100
<b>Total</b>	200	100	

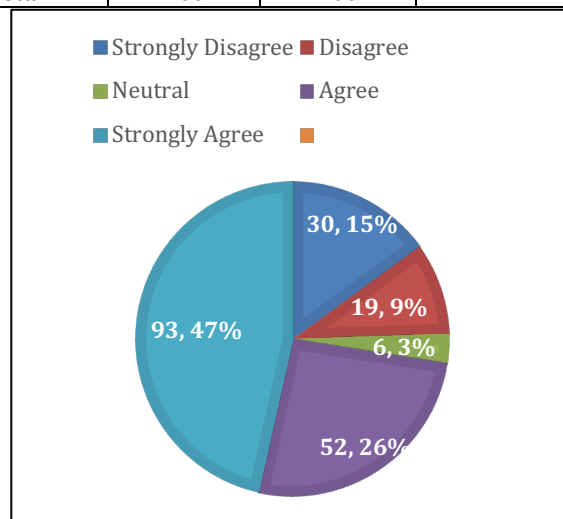


Fig. 6 Compared to traditional purchasing methods, using e-commerce for healthcare purchases saves me time.

### Analysis

# Significance of E-commerce in Healthcare Sector

The majority of respondents think e-commerce saves time when buying healthcare products, in line with table 6 and fig. 6. 72.5% of responders are either agree or strongly agree that compared to traditional purchasing methods, using e-commerce for healthcare purchases saves them time. 3% are neutral, 24.5% of responders don't agree with the opinion.

**Table 7 E-commerce minimises the need for in-person travel to acquire healthcare products.**

	Frequency	Percentage	Cumulative Percentage
<b>Strongly Disagree</b>	19	9.5	9.5
<b>Disagree</b>	9	4.5	14
<b>Neutral</b>	3	1.5	15.5
<b>Agree</b>	64	32	47.5
<b>Strongly Agree</b>	105	52.5	100
<b>Total</b>	200	100	

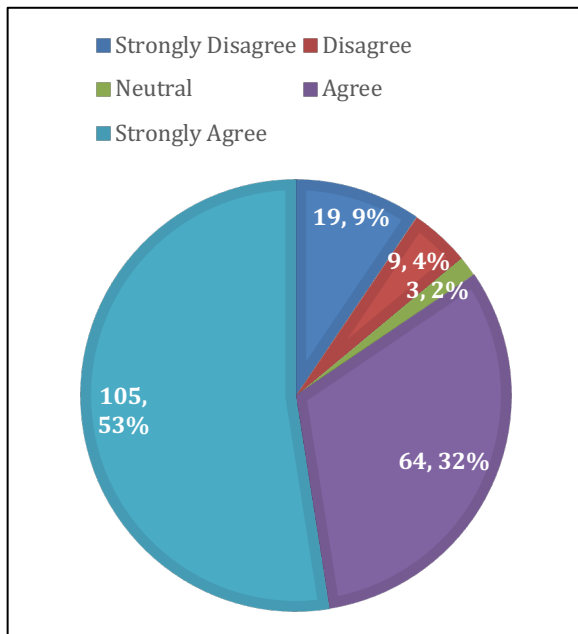


Fig. 7 E-commerce minimises the need for in-person travel to acquire healthcare products.

### Analysis

Table 7 and fig. 7 shows that there is a broad consensus that e-commerce minimises the need for in-person travel to acquire healthcare products. The vast majority of 84.5% responders are either agreed or strongly agree. Just 14% respondents don't agree with the opinion, and 1.5% respondents are unable to express their clear views.

**Table 8 E-commerce sites offer enough information and specifics regarding medical products.**

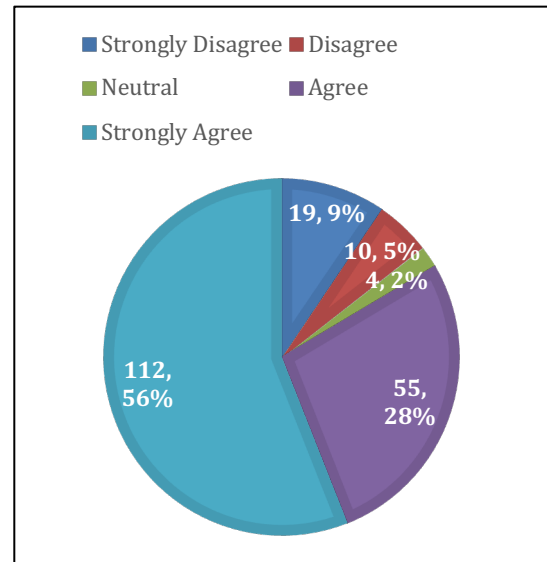


Fig. 8 E-commerce sites offer enough information and specifics regarding medical products.

### Analysis

As stated by table 8 and fig. 8, Most respondents think that e-commerce websites offer enough and specific information about medical products. A solid majority of 83.5% either strongly agreed or agree. Just 14.5% responders disagree with the opinion, 2% respondents are unable to express their clear views.

**Table 9 E-commerce has made healthcare products more affordable.**

	Frequency	Percentage	Cumulative Percentage
<b>Strongly Disagree</b>	20	10	10
<b>Disagree</b>	11	5.5	15.5
<b>Neutral</b>	7	3.5	19
<b>Agree</b>	53	26.5	45.5
<b>Strongly Agree</b>	109	54.5	100
<b>Total</b>	200	100	

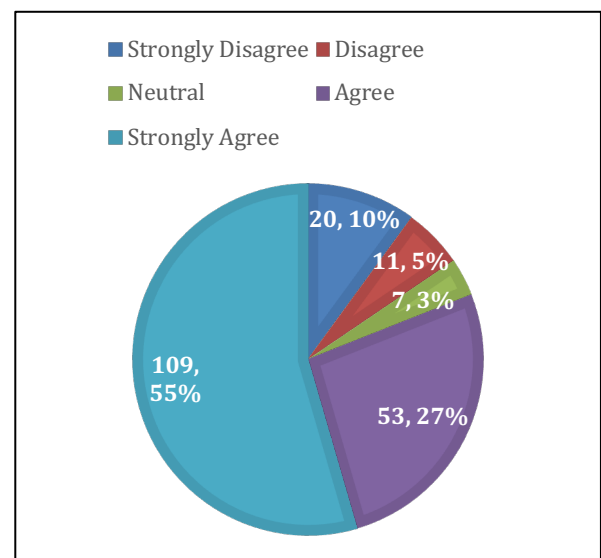


Fig. 9 E-commerce has made healthcare products more affordable.

### Analysis

According to the data in table 9 and fig. 9, most respondents believe that e-commerce makes healthcare products more affordable. Together, 81% of

## Significance of E-commerce in Healthcare Sector

responders either agree or strongly agree with this opinion. Just 15.5% responders are not agreeing with this opinion, and only 3.5% responders are unable to express their views.

**Table 10 E-commerce experience is more satisfying with my entire healthcare purchase.**

	Frequency	Percentage	Cumulative Percentage
<b>Strongly Disagree</b>	27	13.5	13.5
<b>Disagree</b>	19	9.5	23
<b>Neutral</b>	9	4.5	27.5
<b>Agree</b>	58	29	56.5
<b>Strongly Agree</b>	87	43.5	100
<b>Total</b>	200	100	

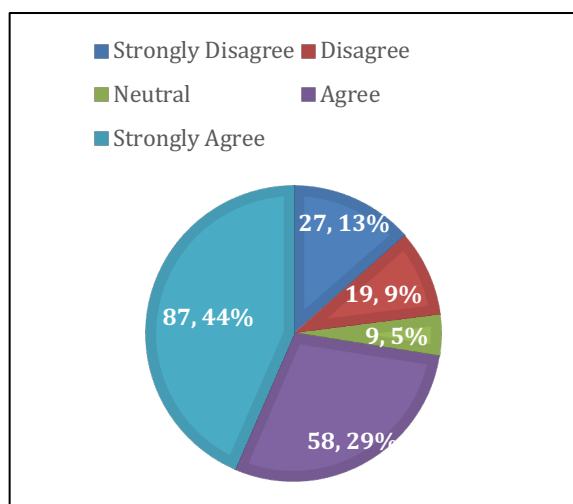


Fig. 10 E-commerce experience is more satisfying with my entire healthcare purchase.

### Analysis

The table 10 and fig. 10 demonstrate a generally favourable degree of satisfaction with online healthcare purchases. Together, 72.5% of responders either agree or strongly agree that E-commerce experience is more satisfying with the entire healthcare purchase. While 4.5% are neutral, about 23% responders do not agree with this opinion.

**Table 11 Based on my experiences, I would advise others to use e-commerce platforms for their healthcare requirements.**

	Frequency	Percentage	Cumulative Percentage
<b>Strongly Disagree</b>	27	13.5	13.5
<b>Disagree</b>	18	9	22.5
<b>Neutral</b>	11	5.5	28
<b>Agree</b>	48	24	52
<b>Strongly Agree</b>	96	48	100
<b>Total</b>	200	100	

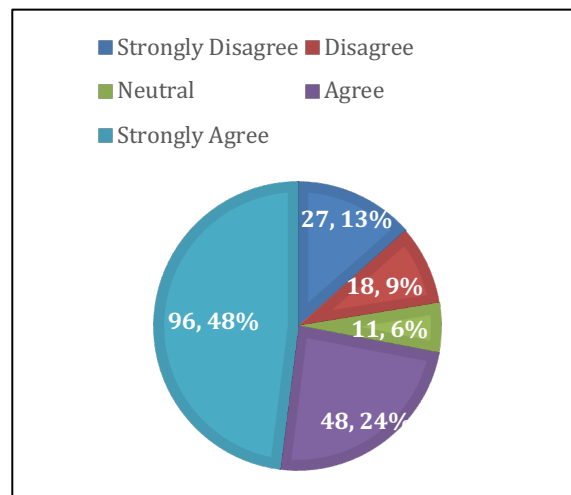


Fig. 11 Based on my experiences, I would advise others to use e-commerce platforms for their healthcare requirements.

### Analysis

The data shows in the table 11 and fig. 11 that respondents are very keen to suggest e-commerce platforms for medical requirements. Together, nearly half of the respondents 48% strongly agree and 24% agree. 5.5% are neutral, while about 22.5% respondents disagree with the recommendation of e-commerce.

### Findings and Suggestions

**Findings:** After completing this study and analysis the following are the findings of our study. -

- 1) Our first objective of this research paper was to study the role and significance of e-commerce in the health care sector. It was found that particularly in the demand and supply of healthcare products e-commerce is playing a vital role because nowadays people are ordering their healthcare products through different online platforms and they are getting it at reasonable prices and in a very short span of time. Even people are getting such products very easily which are not available in their nearby areas.
- 2) Our second objective was to analyse users' adaptability towards e-commerce services in the healthcare sector. We found that people have adapted e-commerce services for ordering their healthcare products. Even old aged people are taking the help of youngsters for ordering their regular medicines and other healthcare goods via online platforms.
- 3) In our respondents, both male and female responders were included. However, a significant number of responders belonged to the age group between 18 to 35 years, who were 74% and also 84% responders were either graduate or post-graduate. Almost 80% responders were either self-employed or doing their jobs somewhere. Additionally, it is observed that 70% middle income groups are using e-commerce services for ordering healthcare products.
- 4) When respondents were analysed on the basis of the likert scale, we found the following observations-
  - a) 82% responders either agree or strongly agree with the opinion that e-commerce sites make it easier to obtain medical supplies for healthcare products.

# Significance of E-commerce in Healthcare Sector

- b) 82% respondents feel that through e-commerce platforms, it is simple for them to compare different healthcare products.
- c) 85% respondents agree with the opinion that e-commerce is of a high calibre in healthcare products.
- d) 78.5% respondents agree that e-commerce has made healthcare products more affordable for their customers.
- e) 72.5% respondents agree that e-commerce has saved their time in purchasing healthcare products.
- f) 84.5% responders believe that e-commerce minimises the necessity for in-person travel to acquire healthcare products, and that there is no need to go personally for acquiring the product.
- g) 83.5% respondents say that e-commerce sites provide sufficient information about healthcare products, which is why it becomes convenient for customers to buy the product of their own choice and need.
- h) 81% respondents feel that healthcare products are more affordable.
- i) 72.5% respondents either agree or strongly agree that the e-commerce experience is very satisfying.
- j) 72% responded says that they would recommend others to use the e-commerce platform for their healthcare product requirements.

On the basis of above observations, it can be said that e-commerce platforms are playing a very vital role in acquiring healthcare products.

**Suggestions:** As we can understand that for using e-commerce platforms knowledge, digital literacy and adaptability for using technology are extremely needed. Generally, it is noted that those who are in urgent need of healthcare products do not use e-commerce platforms. Generally, they satisfy their needs by going to nearby shops to acquire their products. So, it is suggested that if you want to acquire your health care products through e-commerce platforms, then you must properly plan your health care needs, and then only after comparing sufficiently on different platforms, a person can acquire their health care products through e-commerce platforms.

To encourage broader use, government and healthcare providers should make investments in reinforcing digital infrastructure such as internet connectivity and save online payment systems. It is also important to design intuitive user interfaces for those with physical limitations with little experience with technology. Discounts, home delivery and lower transportation cost make e-commerce platform more economical and convenient. To guarantee inclusion in healthcare e-commerce, low-income groups may be given special price models are subsidies.

## Conclusion

The study clearly shows that the healthcare industry has a strong and favourable opinion of e-commerce based on the analysis of the data gathered. Most respondents, who are primarily young, educated, and economically engaged people, actively use and favour e-commerce platforms for transactions pertaining to healthcare. Respondents overwhelmingly concur that e-commerce saves time and eliminates the need for in-

person travel while also making healthcare products and services easier to access, compare, and acquire.

The results also show a high degree of confidence in the dependability and quality of online medical services and goods. Most respondents think that e-commerce is inexpensive, educational, and practical, which raises their happiness with their overall healthcare purchase experience. Furthermore, a substantial portion of consumers express confidence in and adaptation of online healthcare commerce by being prepared to refer e-commerce platforms to others.

Overall, the study finds that e-commerce has greatly improved healthcare services' effectiveness, accessibility, affordability, and user satisfaction. To ensure that e-commerce in healthcare becomes a truly comprehensive and citizen-centric solution, however, continued efforts are required to develop digital awareness, infrastructure, and participation in order to maximise its advantages for all society segments.

## References

- Agmeka, F., Wathoni, R.N. and Santoso, A.S., 2019. The influence of discount framing towards brand reputation and brand image on purchase intention and actual behaviour in e-commerce. *Procedia Computer Science*, 161, pp.851-858.
- Anshu, K., Gaur, L., Singh, G., 2022. Impact of customer experience on attitude and repurchase intention in online grocery retailing: a moderation mechanism of value Co-creation. *J. Retailing Consum. Serv.* 64, 102798.
- Bleier, A., Harmeling, C.M., Palmatier, R.W., 2019. Creating effective online customer experiences. *J. Market.* 83 (2), 98–119.
- Bortoló, G.M., Valdés, J.Á. and Nicolas-Sans, R., 2023. Sustainable, technological, and innovative challenges post Covid-19 in health, economy, and education sectors. *Technological Forecasting and Social Change*, 190, p.122424.
- Brem, A., Viardot, E., & Nylund, P.A. (2021). Implications of the coronavirus (COVID-19) outbreak for innovation: which technologies will improve our lives? *Technol. Forecast. Soc. Change*. DOI: 10.1016/j.techfore.2020.120451.
- Chandna, V., Salimath, M.S., 2018. Peer-to-peer selling in online platforms: a salient business model for virtual entrepreneurship. *J. Bus. Res.* 84, 162–174.
- Guthrie, C., Fosso-Wamba, S. and Arnaud, J.B., 2021. Online consumer resilience during a pandemic: An exploratory study of e-commerce behavior before, during and after a COVID-19 lockdown. *Journal of retailing and consumer services*, 61, p.102570.
- Hendricks, S. and Mwapwele, S.D., 2024. A systematic literature review on the factors influencing e-commerce adoption in developing countries. *Data and Information Management*, 8(1), p.100045.

## Significance of E-commerce in Healthcare Sector

- Hwangbo, H., Kim, Y.S. and Cha, K.J., 2018. Recommendation system development for fashion retail e-commerce. *Electronic Commerce Research and Applications*, 28, pp.94-101.
- Jafari-Sadeghi, V., Garcia-Perez, A., Candelo, E., Couturier, J., 2021. Exploring the impact of digital transformation on technology entrepreneurship and technological market expansion: the role of technology readiness, exploration and exploitation. *J. Bus. Res.* 124, 100–111.
- Kabir, A., Jakowan, M., Bosu, J., Mohsin, M., & Hamim, R. (2020). The emergence of Ecommerce sites and its contribution towards the economic growth of Bangladesh: A qualitative study. *Informatica Economica*, 24(3), 40–53.
- Koe, W., & Sakir, N. (2020). The motivation to adopt E-commerce among Malaysian entrepreneurs. *Organizations and Markets in Emerging Economies*, 11(1), 189–202.
- Konduri, N., Aboagye-Nyame, F., Mabirizi, D., Hoppenworth, K., Kibria, M. G., Doumbia, S., et al. (2018). Digital health technologies to support access to medicines and pharmaceutical services in the achievement of sustainable development goals. *Digital Health*, 4. <https://doi.org/10.1177/2055207618771407>, 2055207618771407.
- Kuppelwieser, V.G., Klaus, P., 2020. Measuring customer experience quality: the EXQ scale revisited. *J. Bus. Res.* 126, 624–633.
- Lee, J.-Y., Fang, E., Kim, J.J., Li, X., Palmatier, R.W., 2018. The effect of online shopping platform strategies on search, display, and membership revenues. *J. Retailing* 94 (3), 247–264.
- Li, X., Zhao, X., Xu, W., Pu, W., 2020. Measuring ease of use of mobile applications in e-commerce retailing from the perspective of consumer online shopping behaviour patterns. *J. Retailing Consum. Serv.* 55, 102093 <https://doi.org/10.1016/j.jretconser.2020.102093>.
- Li, Y.M., Wu, C.T. and Lai, C.Y., 2013. A social recommender mechanism for e-commerce: Combining similarity, trust, and relationship. *Decision support systems*, 55(3), pp.740-752.
- Modgil, S., Dwivedi, Y.K., Rana, N.P., Gupta, S. and Kamble, S., 2022. Has Covid-19 accelerated opportunities for digital entrepreneurship? An Indian perspective. *Technological Forecasting and Social Change*, 175, p.121415.
- Mthembu, P. S., Kunene, L. N., & Mbhele, T. P. (2018). Barriers to e-commerce adoption in African countries. A qualitative insight from Company Z. *Journal of Contemporary Management*, 15, 265–304.
- Murthy, K., Kalsie, A., & Shankar, R. (2021). Digital economy in a global perspective: Is there a digital divide? *Transnational Corporations Review*, 13(1), 1–15.
- Myovella, G., Karacuka, M., & Haucap, J. (2020). Digitalization and economic growth: A comparative analysis of sub-saharan africa and oecd economies. *Telecommunications Policy*, 44(2).
- Novak, T.P., Hoffman, D.L., Yung, Y.F., 2000. Measuring the customer experience in online environments: a structural modeling approach. *Market. Sci.* 19 (1), 22–42.
- Olu, O., Muneene, D., Bataringaya, J. E., Nahimana, M. R., Ba, H., Turgeon, Y., et al. (2019). How can digital health technologies contribute to sustainable attainment of universal health coverage in Africa? A perspective [Perspective] *Frontiers in Public Health*, 7. <https://doi.org/10.3389/fpubh.2019.00341>.
- Rose, S., Clark, M., Samouel, P., Hair, N., 2012. Online customer experience in e-retailing: an empirical model of antecedents and outcomes. *J. Retailing* 88 (2), 308–322.
- Schwalbe, N., & Wahl, B. (2020). Artificial intelligence and the future of global health. *The Lancet*, 395(10236), 1579–1586. [https://doi.org/10.1016/S0140-6736\(20\)30226-9](https://doi.org/10.1016/S0140-6736(20)30226-9)
- Sila, I. (2019). Antecedents of electronic commerce in developing economies. *Journal of Global Information Management*, 27(1), 66–92.
- Yadav, A., Gupta, A., Naseem, A. and Dwivedi, A., et al. (2022). A study on e-commerce health care services and their role in the health sector. *Int. J. Res. Publ. Rev.* 3(7), pp.2520-2552.