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Relationship between socio-economic status and online buying habits of consumers in Bangladesh

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Abstract: This research mainly focuses on examination of the digital marketing buyer's perspective with reference to select e-commerce companies. The consumer behavior is always changing in nature which is evident from various studies that have been conducted in the field of marketing. The digital marketing provides the consumer with lot of information about product, price ranges, alternatives and substitutes and other core dimensions of the product. The main objective of this research is to determine the factors that are influencing the consumers and their perception towards buying the products that are marketed digitally. Dhaka is one of the developing cities to investigate the online buyer's expectation level and their perceptions towards digital marketing. Semi structured interviews for qualitative data and e-commerce websites, magazines, digital marketing books, periodicals and Internet were approached for secondary data. The primary data were collected from 692 online buyers from 4 revenue divisions in Dhaka district through non-probability sampling technique. Structural equation modeling has been used in this research for the data analysis. It is found that the frequency of online purchases has been increasing among the buyer of Dhaka district, which is evident from the response of the consumers, involved in the study. The results stated that the e-commerce company Amazon is performing well in the study area as per the opinions of the consumers involved in study. The future growth of the digital marketing is depending on the expansion strategies of companies which aim to provide consumers with constructive promotional offers, promising after sales services and protecting the financial information of the consumers of online platforms.

Keywords: digital marketing buyer perspective; consumer behavior; factors influencing; perception; e-commerce companies; online buyer expectations

1. Introduction

Consumer behavior determines a product's buying decision based on their needs. Consumer behavior changes from time to time, evident by the various studies conducted on consumer behavior. The selection process involves various thought processes in the minds of consumers to make appropriate choices among all the alternatives available in the market. The consumer behavior change based on the needs that are being pursued. The theories of consumer behavior converge on recognizing needs, searching for information, identifying the best alternatives, and purchasing the product. This involves the thought process of the consumers based on socioeconomic status and other adverse factors involved with the family. Digital marketing understanding the complexities in the social structure and family structure makes the availability of all products under one platform with various price ranges. Digital marketing gives the time to make the decision, which is impossible in other purchase decisions. The technological orientation gives the consumer all information

about the product at one glance, making them evaluate the information available to them (Dennis et al., 2009). Digital marketing provides the consumer with the best alternatives, information about alternatives, price ranges, and other core dimensions of the product. This attracts consumers towards digital marketing and makes them purchase the product through online marketing channels. The digital marketing of products has a significant influence on the fronts of consumer behavior. The process of digital marketing is modulated in such a way as to evoke responses from potential consumers and thereby make them attracted to the product of their choice (Kannan and Li, 2017). The consumer behavior model has undergone drastic changes with the growth of digital marketing of goods and services. There are a lot of universally accepted models for ascertaining consumer behavior while buying products. However, there is a need to assess the changes digital marketing has brought to those models. This evolving form of marketing substantially impacts the consumer behaviors model (Jisana, 2014). The areas of impact have to be identified to make this form of marketing effective among the people and influence them to make their purchase decision. The purchase decision is the gift given to the marketing companies for their efforts, and digital marketing enables them to achieve the purchases with numerous effects on consumer behavior (Bala and Verma, 2018).

Bangladesh has the most favorable climate for online shopping thanks to the digital revolution. The idea of everyone shopping anything, anywhere, at any time has boosted Bangladeshi e-commerce sector. Online shopping is one of the most common pastimes important to today's corporate concerns. Even though there are many benefits for both consumers and businesses, why consumers choose to shop online is still being determined. Business establishments can reach out to more clients through online purchasing at a lower cost and reach out to customers living in remote places. In actuality, they serve as stepping stones toward the global village idea. In addition, the internet has gained acceptance as a powerful and successful communication medium, alongside more conventional ones like radio, magazines, etc. The scope of the study deals with the boundaries within which the study is conducted. The geographical boundaries deal with the revenue divisions of the Dhaka district. The conceptual boundaries of the study examine the various focus areas of factors influencing the consumers to buy products from e-commerce companies, perception and expectation level of consumers towards e-commerce companies, problems and issues faced by the consumers in buying products from e-commerce platforms, and code of conduct followed by the online merchants. These areas form the concepts assessed based on the consumers' opinions in the study.

2. Literature review

The reviewed literature works as the main crux of the study, which explains various research problems that need to be addressed by previous studies. One of the significant sources of the research problem was derived from the literature review.

Digital/online shopping and customer satisfaction

Iluno and Asmau (2017) attempted to measure the impact of e-commerce on customer satisfaction in Nigeria. The paper discusses the various consumer choices

in the country to purchase products. In addition, the paper gives a detailed note on the introduction and operation of e-commerce sites in the country. The study's objectives were to appraise the role of internet security on customer satisfaction and the impact of internet efficiency and reliability for consumers to achieve satisfaction. Bikas and Soma (2017) have conducted a research study titled "Conceptualizing a model for online shopping intension: A literature review," aiming to identify factors influencing online shopping based on the previous studies conducted. The introduction explains the growth of e-commerce websites across the world. The study is entirely based on the literature and involves a theoretical survey which helps to build a conceptual model as an addition to the existing literature. The study thereby highlighted that online shopping intention is based on motivating and restricting factors. The motivating factors are the website, convenience, product-related information, payment options, shopping experience, price, service, word of mouth, return policy, reverse logistics, and delivery options. The restricting factors include ease of use, trust, reliability, security, privacy, inexperience, internet, non-delivery risk, brand image, product quality risk, product guarantee, and product testing. This conceptual model can be tested with the help of SEM after collecting the data from the users will help to test the validity of the model.

Giti and Farid (2018) have published a research paper focusing on various factors that influence the satisfaction level of consumers buying online. The introduction deals with the evolution of internet marketing, followed by the review part explaining the working of e-commerce sites and a brief of various studies that reveal factors influencing the purchase. The study was based on a convenience sampling technique to select the sample. There were 450 questionnaires mailed to the potential online shoppers, of which only 421 were validated with the proper response. The conceptual framework explains the various variables involved in the study, such as website design, information quality, website quality, order fulfillment, security, and trust. The study's findings revealed that B2C e-commerce satisfaction is highly influenced by security and privacy, website usability, order fulfillment quality, information quality, website design, and trust. These factors play a significant role in providing satisfaction to online buyers, supported by the quantitative evidence of hypothesis testing.

Ranjitha and Krishnakumar (2020) examined the factors influencing online consumers buying behavior, and the objective was to identify the influencing factors of buying behavior. The data collected from 55 consumers and percentage analysis, one-sample *t*-test, ranking analysis, and factor analysis were used in this study. It concluded that saving time and transportation costs are the most influencing factor in the online shopping of Dhaka district. Moreover, online buyers are increasing daily worldwide because they are receiving digital technology.

Vivek and Kulkarni (2020) have focused on the objectives of consumer behavior in online and offline modes and identified the factors affecting online buying based on the literature survey. The study has used 64 research papers in order to achieve the objectives of the study. The survey has given factors that promote online buying, the ease of information, user-friendly websites, easy comparison, time-saving, availability of helplines, easy checkouts, and mobile-friendly shopping. The factors that are working against online buying are technology failure, privacy,

security, trust, and lack of transparency. The conclusion reveals that adopting the factors that favor the operation of online shopping will enhance the company's turnover.

Harshal and Simran (2020) determined the impact of the COVID-19 pandemic situation on consumer buying behavior in the Indian market—A review focused on what all changes occurred during this pandemic on consumer buying behavior in the Indian market. The study shows that out of 10 customers, six had switched to digital platforms and are adopting technology changes for their and their family's safety. Hence a massive variation was seen in the usage of digital platforms. Once the cases decrease and the lockdown ends, there will be a ray of hope that consumers will shortly switch to ordinary buying behavior habits. The impact of changes in consumer buying behavior will decrease but not demolish people's lives worldwide.

3. Problem statement

The digital marketing of products has assumed significance, with the growing turnover evident from the number of digital marketers. The marketing of the product is done either by digital marketers who market all types of products under one platform or by organizations that produce the goods and services that may market directly to target consumers. The marketing of products by digital marketers is technically called e-commerce companies. These companies have various tools for making the product easily reach consumers compared to traditional marketing. The companies bring the goods and services together by providing various choices to consumers without much cost added to the expenses of consumers. Many producers opt for e-commerce websites to market their products on the website rather than making an expensive way to reach consumers through traditional marketing forms or distribution channels.

E-commerce websites have given various choices based on the needs of the consumers, but there are lots of problems associated with purchasing on these websites (Dutta, 2011). Consumer buying behavior tends to change with the various attributes of products and attractive designs of e-commerce companies in marketing the product. The financial security and privacy of the consumers who prefer to purchase the product on e-commerce websites are comprised. Lack of security keeps numerous potential consumers out of focus from purchasing from an e-commerce platform. Financial secrecy forms part of the dominant factor influencing consumers to purchase the product. There are other aspects of the product in the form of price, quality, quantity, packaging for shipment, etc., which determines consumers' buying behavior (Bagga and Bhatta, 2013). The growth of e-commerce companies has given them cut-throat competition and makes products available at low prices. Consumers are facing all these issues that determine the purchase decision regarding operational factors.

E-commerce companies must focus on various modes of marketing to become consumer friendly. The identification of the e-commerce companies and the operation of websites has to be easy for consumers to operate and make shopping attractive (Nadanyiova, 2021). The growths of these companies are high, but it has contributed to confusion among consumers to identify firms that service with quality.

Quality service involves the delivery of the product, replacement of defective products, the bearing of costs involved in replacement, policies of guarantees and warranties, refund, sales service, etc. These issues are highly prevalent among e-commerce companies and affect consumers' buying behavior (Bigné et al., 2006). Furthermore, the advertisement and marketing techniques of e-commerce companies have to meet the expectation level of the consumers. The study focuses on the problems mentioned above of the consumers concerning e-marketing companies, which have predominant elements of various factors, financial secrecy, privacy, marketing and distribution policies, the perceptional difference among the consumers, and the code of conduct maintained by the companies in offering the product.

4. Research questions

The study aims to respond to the following research questions:
1) What are the various factors that influence consumers to buy products through e-commerce companies?
2) What are consumers' levels of perception and expectation in marketing products by digital marketers?
3) What are the various problems consumers face in buying e-marketed goods and services?

5. Research design

The research methodology gives the step-by-step scientific process through which the research problems of the study are solved. The research study is based on the observations and opinions of consumers toward e-commerce companies. The study tries to evaluate the objectives based on the primary observation from the responses, which helps to adopt empirical research. The empirical research design is adopted while opting for making the inferences drawn based on the observations. The observational part of the study entirely consists of the opinions of the consumers towards the e-commerce company. The data is collected for the first time, and the nature of the data belongs to primary data. This research design will help assess the various factors contributing to the growth of e-commerce companies based on exploratory or confirmatory analysis.

The study's most suitable sampling size formula is Yamane's simplified formula for calculating the sample for proportions. The formula is:

$$n = \frac{N}{1 + Ne^2}$$

where, N—Population size; e—Level of precision.

By substituting the values in the formula:

The research was carried out based on the sample size of 710 online buyers. Based on that, to have a geographical representation of Dhaka district, the sample was distributed among the proportionate of taluks from each revenue division of the district. This distribution will enable us to infer the findings to the whole population, which will have some scientific proportions. The proportionate distribution gives a geographical distribution for the sample involved in the study. The structured

interviews among the 710 online buyers have yielded only 692 suitable responses, finalized to be the study's sample size.

6. Results and findings

| Association between place of residence and knowledge of online shopping

The area of residence of the digital consumers can have influence on the knowledge towards the online shopping based on their knowledge sourcing habits. The association among the variables will help to gain knowledge whether place have influence on the awareness level of consumers towards online shopping. The cross tabulation explains the results of percentage analysis among the variables.

Table 1. Cross tabulation—Place of residence and knowledge of online shopping (Source: Primary Data).

Place of residence		Knowledge of online shopping				Total
		Television advertisement	Newspaper advertisement	Online advertisement	Others	
Rural	N	42	12	108	27	189
	R (%)	22.2%	6.3%	57.1%	14.3%	100.0%
	C (%)	26.8%	25.5%	28.1%	26.0%	27.3%
Urban	N	72	23	149	33	277
	R (%)	26.0%	8.3%	53.8%	11.9%	100.0%
	C (%)	45.9%	48.9%	38.8%	31.7%	40.0%
Semi-Urban	N	43	12	127	44	226
	R (%)	19.0%	5.3%	56.2%	19.5%	100.0%
	C (%)	27.4%	25.5%	33.1%	42.3%	32.7%
Total	N	157	47	384	104	692
	R (%)	22.7%	6.8%	55.5%	15.0%	100.0%
	C (%)	100.0%	100.0%	100.0%	100.0%	100.0%

The **Table 1** reveals that online advertisement is having significant presence felt among the urban population, which is higher when compared to the other categories. The television advertisement regarding the digital marketing of products is also higher among the urban population. The rural and semi-urban areas are lacking the reach of the advertisements and urban population is having significant knowledge about the online shopping of products when compared to other two groups. The differences in the knowledge level can be attributed to the place of residence of the consumers who are part of the study. The association among the variables is further tested using the chi-square test.

Table 2. Chi-square test—Place of residence and knowledge of online shopping.

	Value	df	Asymp. Sig. (2-sided)	Remarks
Pearson chi-square	9.485	6	0.148	
Likelihood ratio	9.386	6	0.153	Not significant @ 5% level
Linear-by-Linear Association	2.022	1	0.155	

The place of residence is not having significant association with the knowledge for the digital shopping of the products as explained by the chi-square test (See **Table 2**). The area of residence is not having impact on the knowledge regarding consumers to opt for online purchases. The urban and semi-urban area with the logistics facilities available leads the purchases of digitally marketed products.

ǀ   Association between gender and persons/motives for online buying

The motives for online shopping can differ based on the gender differences among the consumers. The gender differences can be attributed to the change in the utilities and preferences of different section of online buyers. The differences based on the gender is explained based on the following cross tabulation.

Table 3. Cross tabulation—Gender and persons/motives for online buying (Source: Primary Data).

Gender		Persons/place motives for digital shopping					Total
		Workplace	Friends	Relatives	Colleagues	Own interest	
Male	*N*	54	93	48	40	67	302
	R (%)	17.9%	30.8%	15.9%	13.2%	22.2%	100.0%
	C (%)	55.1%	40.4%	50.5%	38.5%	40.6%	43.6%
Female	*N*	44	114	45	64	90	357
	R (%)	12.3%	31.9%	12.6%	17.9%	25.2%	100.0%
	C (%)	44.9%	49.6%	47.4%	61.5%	54.5%	51.6%
Transgender	*N*	0	23	2	0	8	33
	R (%)	0.0%	69.7%	6.1%	0.0%	24.2%	100.0%
	C (%)	0.0%	10.0%	2.1%	0.0%	4.8%	4.8%
Total	*N*	98	230	95	104	165	692
	R (%)	14.2%	33.2%	13.7%	15.0%	23.8%	100.0%
	C (%)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The female category is having comparatively higher purchasing habits in the digital market and it is clearly explained by the above **Table 3**. The majority of the consumers are induced by their friend to opt for online buying in the study area. The motives for the online shopping are attributed to the friends and own interest among various categories of the gender. The association is further tested based on the chi-square which is given below.

Table 4. Chi-square test—Gender and persons/motives for online buying.

	Value	df	Asymp. Sig. (2-sided)	Remarks
Pearson chi-square	33.394	8	<0.001	
Likelihood ratio	39.903	8	<0.001	Significant at 1 percent level
Linear-by-linear association	1.156	1	0.282	

The *p*-value of the test is statistically significant which accepts the null hypothesis stating the association among the gender and motives for online shopping (See **Table 4**). The gender of the digitally purchasing consumers are highly

associated with the motives of online shopping and it is having significant impact on the consumers who are buying products that are marketed digitally.

ı   Association between age and frequency of online shopping

The age of the consumers will have impact on the understanding and adoption towards the online shopping based on the technical advancement associated with it. The categories of the age groups are compared with the frequency of online shopping which is analyzed using the percentage analysis. The results of the analysis are presented in the following cross tabulation.

Table 5. Cross tabulation—Age and frequency of online shopping (Source: Primary Data).

Age		Frequency of online purchases					Total
		Very rarely	Rarely	Sometimes	Often	Very often	
Below 30 years	*N*	29	20	126	78	26	279
	R (%)	10.4%	7.2%	45.2%	28.0%	9.3%	100.0%
	C (%)	78.4%	39.2%	46.2%	36.4%	22.2%	40.3%
31 years to 40 years	*N*	4	17	104	83	56	264
	R (%)	1.5%	6.4%	39.4%	31.4%	21.2%	100.0%
	C (%)	10.8%	33.3%	38.1%	38.8%	47.9%	38.2%
41 years to 50 years	*N*	4	14	36	41	34	129
	R (%)	3.1%	10.9%	27.9%	31.8%	26.4%	100.0%
	C (%)	10.8%	27.5%	13.2%	19.2%	29.1%	18.6%
Above 50 years	*N*	0	0	7	12	1	20
	R (%)	0.0%	0.0%	35.0%	60.0%	5.0%	100.0%
	C (%)	0.0%	0.0%	2.6%	5.6%	0.9%	2.9%
Total	*N*	37	51	273	214	117	692
	R (%)	5.3%	7.4%	39.5%	30.9%	16.9%	100.0%
	C (%)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Even though majority of the consumers are having the habit of purchasing digital products sometimes, often and very often categories have significant representation in the study (See **Table 5**). The consumers involved in the study are using the online shopping more frequently. The younger age group of the respondents is having the habits of purchasing the online often in comparison to the older age groups. The association is further tested with chi-square and its results is given below:

Table 6. Chi-square test—Age and frequency of online shopping.

	Value	df	Asymp. Sig. (2-sided)	Remarks
Pearson chi-square	60.717	12	<0.001	Significant at 1 percent level
Likelihood ratio	63.743	12	<0.001	
Linear-by-linear association	26.295	1	<0.001	

The tested values reveal that the null hypothesis is rejected which is based on

the *p*-value significant at one percent level (See **Table 6**). The hypothesis testing has accepted the alternate hypothesis stating there is association among the variables. The age of the consumers and frequency of online shopping digitally marketed products are associated based on the results of chi-square test.

ı Association between educational qualification and knowledge of online shopping

The educational qualification of the respondents can have impact on the knowledge level of consumers towards the online shopping across various promotional channels. The educational qualification can give clarity among the online shoppers in understanding the nuances of advertisements. The following table explains the association based on percentage analysis among various categories of these variables.

Table 7. Cross tabulation—Educational qualification and knowledge of online shopping (Source: Primary Data).

Educational qualification		Knowledge of online shopping				Total
		Television advertisement	Newspaper advertisement	Online advertisement	Others	
School level	*N*	24	0	23	19	66
	R (%)	36.4%	0.0%	34.8%	28.8%	100.0%
	C (%)	15.3%	0.0%	6.0%	18.3%	9.5%
Under graduation	*N*	40	21	73	24	158
	R (%)	25.3%	13.3%	46.2%	15.2%	100.0%
	C (%)	25.5%	44.7%	19.0%	23.1%	22.8%
Diploma	*N*	29	8	77	26	140
	R (%)	20.7%	5.7%	55.0%	18.6%	100.0%
	C (%)	18.5%	17.0%	20.1%	25.0%	20.2%
Post-graduation	*N*	52	14	156	26	248
	R (%)	21.0%	5.6%	62.9%	10.5%	100.0%
	C (%)	33.1%	29.8%	40.6%	25.0%	35.8%
Professional	*N*	12	4	52	9	77
	R (%)	15.6%	5.2%	67.5%	11.7%	100.0%
	C (%)	7.6%	8.5%	13.5%	8.7%	11.1%
Others	*N*	0	0	3	0	3
	R (%)	0.0%	0.0%	100.0%	0.0%	100.0%
	C (%)	0.0%	0.0%	0.8%	0.0%	0.4%
Total	*N*	157	47	384	104	692
	R (%)	22.7%	6.8%	55.5%	15.0%	100.0%
	C (%)	100.0%	100.0%	100.0%	100.0%	100.0%

The online advertisement is gaining popularity among online buyers who are having higher educational qualification, which is explained by the above **Table 7**. The higher level of education reveals that online advertisement is raising the knowledge about the online shopping. The television advertisement is next major

source which improve the knowledge about online shopping but the distribution is different among different educational groups. The educational qualification of the online shoppers is causing significant differences in the knowledge of online shopping based on various promotional channels. The association among the variables is examined using the chi-square which is explained below.

Table 8. Chi-square test—Educational qualification and knowledge of online shopping.

	Value	Df	Asymp. Sig. (2-sided)	Remarks
Pearson chi-square	51.386	15	<0.001	
Likelihood ratio	53.554	15	<0.001	Significant at 1 percent level
Linear-by-linear association	2.562	1	0.109	

The chi-square test reveals that the variables involved in the testing are associated and statistically related based on the *p*-values (See **Table 8**). The *p*-value has rejected the hypothesis at one percent level of significance. The educational qualification of the consumers has significant influence on the knowledge about the goods that are marketed online and these two variables are highly associated based on the opinions of consumers involved in the study.

ı   Association between occupational status and frequency of online purchases

The occupational status of the online shoppers can influence the frequency of the purchases which is determined based on the time available for the direct purchasing in the stores. The occupational status can occupy much of the time which can impact the shopping time making them to opt for online shopping. The influence of the occupational status of the consumers on the frequency of online purchases is explained in the following cross tabulation.

Table 9. Cross tabulation—Occupational status and frequency of online purchases (Source: Primary Data).

Occupational status		Frequency of online purchases					Total
		Very rarely	Rarely	Sometimes	Often	Very often	
Business	*N*	4	0	48	35	29	116
	R (%)	3.4%	0.0%	41.4%	30.2%	25.0%	100.0%
	C (%)	10.8%	0.0%	17.6%	16.4%	24.8%	16.8%
Govt employee	*N*	6	13	40	37	36	132
	R (%)	4.5%	9.8%	30.3%	28.0%	27.3%	100.0%
	C (%)	16.2%	25.5%	14.7%	17.3%	30.8%	19.1%
Private employee	*N*	6	20	106	63	27	222
	R (%)	2.7%	9.0%	47.7%	28.4%	12.2%	100.0%
	C (%)	16.2%	39.2%	38.8%	29.4%	23.1%	32.1%
Professional	*N*	6	3	21	32	18	80
	R (%)	7.5%	3.8%	26.3%	40.0%	22.5%	100.0%
	C (%)	16.2%	5.9%	7.7%	15.0%	15.4%	11.6%

Table 9. (*Continued*).

Occupational status		Frequency of online purchases					Total
		Very rarely	Rarely	Sometimes	Often	Very often	
Housewife	*N*	4	0	29	24	5	62
	R (%)	6.5%	0.0%	46.8%	38.7%	8.1%	100.0%
	C (%)	10.8%	0.0%	10.6%	11.2%	4.3%	9.0%
Others	*N*	11	15	29	23	2	80
	R (%)	13.8%	18.8%	36.3%	28.7%	2.5%	100.0%
	C (%)	29.7%	29.4%	10.6%	10.7%	1.7%	11.6%
Total	*N*	37	51	273	214	117	692
	R (%)	5.3%	7.4%	39.5%	30.9%	16.9%	100.0%
	C (%)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The frequency of the online shopping is higher among the private employees in comparison with the other occupational groups (See **Table 9**). The private employees are significantly prone to purchase online based on the nature of job which restricts time for the purchases. The association is further tested based on the chi-square test and its results are given below.

Table 10. Chi-square test—Occupational status and frequency of online purchases.

	Value	df	Asymp. Sig. (2-sided)	Remarks
Pearson chi-square	91.438	20	<0.001	
Likelihood ratio	102.626	20	<0.001	Significant at 1 percent level
Linear-by-linear association	27.092	1	0.000	

The frequency of purchasing online products is highly associated with the occupational status of the consumers who are prone to buy products online, which is supported by the p-value mandating to reject the null hypothesis (See **Table 10**).

| Association between monthly income and frequency of online purchases

The monthly income of the consumers can have significant impact on the frequency of the online purchases which is determined by the purchasing power of the buyers. The monthly income acts as the major variable in determining the frequency of the online purchases and various groups of this variable is compared with the frequency of online purchases. The cross tabulation explains the results of percentage analysis.

The online purchases are higher among the middle-income group and higher income group which are clearly explained by the cross-tabulation (See **Table 11**). The habits of buying often and very often are highly prevalent among the groups that are belonging to the middle- and higher-income groups. The online shopping is adopted mostly by people who are having higher monthly income in comparison to other groups. The following table explains the association based on hypothesis testing.

Table 11. Cross tabulation—Monthly income and frequency of online purchases (Source: Primary Data).

Monthly income		Frequency of online purchases					Total
		Very rarely	Rarely	Sometimes	Often	Very often	
Less than Rs. 20,000	*N*	10	25	56	15	0	106
	R (%)	9.4%	23.6%	52.8%	14.2%	0.0%	100.0%
	C (%)	27.0%	49.0%	20.5%	7.0%	0.0%	15.3%
Rs. 20,001 to Rs. 25,000	*N*	10	16	43	49	28	146
	R (%)	6.8%	11.0%	29.5%	33.6%	19.2%	100.0%
	C (%)	27.0%	31.4%	15.8%	22.9%	23.9%	21.1%
Rs. 25,001 to Rs, 30,000	*N*	4	5	78	51	21	159
	R (%)	2.5%	3.1%	49.1%	32.1%	13.2%	100.0%
	C (%)	10.8%	9.8%	28.6%	23.8%	17.9%	23.0%
Rs. 30,001 to Rs. 35,0000	*N*	6	1	59	48	12	126
	R (%)	4.8%	0.8%	46.8%	38.1%	9.5%	100.0%
	C (%)	16.2%	2.0%	21.6%	22.4%	10.3%	18.2%
Above Rs. 35,001	*N*	7	4	37	51	56	155
	R (%)	4.5%	2.6%	23.9%	32.9%	36.1%	100.0%
	C (%)	18.9%	7.8%	13.6%	23.8%	47.9%	22.4%
Total	*N*	37	51	273	214	117	692
	R (%)	5.3%	7.4%	39.5%	30.9%	16.9%	100.0%
	C (%)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 12. Chi-square test—Monthly income and frequency of online purchases.

	Value	df	Asymp. Sig. (2-sided)	Remarks
Pearson chi-square	156.451	16	<0.001	
Likelihood ratio	163.210	16	<0.001	Significant at 1 percent level
Linear-by-linear association	66.719	1	<0.001	

The *p*-value has rejected the null hypothesis at one percent level of significance, which implies that the monthly income of the consumers is having significant association with the frequency of online purchases of the products that are digitally marketed (See **Table 12**).

ꞁ Association between family type and knowledge of online shopping

The family type of the online shoppers can improve the knowledge based on the collective information possessed by the family members. The role played by the family type and its association with the knowledge of online shopping is analyzed with the cross tabulation based on percentage analysis. The results of the calculations are given below.

Table 13. Cross tabulation—Family type and knowledge of online shopping (Source: Primary Data).

Family type		Knowledge of online shopping				Total
		Television advertisement	Newspaper advertisement	Online advertisement	Others	
Nuclear family	N	83	35	246	60	424
	R (%)	19.6%	8.3%	58.0%	14.2%	100.0%
	C (%)	52.9%	74.5%	64.1%	57.7%	61.3%
Joint family	N	74	12	138	44	268
	R (%)	27.6%	4.5%	51.5%	16.4%	100.0%
	C (%)	47.1%	25.5%	35.9%	42.3%	38.7%
Total	N	157	47	384	104	692
	R (%)	22.7%	6.8%	55.5%	15.0%	100.0%
	C (%)	100.0%	100.0%	100.0%	100.0%	100.0%

Table 14. Chi – Square Test—Family Type and Knowledge of Online Shopping.

	Value	df	Asymp. Sig. (2-sided)	Remarks
Pearson chi-square	9.946	3	0.019*	Significant at 5 percent level
Likelihood ratio	10.059	3	0.018	
Linear-by-linear association	1.670	1	0.196	

The various categories of the family type are significantly associated with the knowledge about online shopping which is explained by the *p*-value significant at five percent level of significance and it has rejected the null hypothesis (See **Tables 13** and **14**).

l   Association between number of family members and frequency of online purchases

The number of family members in the family may influence the frequency of purchases made by the general consumers. The needs for the family incline with the increase in the number of family members. The frequency of the online purchases is significantly affected with the various categories of number of family members based on which the following table is presented using the percentage analysis.

The family members of the online shoppers are significantly lacking relationship with the frequency, which is explained by the percentage analysis (See **Table 15**). The frequency of online shopping is higher among the nuclear family type which can be based on the preferences and sources of awareness among the population. The majority of the online shoppers belong to the category of 2–4 members category. The association among the variables is presented in the following table.

The variable of number of family members is significantly associated with the frequency of online purchases of products that are marketed digitally, which is validated by the p-value of chi-square test (See **Table 16**).

Table 15. Cross tabulation—Family members and frequency of online purchases (Source: Primary Data).

Number of family members		Frequency of online purchases					Total
		Very rarely	Rarely	Sometimes	Often	Very often	
2–4 members	*N*	10	29	155	117	44	355
	R (%)	2.8%	8.2%	43.7%	33.0%	12.4%	100.0%
	C (%)	27.0%	56.9%	56.8%	54.7%	37.6%	51.3%
5–6 members	*N*	27	20	103	84	43	277
	R (%)	9.7%	7.2%	37.2%	30.3%	15.5%	100.0%
	C (%)	73.0%	39.2%	37.7%	39.3%	36.8%	40.0%
Above 7 members	*N*	0	2	15	13	30	60
	R (%)	0.0%	3.3%	25.0%	21.7%	50.0%	100.0%
	C (%)	0.0%	3.9%	5.5%	6.1%	25.6%	8.7%
Total	*N*	37	51	273	214	117	692
	R (%)	5.3%	7.4%	39.5%	30.9%	16.9%	100.0%
	C (%)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 16. Chi-square test—Family members and frequency of online purchases.

	Value	df	Asymp. Sig. (2-sided)	Remarks
Pearson chi-square	69.887	8	<0.001	
Likelihood ratio	59.892	8	<0.001	Significant at 1 percent level
Linear-by-linear association	9.084	1	0.003	

Multidimensional analysis

The digital buyers are having significant interest towards the marketing of digital products and induced to repurchase the products when it satisfies the needs of the consumers. The various opinions given by the digital shoppers involved in the study were used for grouping the respondents based on their interest. The results of the cluster grouping are presented in the following.

Table 17. Cluster analysis—Perception of digital buyers towards digital marketing and repurchase intention.

	Cluster		
	1	2	3
The privacy of the customers is maintained by the website design	4.08	4.00	4.49
The various transactions that are done remains safe	4.08	2.00	3.99
The security features of the website are commendable	3.80	4.00	4.18
The reliability of the site and product offered is good	3.65	4.00	4.33
The various information and promises given by the website is true and uniform	3.86	2.00	4.22
The accessibility and usage of the websites is easy	3.73	4.00	4.19
The website provided by the companies are customer friendly	3.93	4.00	4.08
There is legibility in the various information regarding provision of goods through websites	3.68	1.00	4.23

Table 17. (*Continued*).

	Cluster		
	1	**2**	**3**
The website offers the product which can be identified with little effort	3.65	1.00	4.15
The website provides various competitive varieties and brands of same product	3.78	4.00	4.15
The website provides the products that meet my needs and demand	3.87	4.00	4.16
It offers the product at short time which makes me to spend less time for shopping	3.79	4.00	4.22
The online shopping helps me to shop at time which is convenient for me	4.01	4.00	4.06
It provides actual, relevant and complete information about the product	3.72	4.00	4.09
It gives me good memories of shopping experience with attraction	3.73	4.00	4.19
This website would be first choice to buy the product in future	3.74	2.00	4.16
I would like keep me updated with various products that are sold through this website	3.80	2.00	4.21
The usage of the website will be often when new product comes through	3.94	2.00	4.04
I will engage myself to the website if there are any resale of products	3.52	2.00	4.37
I consider this website provides better price than competitors which make me to repurchase	3.61	2.00	4.34

The above **Table 17** explains the variables and their respective cluster center in which the respondents belong majorly. The cluster analysis has helped to group the consumers into three groups based on the perception towards the digital marketing and repurchase intention. This will help to understand the nature of the group to which they are attached.

Table 18. ANOVA—Clusters and perception of digital buyers towards digital marketing and repurchase intention.

	Cluster		Error		*F*	Sig.
	Mean square	**df**	**Mean square**	**df**		
The privacy of the customers is maintained by the website design	13.738	2	0.406	689	33.803	<0.001**
The various transactions that are done remains safe	10.875	2	0.550	689	19.761	<0.001**
The security features of the website are commendable	11.885	2	0.477	689	24.911	<0.001**
The reliability of the site and product offered is good	38.182	2	0.475	689	80.315	<0.001**
The various information and promises given by the website is true and uniform	21.381	2	0.580	689	36.846	<0.001**
The accessibility and usage of the websites is easy	16.873	2	0.526	689	32.094	<0.001**
The website provided by the companies are customer friendly	1.807	2	0.528	689	3.420	0.033*
There is legibility in the various information regarding provision of goods through websites	47.420	2	0.542	689	87.569	<0.001**

Table 18. (*Continued*).

	Cluster		Error		*F*	Sig.
	Mean square	df	Mean square	df		
The website offers the product which can be identified with little effort	42.130	2	0.493	689	85.488	<0.001**
The website provides various competitive varieties and brands of same product	11.356	2	0.482	689	23.547	<0.001**
The website provides the products that meet my needs and demand	6.819	2	0.496	689	13.739	<0.001**
It offers the product at short time which makes me to spend less time for shopping	15.465	2	0.474	689	32.617	<0.001**
The online shopping helps me to shop at time which is convenient for me	.162	2	0.584	689	0.277	0.758
It provides actual, relevant and complete information about the product	11.809	2	0.492	689	23.988	<0.001**
It gives me good memories of shopping experience with attraction	17.328	2	0.516	689	33.601	<0.001**
This website would be first choice to buy the product in future	24.289	2	0.462	689	52.611	<0.001**
I would like keep me updated with various products that are sold through this website	24.569	2	0.455	689	54.044	<0.001**
The usage of the website will be often when new product comes through	10.749	2	0.571	689	18.829	<0.001**
I will engage myself to the website if there are any resale of products	70.856	2	0.423	689	167.700	<0.001**
I consider this website provides better price than competitors which make me to repurchase	53.495	2	0.431	689	123.998	<0.001**

(**—implies valid relationship @ 1% level; *—implies valid relationship @ 5% level).

The ANOVA helps to understand that the variables used in the cluster analysis are significant and formation of the cluster is significantly approved by the values of the test (See **Table 18**). The formed cluster explains the opinions of the digital shopper towards the digital marketing and repurchases intention among the respondents. The reliability of each variable under the cluster is validated by the ANOVA and its significance.

Table 19. Cluster membership—Perception of digital buyers towards digital marketing and repurchase intention.

Grouping of digital shoppers			
Cluster I	Marginal digital shoppers	275	39.74
Cluster II	Interest low digital shoppers	5	0.72
Cluster III	Valued digital shoppers	412	59.53
Total		692	100.00

The cluster were named based on the values of each variable found in the final cluster centers (See **Table 19**). The values of the first group were found to average which is termed as marginal digital shoppers and their perception level is marginal to

opt for digital buying. The second group was lacking interest which is revealed by the low cluster values which is termed to be interest low digital shoppers. The third cluster has significantly higher clustering value which is termed to be valued digital shoppers who value their perception towards the digital shopping and repurchasing intention based on which they opt for products marketed online. The digital buyers were influenced by various factors which make them to opt for digital buying of products. The diverse set of variables involved in the assessment of the concept was examined using the factor analysis to identify prime factors influencing the digital buyers. The results of the factor analysis are given in this section.

7. Conclusion

The digital marketing platform makes its presence felt across all income groups and societal classifications. Even though the traditional platforms, even though growing, have been in the saturation stage, digital marketing is gaining speed in growth. The presence of the numerous platforms and the turnover of these platforms year after year proves the sector's growth, which has been exponential over the past decade. The internet is transforming how people shop and purchase goods and services, and it has quickly spread to other countries. Digital marketing has significantly reduced the intermediaries' costs and helped connect directly to the end consumers. Access to online purchasing has profoundly affected our culture as a whole. Today's living is more convenient because of the numerous doors and opportunities that technology has created. The factors influencing consumers to buy digitally marketed products are expanding over time, and it is well reflected in the opinions of consumers involved in the study. Digital marketing companies and government regulations that protect the consumer interest in purchasing digital products reduce the problems faced by consumers drastically through different self-retrospection. The future of digital marketing depends on the expansion strategies of companies that aim to provide consumers with constructive promotional offers, give good after-sales services, and protect the financial information of the consumers buying products that are marketed online.

8. Future research implication

The most crucial component for all corporate entities is consumer perception because it aids in building brand awareness and perception. Therefore, management must comprehend consumer impressions more effectively and efficiently for offline and online marketing. The financial information and allied data have to be maintained in encrypted databases to avoid the stealing of data from potential threats on the internet. Digital marketers must improve this area to protect financial information and give confidence in the platform's usage. This will also enhance the turnover of the digitally marketed products of a platform that has this facility. One of the main things that have revolutionized business is e-commerce. It is generating a brand-new economy with enormous potential and profoundly altering how operations are conducted. Online shopping is now a crucial part of the consumer's everyday life to meet their never-ending requirements. Electronic commerce is anticipated to grow into a significant business in the coming years. Online

purchasing is expanding and getting more popular. The policymakers have to make stringent regulations in punishing the cybercrime activities related to the FMCG sector in order to boost the confidence of the consumers to engage in the purchase of digitally marketed products with more safety.

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