

ONLINE SHOPPING IN THE DIGITAL ERA: FACTORS INFLUENCING CONSUMERS' PREFERENCE AND DECISION MAKING AN EMPIRICAL INVESTIGATION

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ABSTRACT

Trade and commerce are globalised in the new millennium for exchanging goods and services around the world. Amongst that Online shopping is transforming in such a way to fulfil the need of the customers and ready to supply the requisite products to any parts of the world. Technology, Economic factors, psychological factors are playing pivotal role in customer preference and decision making. This research was concerned around knowing the more influencing factors which motivates the consumers to decide the nature of products preferred to buy on line basis. The findings of the study emphasize the relationship among the technology, economic status, and psychological factors and its influence on decision making among these factors after successfully examined that the relationship between technological and economic elements influencing consumer psychology and stood main factor for purchasing decisions. The research data is collected from five states exclusively Tamil Nadu, Kerala, Karnataka, Andhra and Telangana from south India and analysis is done with percentage analysis, and Analysis of movement Structure (AMOS), to identify the relationship between the latent variables used in the path diagramme to know its level of significance.

Key words: Technology Advancement, Economic factors, psychological factors, Decision making

INTRODUCTION:

Technology Advancement and digitisation in the field of trade and commerce in an inevitable in the present globalised economy for inclusive growth among the countries all over the world. The advancement of technology and adoption decides the growth and development of the countries. (Li et al., 2024) In the present digitalised world both online shopping and E-commerce has placed its vital importance among the users, due to several uses, the customers need not to visit bricks and motors, rather with the help of Applications, (Awogbemi et al., 2025) and few clicks customer can buy their desired commodities. It ranges from small pencil to costlier and precious ornaments and even luxurious branded cars. (Nipawan Kaewpu et al., 2023) Digital transactions in the developed countries are largely accepted and practiced better than people living in the developing or under-developing countries. Where customers use digital coins and crypto currencies for digital payments. (Ghiuță & Nistor, 2025)

In the developed countries big mahals and super markets with spacious access and luxurious acceptance make the people to better (Yuvasubramaniyan, n.d.) utilise the services. Countries like India, major E-commerce players like, Flipkart, Amazon, Home Depot, Walmart, Alibaba, eBay, Rakuten, Shein, and Prosus are providing unimaginable services, the accessing services and application are designed user friendly, E-Commerce application enhances and provides better services to the customers. (Farihah Isamudin & Islam, 2023)

In India current market size of E-commerce stands for 125-151 billion amongst the retail share stands for 7.8%, number of average online shoppers stands 270 million as of 2024-25 and expected to reach \$325 to 345 billion by 2030 and as long term projection by 2025 it will reach \$ 550 billion. Other countries like China's total market size and revenue stands to \$2.535 trillion, and retail contribution is about 47.0%, this contributes for global online shopping marker and Huge mobile commerce usages. United states total marker stands to 1.193 trillion, contributes 15.8% towards retail sales, as maker penetration is lower as compared to China, but per-capital spending is highest in the country. South Korea, contributes to 207.71 billion and 30.0% towards e-commerce penetration, high internet uses and mobile usage and strong logistics tech infrastructure boosts for purchases. (Bhanushali & Vyas, n.d.)

United Kingdom contributes 142.82 billion and 30.6% contribution towards retail sales, where exists mature online culture, well developed payments and delivery systems. Followed by Japan contributes 190.53 billion for total e-commerce business, and 13.4% towards retail sales, slower growth as compared with other Asian countries.

REVIEW OF LITERATURE

Consumers purchasing products or services using social media network such as Instagram, Facebook WhatsApp, YouTube, Twitter and LinkedIn. The utility of social media in online buying grown almost every individual used these platforms for accessing various services. (Bhanushali & Vyas, n.d.) COVID -19 pandemic brought transformative shifts in consumer behaviour promotes notable increase in online shopping activities, provides services to the diverse cultural landscapes witnessed a paradigmatic evaluating in consumer preference during the tight period. (Muhammed Sha.S & Dr.P.V. Lal Wilson, 2024) Interactions via digital platform communicates networks at the time of lockdown and pandemic scenario caused a drastic change in customer perception and behaviour and altered the perception and purchasing habits (Kutty et al., 2024)

Trust and social influence and personal experience play major role on purchasing decision and one category of consumer prefer products like music, clothing, smart phone and online education whereas another category prefer products like cosmetic, clothing, music and online (Professor ISBR, 2024) Factors influencing purchase of fresh online seafood among X generation consumers provides recommendations for seafood business especially on online Platform gives quick access and cost savings. Especially it helps small-scale entrepreneurs with limited investments to provide market strategies for competitive advantage. (Nipawan Kaewpu et al., 2023)

The online shopping and its importance increase over time in the era of intelligence, emphasis the need to attract the consumers attention. Reanalysis technique provides a significant reference for the future development the movement experiments is crucial for identifying variations in the data outcome. The primary discovery of time fixation, fixation count, and the duration for the first fixation and visual cognition experimental design were examined. (Li et al., 2024) Needs are met people are likely to experience greater satisfaction and lead comfortable lives in resource constrained world. Border inquiry on individuals, a

meet of needs under one platform. Shopping malls, offers potential solution to the multifaceted avenues ad brings together a diverse brands and stores provides consumers requisites.(Tuncer, 2025) The pattern and decision-making styles and technology revolution exponentially contributed for growth of online shopping shows contemporary innovations. Behavioural and cognitive dimensions of consumer change the new circumstances, psychological traits such as depression, anxiety, stress, extraversion and neuroticism, openness to experience, influence consumer decision making.(Vujović et al., 2025) Digital commerce influences consumer perception and changes their decision-making process. The last pandemic of COVOD-19 additionally accelerated the acceptance of the digital services. Online stores are building relationship with customers in the way they need and accept. (Petrovska et al., n.d.) China experience benefits online shopping such as broader product variety, competitive pricing, convenience, and accessibility. Finding reliable sellers or product, product quality and authenticity concerns, shipping and delivery issues. (Kouam & William, 2023) Exploring factors influencing shopping destination choice, like trave behaviour, lifestyle, and Psychographic variables contributing to understanding of consumer behaviour. Shopping destination choice and provides insights provide marketing and management practices in retail industry .(Manandhar & Kafle, 2023)

STATEMENT OF THE PROBLEM

Online shopping turns as key habit of the 21st millennials, prefers to access the technology for their daily utility, most of the customers are preferring to buy high end of the products through online instead of visiting the bricks and motors,(Vieceli & Shaw, n.d.) this is due to sedentary and routine life style. (“Impact of Customer Reviews on Purchase Decision of a Brand: A Study of Online Shopping,” 2024) And others reasons are accessing high end of products available around the world, living country and location (Anju L & Veni, 2024)does not play role in the online shopping. There fore here in the study four factors have been considered to identify the significant role of the variables.(Muhammed Sha.S & Dr.P.V. Lal Wilson, 2024) first one technology and economic factors pays key role in accessing online shopping the second one is psychological and socio economic factors plays role in Technological factors, the third one is economic factors (Skallerud, 2025)and psychological and psychological and social factors goes hand on hands, and fourth one is economical factors has impact on online purchasing decisions and finally is technology, Socio-economic and psychological and social factors are paying important role in online buying decisions of the customers. (Akter et al., 2025)

OBJECTIVES

1. To examine the influence of Technology factors and socio-economic factors influence on Online decision making
2. To asses’ psychological factors and its role in customers decision on purchasing decision
3. To examine the factors influencing consumer preference on-line shopping and its effects on decision making.

HYPOTHESIS

H01: There is a significant relationship between Technological factors and psychology factors

H02: There is a significant relationship between Economic factors and psychological factors

H03: There is a significant relationship between psychological and social factors and its effects on online decision making

Ho4: There is a significant relationship between economic factors and its effects on On-line Decisions

RESEARCH METHODOLOGY

The study is based on qualitative research approach, using an inductive method and descriptive research design is used to explore the phenomena. Here both primary and secondary source of data have been used for data collection. Primary source of data is collected through google from circulated amongst the customers using online platform for their personal shopping, the recorded data is used for analysis using SPSS software and AMOs is used for identifying the relationship between the variables for identifying the factors which influences the customer's preference and helps in taking decisions in online shopping.

The respondents were administered with google questionnaire, were asked the details of their demographics like age, gender, education and income with closed ended questions, for identifying the respondents' demographic characteristics. The questionnaire utilized a five-point Likert scale, ranges from strongly agree to strongly disagree and 1point to strongly disagree and 5 points to strongly agree.

The research data is collected from the south Indian respondents consist of five states exclusively Tamil Nadu, Kerala, Karnataka, Andhra and Telangana to understand the factors influences online shopping of the south Indian customers and how customers preferences and decision making in the purchasing has effects.

The analysis is done by percentage analysis to know the influence of demographic variables and its influence of purchasing decisions of the customers going for online purchase. Analysis of movement structure (AMOS)(Rajendran R, n.d.-a) is used to identify the relationship between the latent variables used in the path diagramme to know its level of significance.(Boboye & Taoheed, n.d.)

Research analysis is confined only to the convergent validity and discriminant validity is not requires as multiple indicators are not visible for each latent variable only single numbers or error terms is used.(Lai, 2018)

The Sampel size is restored only to 346, based on application of solver's formula under sample is unknow where margin of error is assumed to have been as $e \approx 5.38\%$ to get the proposed sample size.(Rajendran R, n.d.-b)

PERIOD OF THE STUDY

The study was conducted over some time frame between April to June 2025. The geographical area of the study was south India consist of five states exclusively Tamil Nadu, Kerala, Karnataka, Andhra and Telangana, where data were collected from different location with the help of google form as per the convenient.

RELIABILITY AND VALIDITY

The reliability statistics Cronbach alpha value for Technology factor is 0.835 shows excellent reliability this model is highly acceptable with good consistency,(Civelek, 2018) for Economic factor Cronbach's alpha value is 0.770 show high reliability, for psychological factors corrected item total correlation stands as 0.752 with Cronbach's alpha of 0.783 show high reliability (Dragan & Topolšek, n.d.)and for buyer's decision-making alpha value stands

0.783 shows high reliability. (Jiang, 2024)The outcome of the overall Cronbach alpha value of the model stands as 0.834 shows high reliability. Hence the scales used in the model is well constructed and reflecting good internal consistency. (Boomsma, 2000)

ANALYSIS AND RESULTS

Table 1: Demographical variables of the respondents

Table no 1 Descriptive statistic

S. No	Statements	NOR	Percentage
Gender			
1.	Male	127	38
2.	Female	218	63
Marital status			
1.	Married	214	62
2.	Unmarried	131	38
Educational qualification			
1.	No formal education	42	13
2.	Primary school	41	12
3.	Secondary school	43	13
4.	Diploma	62	17
5.	Under graduate	101	29
6.	Postgraduate degree	57	16
Source of finance received			
1.	Clothing and accessories	78	22
2.	Electronics and gadgets	67	19
3.	Groceries and household items	31	10
4.	Books and stationery	88	24
5.	Beauty and personal care products	27	8
6.	Furniture and home décor	21	7
7.	Health and fitness products	17	5
8.	Toys and games	17	5
Type of Business			
1.	Amazon	85	25
2.	Flipkart	76	22
3.	Myntra	64	18
4.	Snapdeal	66	19
5.	Nykaa	50	15
6.	Social media platforms (e.g., Instagram, Facebook, WhatsApp)	05	1

Source: SPSS output

The socio-economic factors shows that female respondents of 63 % form the majority shows that higher female customers are interested in online buying of products as compared to male counterparts only to 38%. Most of the respondents belongs to married categories of 62% suggest that facility needs are influencing online buying. In term of education, a considerable portion of respondents 29%, belongs to undergraduate degree category reflecting moderate educational background among the respondents.

The data shows that majority of online purchases 28% are made in categories such as books and stationeries, 22% belongs to clothing and accessories indicating strong consumer

preference for essential and lifestyle related items. Purchases of electronics is 19% groceries 10% shows notable engagement, suggest growing trust in e-commerce for varied products needs. Regarding online platforms, Amoson 25% Flipkart 22% dominates as the most preferred online sources, reflecting their wide reach and reliability. On the other hand, Myntra platform is preferred by 18% of the customers, and 195 by Snapdeal customers and 15% by Nykaa customers. Social media platforms for shopping indicates that social commerce is still emerging as compared to established e-commerce giants.

Table 2: Corrected items total correlation and alpha value for variables

Variables	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Technology	156.7861	77.143	.643	.835
Economic	179.6098	88.256	.710	.770
Psychology	205.8353	110.242	.752	.783
Decision	213.7254	104.710	.707	.783

The reliability statistics shows that all the four variables such as Technology factors, Economic factors, psychological factors and buying decision factors – contributes passively to the overall consistency and validity of the scales. The corrected items total correlation values ranging from 0.643 to 0.752 shows strong positive relationship between the items are well related to the underlying constructs. The Cronbach’s alpha value ranging from 0.770 to 0.835 suggest the removing any variable do not significantly improve reliability and show that all the items are essential. Among all the variables psychology variable has highest correlation of 0.752 shows strong alignment with the overall construct. Over all the scale demonstrated good internal consistency and reliability and supporting for further analysis.

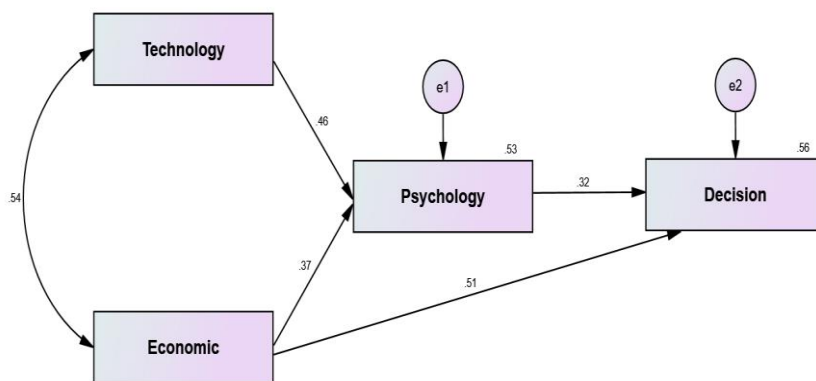


Fig 1 Standardised model for online shopping and factors influencing customer’s preference and decision making

Table no 3: Standardized Regression Weights: Model for online shopping and factors influencing customer’s preference and decision making

Variables		Variables	Estimate
Psychology	<---	Technology	.460
Psychology	<---	Economic	.368
Decision	<---	Psychology	.316
Decision	<---	Economic	.513

The result from the above table of standardized regression weights shows that significant relationships among the key variables influencing online shopping behaviour. Technology factor shows stronger positive impact on psychology factor with beta value of ($\beta = 0.460$), (Awang - Universiti & Abidin, n.d.) shows that advancement in technology increases the consumers psychological comfort and trust on online shopping, similarly, the economic factor also has positive effect on Psychology factors with beta value of ($\beta = 0.368$), (Owolabi et al., 2020) suggests affordability, discount and financial convenience influence consumer attitude, further psychology has positive effect on decision making with beta value of ($\beta = 0.316$), showing favourable psychological perceptions lead to stronger purchase intentions. (Maccallum & Austin, 2000) The economic factor exerts the highest influence on Decision -Making with beta Value of ($\beta = 0.513$), highlighting that price sensitivity and economic benefits play a major role in shaping consumer decisions. In overall model emphasises that both technological and economic aspects indirectly impact decision-making through psychological responses, reinforcing the importance in online consumer behaviour. (Hemalatha et al., 2014)

Table no 4 Covariances: for online shopping and factors influencing customer's preference and decision making

Variable		Variable	Estimate	S.E.	C.R.	P	Label
Technology	<-->	Economic	11.361	1.279	8.886	***	par_1

The result shows strong and significant positive relationship between Technology and Economic factors with estimate value of 22.361, CR value of 8.886, and $P < 0.001$ indicates the technological advancements are closely linked with economic aspects influencing online shopping behavior. (STATISTICAL ANALYSIS CRITERIAS, n.d.)

Table no 5 : Regression Weights: For online shopping and factors influencing customer's preference and decision making

			Estimate	S.E.	C.R.	P	Label
Psychology	<---	Technology	.245	.023	10.467	***	par_2
Psychology	<---	Economic	.241	.029	8.386	***	par_3
Decision	<---	Psychology	.368	.053	6.969	***	par_4
Decision	<---	Economic	.392	.035	11.316	***	par_5

The structural equation modelling shows strong statistically significant relationships among the variables influencing online shopping behaviour of the customers accessing the service. Technology has a significant and positive effect on Psychology with estimated value of 0.245, CR of 10.467 and $P < 0.001$, indicates that improved technological features like website design security and ease of use increases consumers psychological needs, comforts and trust. Similarly Economic Factors also contributes significantly and contributes towards psychological factors with Estimated value of 0.241, CR=8.387 and $P < 0.001$, suggests that affordability, discounts and financial convenience shape consumer's attitudes and perception. Furthermore, psychological factors have notable impact on decision making with estimated value of 0.368, CR=6.969 and $P < 0.001$ confirming that economic factors play considerable role in the final buying decisions and choices of the customers. Overall the present model represents that both technological and economic dimension are influencing consumer

psychological states, which in turn significantly affects consumers online purchasing decisions.

Table no 5 : Model fit measures for online shopping and factors influencing Customer’s Preference and decision making

Measure	Estimate	Threshold	Interpretation
CMIN	0.906	--	--
DF	1	--	--
CMIN/DF	0.906	Between 1 and 3	Excellent
CFI	1.000	>0.95	Excellent
SRMR	0.010	<0.08	Excellent
RMSEA	0.000	<0.06	Excellent
PClose	0.521	>0.05	Excellent
CMIN	0.906	--	--

The present model fit related to online shopping and factors influencing customers’ preference and decision-making. The structural equation model represents an excellent fit to the data. The CMIN/DF value of 0.969 is well below the acceptable range of 1 to 3, confines minimal discrepancy between the observed and estimated data. The comparative fit index (CFI =1.000), further validates the perfect fit, suggests that the model explains the data exceptionally well compared to the null model. The standardised root means square residual error RMSM=0,000, and PClose value = 0.521>0.05 together these values indicate that the model has a close and relevant fit with the population data. Overall result shows that the proposed model on online shopping and factors influencing customer preference and decision making is statistically significant and highly reliable.

FINDINGS

The proposed structural equation model for online shopping and factors influencing customer preference and decision making exhibits an excellent overall fit. The CMIN value of 0.096 with degree of freedom of 1 and p-value of 0.342 shows estimated covariance matrix closely matched with observed data. The CMIN/DF is 0.906 falls below the threshold value of 1-3 confirms strong adequacy of the model. CFI =1.000 GFI-0.999 both shows excellent threshold value of 0.95, shows perfect model. Moreover the SRMR=0.010, and RMSEA-0.000 are below their critical value reflects error free model. The PClose value is 0.521 being greater than 0.05 suggests model is close fit the population data. Overall the results confirms that the hypothesized relationship among technology , economic factors, psychological factors and decision making are well represented by the model.

DISCUSSION

The excellent fit indices indicates that the proposed model effectively captures the dynamics between technology, economic aspects, psychological influences, and customer decisions making in the context of online buying behaviour of the customers. The perfect model fit highlights that the hypothesized paths align closely with the real-world consumer behaviour patterns. The low RMSEA and SRMR further confirms minimal discrepancies between observed and predicted variables. These results recommend model structure is both theoretically and empirically supported and also demonstrated that consumer preferences and decision are shaped by a harmonious interaction between technological convenience and economic value, this validation strengthens the theoretical framework which connects behavioural an economic factor on online shopping decision.

CONCLUSION

The analysis conducted that the proposed model exhibits extremely satisfactory fit and all the indices met and exceeding standard thresholds. The finding of the study emphasizes that the relationship among the technology, economics, psychology factors and decision making are statistically robust and significant. The model successfully examines the relationship between technological and economic elements influencing consumer Psychology, which in effect drives purchase decisions. Its strong and goodness of fit indices confirms its suitability for future empirical studies in on-line purchasing behaviour. Further more the results contribute to a better understanding of the underlying mechanisms of online shopping preferences of customers. The study finally validates that well designed technology and favourable economic conditions enhance customer confidence and decision making.

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