

#### SOCIAL COMMERCE - HOW CONSUMER SHOPS DIRECTLY ON SOCIAL

#### MEDIA

Neha Rani Research scholar Department of commerce singhania University pacheri bari , Rajashthan

Prof. (Dr) Alok Kumar Supervisor Dean & Director Industrial Relations & Placement singhania University pacheri bari, Rajashthan

Dr Ritesh Verma Co-Supervisor Assistant professor Vallabh Government College Mandi , Himachal Pradesh

**DECLARATION:** I AS AN AUTHOR OF THIS PAPER /ARTICLE, HERE BY DECLARE THAT THE PAPER SUBMITTED BY ME FOR PUBLICATION IN THE JOURNAL IS COMPLETELY MY OWN GENUINE PAPER. IF ANY ISSUE REGARDING COPYRIGHT/PATENT/OTHER REAL AUTHOR ARISES, THE PUBLISHER WILL NOT BE LEGALLY RESPONSIBLE. IF ANY OF SUCH MATTERS OCCUR PUBLISHER MAY REMOVE MY CONTENT FROM THE JOURNAL WEBSITE. FOR THE REASON OF CONTENT AMENDMENT /OR ANY TECHNICAL ISSUE WITH NO VISIBILITY ON WEBSITE /UPDATES, I HAVE RESUBMITTED THIS PAPER FOR THE PUBLICATION.FOR ANYPUBLICATION MATTERS OR ANY INFORMATION INTENTIONALLY HIDDEN BY ME OR OTHERWISE, I SHALL BE LEGALLY RESPONSIBLE. (COMPLETE DECLARATION OF THE AUTHOR AT THE LAST PAGE OF THIS PAPER/ARTICLE

#### Abstract

This study examines into the elements that influence customer buying decisions on social commerce platforms, with a particular emphasis on the function of social media features including user reviews, influencer endorsements, and social interactions. It also investigates how social media purchasing experiences—such as ease of use, trust in platforms, and personalised marketing—influence consumer behaviour and purchase intentions. Using a quantitative research approach and focussing on 250 users who engaged in direct transactions through media sources such as Instagram, Facebook, TikTok, or Pinterest during the previous six months, regression is used to assess such associations with respect to consumer purchases based on given elements. This study demonstrates the level of considerable buying influence from such forms of advertisement across social media sites, as people trust the platforms to get them closer to the object being sold. For example, influencer endorsement and consumer



ISSN:2320-3714 Volume:1 Issue:1 January 2025 Impact Factor: 11.9 Subject:Commerce

reviews, as well as consumer attitudes towards convenience and personalisation. Thus, this understanding has significant ramifications for marketers and social commerce platforms in terms of what strategies are in place, as well as improvements in customer engagement and sales.

**Keywords:** Social commerce, Consumer behaviour, social media features, purchase decisions, influencer endorsements, user reviews.

## 1. INTRODUCTION

Social commerce as a showcasing idea arose because of the rising business utilization of social media stages. It is important for a more drawn-out shopper venture that incorporates components, for example, need acknowledgment, data looking, buy expectation, inclusion, data sharing, and brand steadfastness improvement, interfacing both merchant and purchaser networks. Social commerce is an Internet 2.0 peculiarities that permits individuals to connect on social media stages through client produced content. Social commerce considers the trading of content as a feature of for the most part electronic social networks, in which entertainers can showcase, sell, buy, and offer items and administrations on commercial centers. Switzerland has 8.7 million residents, and 89% (Bundesamt für Statistik, 2020) of them are on the web, or utilize the Web. While practically all more youthful occupants are on the web (close to 100%) between the ages of 14 and 39), senior residents don't utilize the web as regularly (79% between the ages of 60 and 69, and 53% between the ages of 70 and up) (Cheng et al., 2019). The typical Swiss family's month to month expenses for lodging and energy, food, protection, and buyer items all out roughly CHF 5,870 (Han et al., 2018), making Swiss shoppers an engaging objective for social commerce. Trust is a critical determinant of customer reception of social commerce, and it depends on quality-guaranteed shared data, for example, client created content, as well as commonality and underwriting by different clients (Wang et al., 2022). This implies that believed clients' material might be consumed to illuminate buy choices, and clients might record their encounters on social media, as individuals have a basic impact in social commerce.

#### **1.1.Social Commerce**

A rapidly expanding subset of online business known as "social commerce" utilizes computerized media and social organizations to assist firms and purchasers with exchanging.



Item revelation, audits, evaluations, sharing, proposals, buys, and dependability programs are totally included.

To put it another way, social commerce exploits the expanding utilization of social media stages to promote and sell labor and products directly from the social media websites that individuals visit consistently.

Interfacing brands with their clients straightforwardly and empowering them to have significant conversations through different social media stages is the fundamental motivation behind why organizations are involving social media as a showcasing and deals instrument. Organizations can lay out further associations with clients than is conceivable with customary online business strategies by using user-generated content (UGC), like pictures, recordings, and client assessments. Through social media stages, this empowers organizations to lay out a close to home association with possible clients and increment deals changes. Because of the developing fame of social media stages like as well as the far and wide utilization of cell phones, social commerce has encountered noteworthy advancement lately. A new McKinsey examination gauges that global deals from social media diverts came to \$37 billion out of 2021 and are probably going to reach nearly \$80 billion by 2025, when they are supposed to make up 5% of all U.S. internet business deals. Despite the fact that that piece of the market is as yet small, social commerce is expanding quickly (Sharma & Singh, 2024).

As well as allowing organizations more prominent opportunities to communicate with their clients, social commerce benefits customers in various ways. Clients are progressively utilizing social media to get item ideas from companions, family members, and complete outsiders who have proactively purchased the thing they are pondering. Furthermore, shoppers can pose direct inquiries about an item prior to getting it through commitment by means of Q & A (question and answer) sheets or remarks segments, which gives them more trust in their general buying choices and gives brands better market knowledge. Social media stages offer an incredible opportunity for this cooperation since they work with correspondence between clients who are thinking about an item and the individuals who have proactively gotten it.

Finally, a great deal of organizations uses the data procured from these trades — likes, offers, and remarks — to continuously work on their items as indicated by the inclinations of their



ISSN:2320-3714 Volume:1 Issue:1 January 2025 Impact Factor: 11.9 Subject:Commerce

clients. Clients benefit from a considerably more individualized buying experience therefore, fortifying their relationship with a particular organization or brand.

For example, Amazon figures out what item's clients are keen on purchasing by utilizing customer information accumulated from website visits as well as strengthening information like tweets and postings. Thusly, they can all the more successfully target shoppers with tweaked advertisements on a few stages, for example, supported postings in clients' news channels on social systems administration destinations like Facebook and Twitter or web crawler results pages.

## 1.2.Social Media

Any web-based and portable advances that permit individuals or associations to convey, share data, or take part in alternate ways are alluded to as "social media." Through stages like Instagram, Facebook, TikTok, LinkedIn, X/Twitter, YouTube, Snapchat, and others, the expression envelops social systems administration, writing for a blog, messaging, informing, and email. At first made for of correspondence with loved ones, social media immediately developed to be utilized for a large number of goals. The primary organization to outperform 1,000,000 months to month dynamic clients was MySpace in 2004 (Our World in Data, Report)

As Facebook and Twitter (presently X) entered the market, social media use soar in the years that followed. Organizations ran to these stages since they permitted them to get to an overall crowd quickly. 46% of web clients globally gain their report from social media, as indicated by the Global Web Index. This is tantamount to 40% of guests who visit news websites to see news. Contrasted with different ages, Gen Z and recent college grads were the most disposed to watch news on social media (Global Web Index, 2024).

Considering how long people spend on social media locales and applications consistently, it isn't startling that social media has a huge impact in many firms' promoting methodology. With later applications like TikTok, Sign, and Clubhouse entering the positions of notable social organizations like Facebook, YouTube, X, and Instagram, social media is a continually developing region (Pew Research Center, 2022).



ISSN:2320-3714 Volume:1 Issue:1 January 2025 Impact Factor: 11.9 Subject:Commerce

## **1.3.Objectives of the Study**

- To determine what influences customers' decisions to buy on social commerce websites and whether elements like user reviews, influencer endorsements, and social interaction encourage customers to buy directly from a website.
- To assess how social media purchasing experiences—like user-friendliness, platform trust, and tailored marketing—affect customer behaviour and their propensity to make purchases straight from social media channels.

# 2. LITERATURE REVIEW

Leong et al. (2024) developed a new research paradigm to address the shortcomings in existing social commerce models. The authors noted flaws in prior frameworks, particularly the information model, and stressed the importance of fresh theoretical perspectives in the age of Industrial Revolution 4.0 technologies. Using a longitudinal science mapping of the s-commerce paradigm from 2003 to 2023, the authors determined that the era between 2003 and 2010 was mostly concerned with social networking sites, virtual communities, and social purchasing. Researchers created analytical methodologies and service-based social commerce constructs to better understand how social media could influence online shoppers' behaviour during this time period. From 2011 to 2015, there was a shift in the concept of consumer behaviour that emphasised Web 2.0, artificial intelligence, and cognitive elements. From 2017 to 2023, social commerce remained in the forefront of the research, with a focus on the convergence of social media technologies and e-commerce.

**Chodak (2024)** investigated the importance of user-generated content and influencers in social commerce, emphasising their major influence on customer behaviour. The convergence of e-commerce and social media has allowed firms to open online stores on social media platforms, engaging customers with personalised marketing and feedback. It identified important trends that are predicted to shape the future of social commerce, including enhanced personalisation via machine learning, the adoption of social VR and AR experiences, and virtual influencers. On the other hand, Chodak identified security, privacy, and ethical quandaries around obtrusive advertising as concerns that must be addressed in order for social commerce to remain relevant. Griffin (2024) emphasised the need of ethical standards and consumer education in sustaining a user-centric strategy in the digital age. Social content may play a significant part in driving sales and engaging customers. According to the study, social material utilised on social media



ISSN:2320-3714 Volume:1 Issue:1 January 2025 Impact Factor: 11.9 Subject:Commerce

sites can significantly improve brand awareness and customer experience if deployed at the appropriate stages of the marketing funnel. Griffin has demonstrated that a brand that uses an integrated approach outperforms one that does not. This outcome demonstrates the importance of social content in the development of commercial performance and long-term consumer connections.

Asanprakit and Kraiwanit (2023) compared the economic consequences of social commerce businesses on Instagram and TikTok. The authors employed a case study technique to investigate how these platforms influenced consumer behaviour and the economy as a whole. According to the findings, both TikTok and Instagram Shopping had a beneficial impact on economic growth. However, the users' behavior was more criticized in TikTok Shop compared to Instagram. Users demonstrated varied behaviours across both platforms. The study revealed that, while both platforms had similar attraction and user behaviours, Instagram Shopping was perceived more positively. The economic benefits of social commerce were expected to continue, and the study recommended that future research focus on long-term monitoring of social media platforms to track their evolution.

**Suresh et al. (2023)** used SCAM adding in perceived risk factors, concluded how 349 responses of Gen Z consumers living in India were analysed, whereby findings show how "perceived risk predicted the likelihood that the useful nature of such will be observed." Such behaviour had an impact on the relationship and was damaging in terms of the element that impacts "buying intentions negatively." Among the constructs of SCAM, perceived usefulness emerged as the most influential factor in predicting buying intention. The study showed that approximately 34% of the variance in behavioral intention could be explained by the model. These findings provide theoretical and practical insights into how social commerce companies can better understand and cater to Gen Z consumers, especially in addressing the perceived risks associated with online shopping and enhancing perceived usefulness.

# 3. RESEARCH METHODOLOGY

#### **3.1.Research Design**

The study used a quantitative research approach to analyse consumer behaviour in the context of social commerce, specifically how consumers shop directly on social media platforms. The



study's design centred on examining consumer perceptions, decision-making processes, and the influence of social media elements in influencing purchase decisions.

## 3.2.Research Approach

It used a deductive approach in which current ideas about customer behaviour in e-commerce and social media are tested with empirical data. It seeks to confirm or refute the impact of social media elements such as user reviews, influencer endorsement, and social engagement on consumer purchasing behaviour.

## **3.3.Sample Size:**

The study included 250 individuals. The sample comprised of active social media users who had made purchases directly through social media sites (such as Instagram, Facebook, TikTok, or Pinterest) within the previous six months. The sample size was set to guarantee that the study produced accurate and statistically meaningful results.

## **3.4.Sampling Technique**

A stratified random sampling method was used. The stratification was based on demographic parameters such as age, gender, and frequency of social media use. This means that the sample would include a wide range of social media users, making the results more generalisable to a larger population.

#### **3.5.Data Collection**

A systematic online poll was used to gather primary data. The poll was aimed to collect information on consumer behaviour when shopping directly through social media. Questions included:

- Social media usage patterns (frequency and platforms)
- Factors influencing purchasing decisions (e.g., influencer endorsements, social media marketing, user reviews).
- Consumers' attitudes towards social media shopping (e.g., trust, ease, personalisation)
- Demographic information (such as age, gender, and income level)

The poll was distributed via several social media channels, with active users in mind. Google Forms or other survey software was then used to collect replies.



## **3.6.**Tools for Data Analysis

The survey data were analysed using descriptive and inferential statistics. The same includes:

- Descriptive statistics, such as the mean and frequency distributions, will be used to summarise demographic data and trends in general consumers' shopping on social media.
- Regression analysis was used to quantify the influence of social media elements including user reviews, influencer endorsements, and social interactions on consumer purchasing decisions.

# 4. DATA ANALYSIS AND INTREPRETATION

The demographic characteristics of the sample reveal a diverse range of participants, providing a comprehensive view of consumer behavior in social commerce as shown in table 1.

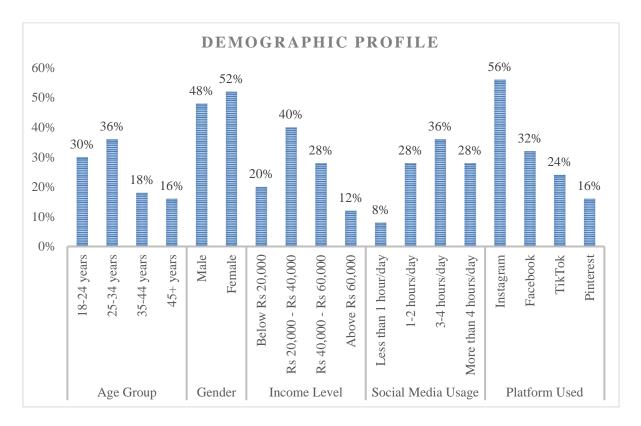
Demographic Category	Category	Frequency (n)	Percentage (%)
Age Group	18-24 years	75	30%
	25-34 years	90	36%
	35-44 years	45	18%
	45+ years	40	16%
Gender	Male	120	48%
	Female	130	52%
Income Level	Below Rs 20,000	50	20%
	Rs 20,000 - Rs 40,000	100	40%
	Rs 40,000 - Rs 60,000	70	28%
	Above Rs 60,000	30	12%
Social Media Usage	Less than 1 hour/day	20	8%
	1-2 hours/day	70	28%
	3-4 hours/day	90	36%
	More than 4 hours/day	70	28%
Platform Used	Instagram	140	56%
	Facebook	80	32%

## Table 1: Demographic Characteristics of the Sample



ISSN:2320-3714 Volume:1 Issue:1 January 2025 Impact Factor: 11.9 Subject:Commerce

TikTok	60	24%
Pinterest	40	16%



#### Figure 1: Graphical presentation of Demographic Characteristics of the Sample

According to the age distribution, the bulk of respondents—66% of the sample—are between the ages of 18 and 34, with 36% of the sample falling into this age range. This suggests that the main population participating in social commerce activities is younger people. With 52% females and 48% males, the sample is almost evenly dispersed by gender, indicating that both sexes use social commerce platforms equally. Middle-class people are more inclined to participate in social commerce, as evidenced by the fact that a sizable percentage of respondents (40%) had incomes between Rs 20,000 and Rs 40,000. According to social media usage habits, a significant portion of respondents are quite active on social media, with 36% using it for three to four hours per day and 28% using it for more than four hours. With 56% of respondents using Instagram, Facebook came in second with 32% and TikTok with 24%. This usage pattern is in line with the trend of social commerce that is primarily impacted by visual platforms like Instagram.



The regularity with which customers interact with social media sites is demonstrated by the data on usage trends as shown in Table 2.

# Table 2: Social Media Usage, Influencing Factors, and Consumer Attitudes (Sample Size 250)

Category	Subcategory	Frequency	Percentage	
		( <b>n</b> )	(%)	
Social Media Usage Patterns	Frequency of Use			
	Less than 1 hour/day	20	8%	
	1-2 hours/day	70	28%	
	3-4 hours/day	90	36%	
	More than 4 hours/day	70	28%	
	Platforms Used			
	Instagram	140	56%	
	Facebook	80	32%	
	TikTok	60	24%	
	Pinterest	40	16%	
Influencing Factors on	Influencers	160	64%	
Purchase Decisions	Endorsements			
	Social Media Ads	190	76%	
	User Reviews	150	60%	
	Combination of			
	Factors			
	Influencers & Social	110	44%	
	Media Ads			
	Influencers & User	85	34%	
	Reviews			
	Social Media Ads &	90	36%	
	User Reviews			
Consumer Attitudes toward	Trust in Platforms	210	84%	
Social Media Shopping	Convenience	200	80%	

Size: 250)



ISSN:2320-3714 Volume:1 Issue:1 January 2025 Impact Factor: 11.9 Subject:Commerce

Personalization	180	72%
Skepticism	50	20%

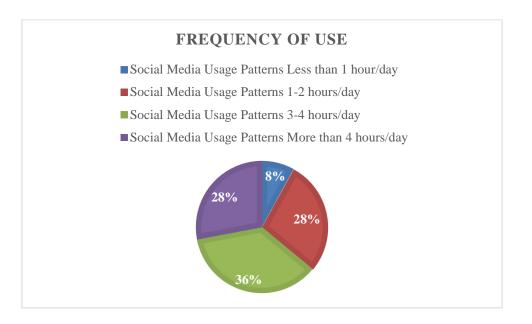
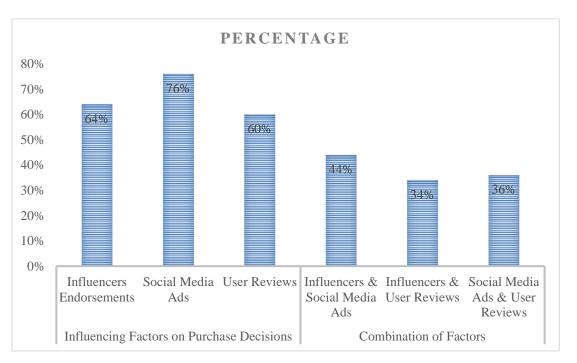


Figure 2: Frequency of use social media



# **Figure 3: Influencing Factors on Purchase Decisions**

Social media is an essential part of the daily routine for the majority of respondents (36%), who spend 3–4 hours a day on it, while 28% spend more than 4 hours. With 56% of respondents



ISSN:2320-3714 Volume:1 Issue:1 January 2025 Impact Factor: 11.9 Subject:Commerce

using it, Instagram continues to be the most popular social commerce network. Facebook and TikTok are also used, albeit less often. The trends' direction indicates how prominent visuallyoriented platforms are in social commerce. 76% of respondents said that social media advertisements have an impact on their buying decisions, making them the most significant influencing factor. User reviews, at 60%, and influencer endorsements, at 64%, also had a big impact, demonstrating the value of user-generated content and reliable recommendations in influencing consumer behaviour. Multiple influencing factors frequently interact together to drive purchase decisions, according to combinations of these elements, such as influencers and social media ads (44%), influencers and user reviews (34%), and social media ads and user reviews (36%). According to consumer perceptions of social media buying, trust in the platform will be the most important aspect, as 84% of respondents stated that trust influences their purchases. Convenience (80%) and personalisation (72%), two additional criteria, were also significant, indicating that more individuals are willing to shop on social media if it is convenient and allows them to customise their purchases to suit their preferences. Although 20% of respondents remain sceptical, this is a tiny percentage, indicating that most customers are positive about purchasing on social networking platforms.

The regression analysis's findings shed light on the connections between many factors and the mechanisms underlying consumers' social media buying decisions as shown in Table 3.

Variable	Coefficient	Standard	t-	<b>p-</b>
	(β\betaβ)	Error	Statistic	Value
Intercept (β0)	0.5	0.2	2.5	0.01
Social Media Usage (β1)	0.3	0.1	3.0	0.003
Influencers Endorsements	0.25	0.1	2.5	0.01
(β2)				
Social Media Ads (β3)	0.4	0.08	5.0	0.0001
User Reviews (B4)	0.2	0.09	2.22	0.03
Trust (β5)	0.5	0.1	5.0	0.0001
Convenience ( <b>β6</b> )	0.3	0.07	4.29	0.0001
Personalization (β7)	0.2	0.1	2.0	0.05

#### Table 3: Regression Output



When there are no specific factors influencing purchasing decisions, there may be a little base influence since  $\beta_0$  is equal to 0.5.

- Social media use has a positive and statistically significant impact on purchasing decisions ( $\beta_1 = 0.3$ , p = 0.003), with consumers more likely to make a purchase the more time they spend on social media.
- Influencer endorsements also showed a substantial beneficial impact ( $\beta_2 = 0.25$ , p = 0.01), suggesting that influencer endorsements help consumers make informed decisions about what to buy.
- Social media ads ( $\beta_3 = 0.4$ , p = 0.0001) have the greatest impact; they are important determinants of whether or not customers would buy something based on their posts.
- Although they have a smaller positive impact than advertisements and influencer endorsements, user reviews ( $\beta_4 = 0.2$ , p = 0.03) are nonetheless powerful enough to influence consumer behaviour.
- The strongest predictor,  $\Box$  tTrust  $\beta_5 = 0.5$ , p = 0.0001, indicates that customers' trust in the platform has a significant impact on their decision to buy.
- It is found that both convenience ( $\beta_6 = 0.3$ , p = 0.0001) and personalisation ( $\beta_7 = 0.2$ , p = 0.05) have significant effects on consumers' purchasing decisions, with convenience being more valuable than tailoring.

The regression results confirm that a number of important factors influence consumer purchasing decisions on social commerce platforms, including social media usage, influencer endorsements, social media ads, user reviews, and consumer attitudes towards convenience, personalisation, and trust. These insights can be utilised to identify the key factors influencing customer behaviour and adjust the approach to increase the efficacy of the marketing campaign on social media.

# 5. CONCLUSION

This study investigates the elements that impact consumer purchasing behaviours on social commerce platforms. These aspects include customer reviews, the opinions of influencers or celebrities, advertisements on social networks, and buyer attitudes. For example, the findings of the study indicate that advertisements on social media platforms and endorsements from



ISSN:2320-3714 Volume:1 Issue:1 January 2025 Impact Factor: 11.9 Subject:Commerce

influential people have a significantly greater impact on consumers' decisions to make purchases than do reviews written by customers about the product. It was discovered that consumer attitudes, such as trust in platforms, ease, and personalisation, have a beneficial impact on one's intents to make a purchase, with trust being the most powerful component. Younger age groups, specifically those between the ages of 18 and 34, were found to be the most active social media shoppers, and Instagram was discovered to be the site that was utilised the most frequently. These findings suggest that in order for businesses to be successful in social commerce, they will need to put a lot of effort into ensuring that customers have trust, ease, and the ability to personalise their shopping experience. This study also provides a great deal of useful information for those who work in marketing. Additionally, it is recommended that marketers implement targeted methods by mixing user-generated content, influencer alliances, and adverts on social media platforms. It is possible that future research will investigate the long-term effects of these elements, the influence of developing technologies such as artificial intelligence and virtual reality, and differences in consumer behaviour across different cultures. The findings of this study, in general, provide significant insights into the ways in which social media platforms influence the behaviour of consumers and offer recommendations to firms that are wanting to optimise their social commerce strategy.

#### REFERENCES

- Asanprakit, S., & Kraiwanit, T. (2023). Causal factors influencing the use of social commerce platforms. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(4), 100172.
- 2. Azhar, M., Akhtar, M. J., Rahman, M. N., & Khan, F. A. (2023). Measuring buying intention of generation Z on social networking sites: an application of social commerce adoption model. *Journal of Economic and Administrative Sciences*.
- Bundesamt f
  ür Statistik. (2020). Konsum und Sparen. Neuenburg, Schweiz. Retrieved from https://www.bfs.admin.ch/bfs/de/home/statistiken/querschnittsthemen/wohlfahrtsmess ung/wohlfahrt/wohnsituation/konsum-sparen.html



- Cheng, X., Gu, Y., & Shen, J. (2019). An integrated view of particularized trust in social commerce: An empirical investigation. *International Journal of Information Management*, 45, 1–12. https://doi.org/10.1016/j.ijinfomgt.2018.10.008
- Chodak, G. (2024). Social Commerce. In *The Future of E-commerce: Innovations and Developments* (pp. 169-185). Cham: Springer Nature Switzerland.
- Chong, S. E., Lim, X. J., Ng, S. I., & Kamal Basha, N. (2025). Unlocking the enigma of social commerce discontinuation: exploring the approach and avoidance drivers. *Marketing Intelligence & Planning*.
- 7. Global Web Index. "The Global Media Landscape."
- 8. Griffin, L. (2024). The power of social content: Transforming digital commerce. *Journal of Digital & Social Media Marketing*, *12*(2), 129-140.
- Han, H., Xu, H., & Chen, H. (2018). Social commerce: A systematic review and data synthesis. *Electronic Commerce Research and Applications*, 30, 38–50. https://doi.org/10.1016/j.elerap.2018.04.002
- Leong, L. Y., Hew, T. S., Ooi, K. B., Hajli, N., & Tan, G. W. H. (2024). Revisiting the social commerce paradigm: The social commerce (SC) framework and a research agenda. *Internet Research*, 34(4), 1346-1393.
- 11. Our World in Data. "The Rise of Social Media."
- 12. Pew Research Center. "Connection, Creativity, and Drama: Teen Life on Social Media in 2022."
- 13. Sharma, D., & Singh, T. (2024). OVER A DECADE OF SOCIAL COMMERCE: A BIBLIOMETRIC ANALYSIS. *Journal of Commerce & Accounting Research*, *13*(4).
- 14. T Suresh, A., Margret, N., Francis, A., & Joseph, S. (2023). EEFECT OF SOCIAL COMMERCE ON CONSUMER BEHAVIOUR TOWARDS APPAREL SELECTION (Doctoral dissertation, St Teresa's College (Autonomous), Ernakulam).



ISSN:2320-3714 Volume:1 Issue:1 January 2025 Impact Factor: 11.9 Subject:Commerce

 Wang, X., Wang, H., & Zhang, C. (2022). A literature review of social commerce research from a systems thinking perspective. *Systems*, 10(3), 56. https://doi.org/10.3390/systems10030056

#### Author's Declaration

I as an author of the above research paper/article, here by, declare that the content of this paper is prepared by me and if any person having copyright issue or patent or anything otherwise related to the content, I shall always be legally responsible for any issue. For the reason of invisibility of my research paper on the website /amendments /updates, I have resubmitted my paper for publication on the same date. If any data or information given by me is not correct, I shall always be legally responsible. With my whole responsibility legally and formally have intimated the publisher (Publisher) that my paper has been checked by my guide (if any) or expert to make it sure that paper is technically right and there is no unaccepted plagiarism and hentriacontane is genuinely mine. If any issue arises related to Plagiarism/ Guide Name/ Educational Oualification /Designation/Address of my university/college/institution/ Structure or Formatting/ Resubmission/Submission /Copyright /Patent /Submission for any higher degree or Job/Primary Data/Secondary Data Issues. I will be solely/entirely responsible for any legal issues. I have been informed that the most of the data from the website is invisible or shuffled or vanished from the database due to some technical fault or hacking and therefore the process of resubmission is there for the scholars/students who finds trouble in getting their paper on the website. At the time of resubmission of my paper I take all the legal and formal responsibilities, If I hide ordo not submit the copy of my original documents (Andhra/Driving License/Any Identity Proof and Photo) in spite of demand from the publisher then my paper maybe rejected or removed from the website anytime and may not be consider for verification. I accept the fact that as the content of this paper and the resubmission legal responsibilities and reasons are only mine then the Publisher (Airo International Journal/Airo National Research Journal) is never responsible. I also declare that if publisher finds Any complication or error or anything hidden or implemented otherwise, my paper may be removed from the website or the watermark of remark/actuality maybe mentioned on my paper. Even if anything is found illegal publisher may also take legal action against me

Neha Rani Prof. ( Dr ) Alok Kumar Dr Ritesh Verma