Impact of Digital Marketing on Consumer Behavior towards Edtech Startups

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ABSTRACT

The rapid growth of digital technology has led to significant transformations in the education industry, with the emergence of edtech startups at the forefront of this revolution. This research paper aimed at investigating the relationship between digital marketing and consumer behavior towards edtech startups and examining the extent to which digital marketing strategies shapes consumer perceptions, attitudes, and actions. The research addressed the following objectives: (1) to examine the extent of consumer awareness and perception of edtech startups, including their offerings, features, channels adopted, and benefits as influenced by digital marketing strategies, (2) to identify and analyze the relationship between various factors influencing the consumers to engage with edtech startups, and (3) to assess the impact of digital marketing on consumer behavior and engagement with edtech startups, including the relationship between the level of satisfaction, trust and recommendation. Statistical analysis techniques, including correlation analysis and content analysis were used to explore the relationships between factors, exposure to digital marketing and various dimensions of consumer behavior such as awareness, attitudes, engagement, trust, and satisfaction.

Keywords: Consumer behavior, Digital marketing, Edtech, Education, Startups

Introduction

The rapid advancement of digital technology has revolutionized various industries, and the education sector is no exception. With the emergence of educational technology (Edtech) startups, the way people access and engage with learning experiences has undergone a significant transformation. Edtech startups leverage digital marketing strategies to reach, influence and engage their target audience, driving consumer behavior, attitudes and preferences in the process. Understanding and analyzing the impact of digital marketing on consumer behavior towards Edtech startups is crucial for researchers, marketers and practitioners.

The purpose of this research paper was to investigate the relationship between digital marketing and consumer behavior towards Edtech startups in order to shed light on the effectiveness of digital marketing strategies employed by these startups and their influence on consumer behavior and attitude. By examining this relationship, we aimed at contributing to the existing body of knowledge in the field of marketing and education, providing insights that can inform marketing strategies for Edtech startups and contribute to the advancement of the whole industry.

Consumer behavior plays a pivotal role in determining the success of any business, including Edtech startups. Understanding how digital marketing efforts impact consumer behavior is essential for Edtech

startups to effectively promote their offerings, attract new customers, and retain existing ones. Digital marketing encompasses various channels, such as social media platforms, search engine ads, email marketing, influencer marketing, video platforms, and display/banner ads on websites. Each of these channels has its unique characteristics and potential to influence consumer behavior in distinct ways.

The impact of digital marketing on consumer behavior towards Edtech startups can be observed through various dimensions. Firstly, digital marketing campaigns can enhance consumer awareness of Edtech startups, making potential customers familiar with the products or services they offer. Secondly, these campaigns can influence consumers' consideration of Edtech startups, shaping their perception of the value and relevance of the offerings. Thirdly, digital marketing strategies can drive consumers' intentions to engage with Edtech startups, fueling their motivation to explore the products or services further. Ultimately, digital marketing efforts can lead to actual engagement with Edtech startups, as consumers make decisions to enroll in online courses, access available learning materials, or participate in interactive platforms via different channels. Furthermore, positive consumer experiences resulting from digital marketing campaigns may lead to consumers recommending Edtech startups to others, amplifying their reach and impact.

To investigate these relationships, this research paper has employed quantitative research methods and data analysis techniques such as correlation analysis, frequency and content analysis. By collecting data from a sample of consumers, we have explored the correlations between primary factors affecting consumer behavior, exposure to digital marketing campaigns by Edtech startups and various aspects of consumer behavior, such as awareness, effectiveness, engagement, level of satisfaction, trust and recommendation.

The findings of this research would be useful in providing valuable insights into the effectiveness of digital marketing strategies employed by Edtech startups and their impact on consumer behavior. By understanding the dynamics between digital marketing and consumer behavior, Edtech startups can develop informed marketing strategies to better reach and engage their target audience. Moreover, this research will contribute to the broader understanding of the role of digital marketing in the education sector and pave the way for further research in this evolving domain.

Review of Literature

Digital marketing and digital channels are nowadays the greatest and widely used means to reach out to the target customers, irrespective of their location. The development of mobile marketing has proved to be highly beneficial for the marketers as it helps them connect with the masses which otherwise wouldn't have been possible. The number of mobile users is increasing significantly because of rise in internet penetration, and the Indian mobile market is considered to be growing at a fast pace which provides more opportunities for businesses as now they can target even more people. Marketers leave no stone unturned to advertise their products over the digital marketing channels, and to influence the purchase decisions of customers. Digital marketing through digital channels has proven to be effective in influencing the customers' buying decisions (Mahalaxmi & Ranjith, 2016).

Digital marketing is crucial for businesses to grow in future as it attracts a wide variety of customers irrespective of their income class. In addition to it, more and more customers are buying online as they consider it to be a convenient and safe option. It can help build good relationships with customers, and clear information about products/services can be provided regularly (Tandon & Kaur, 2018).

Technology has had a significant and positive impact on the society, whereby the whole education system has undergone drastic changes. With the introduction of education technology startups, the traditional and formal style of teaching has transformed to a great extent. Now, people are getting more and more inclined towards online mode of learning. The customer reviews available online play a great role in shaping the sentiments of the customers, and accordingly marketers can make use of these reviews to understand their customers and plan their service accordingly (Rao & Palathil, 2020).

Marketers need to decide upon the type of digital marketing strategies to be used carefully. When it comes buying any products/services online, it was found that social media platforms are most widely used. The satisfaction levels of customers increase when they make purchase using such digital platforms. If business houses focus on social media marketing effectively and efficiently, it could surely help them earn higher profits in future (Pillai, Holla & Srinivas, 2021). Earlier, it was believed that consumer behavior depends upon their educational background, income class or monthly income levels, but with the advent of digital marketing these factors do not hold much importance as long as people are aware about digital media platforms (Hemavati & Raji, 2018).

Objectives of the Study

1. To examine the extent of consumer awareness and perception of Edtech startups, including their offerings, features, channels adopted, and benefits as influenced by digital marketing strategies.
2. To identify and analyze the relationship between various factors influencing consumers to engage with Edtech startups.
3. To assess the impact of digital marketing on consumer behavior and engagement with Edtech startups, including the relationship between the levels of satisfaction, trust, and recommendation.

Hypothesis of the study

Ha1: There is a significant relationship between the factors influencing consumer to engage with Edtech startups.

Ha2: There is a significant relationship between the levels of satisfaction, trust and recommendation.

Research Methodology

Research Design: This research study is descriptive and analytical in nature.

Sample Size: A total of 112 respondents were collected, out of which 100 were taken for the purpose of quantitative as well as qualitative analysis, 12 responses eliminated had invalid/missing data.

Sampling Technique: A Non-probability sampling technique namely, Purposive sampling was used with a purpose to study the impact of digital marketing on consumer behavior towards Edtech startups.

Collection of Data: In this study, data was collected through primary as well as secondary sources. Primary data was collected with the help of a self-structured questionnaire and secondary data was collected through extensive review of literature from journals and articles.

Tools used for Analysis: For quantitative data analysis, SPSS software version 29.0.1.0 was used to conduct descriptive studies and correlation tests. For qualitative analysis, content and frequency analysis technique was adopted to depict the responses along with graphical and tabular representation of data.
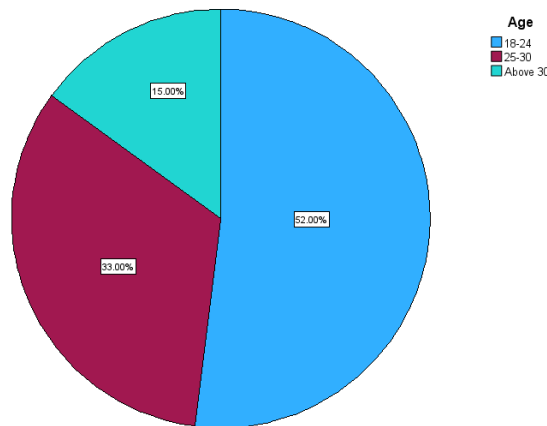
Results and Discussions
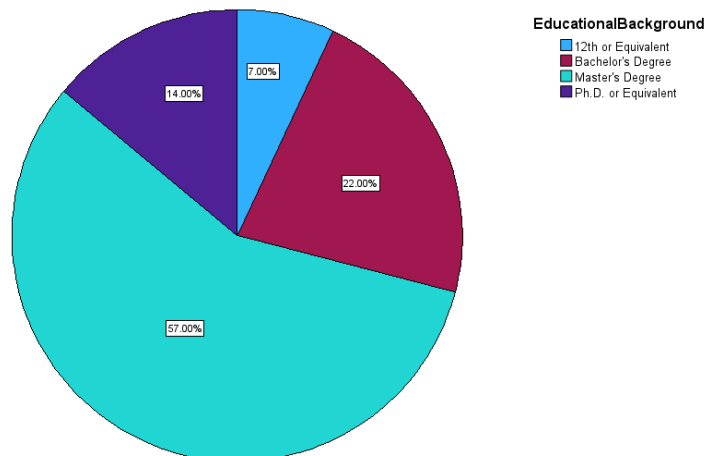
Figure No. 1 – Demographic Variable- Gender
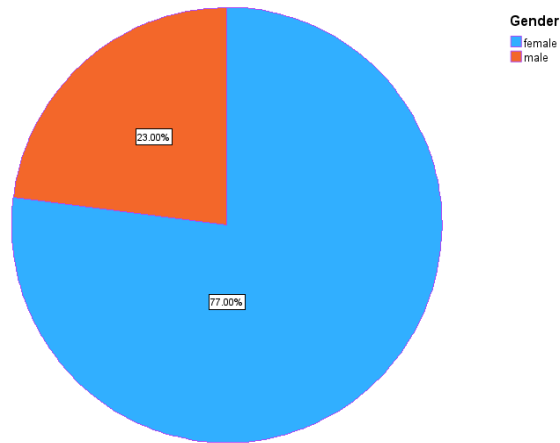
Interpretation- Out of total 100 respondents, 23% of the respondents are males and remaining 77% were females (fig. 1).
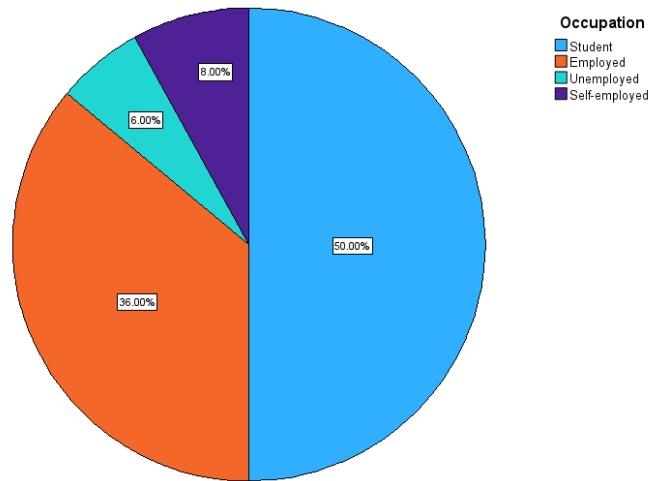
Figure No.2- Age

Interpretation- Out of 100 people, 52% were aged between 18-24, 33% in 25-30 years and the remaining 15% were above the age of 30 (fig. 2).

Figure No.3- Educational Qualification

Interpretation- Out of the total respondents, 7% were qualified till school level, 22% are graduates, 57% were post-graduates and remaining 14% are Ph.D. holders (fig. 3).

Figure No.4- Occupation

Interpretation- Out of total 100 respondents, 50% were students followed by 36% people who were employed, 8% were self-employed and 6% were unemployed (fig. 4).

**Reliability Analysis**

Table No.1- Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.722	.741	21

Interpretation: The above table indicates that the value of Cronbach's alpha coefficient for the 21 items is **α=0.722** suggesting that the items have high internal consistency and reliability. This indicates the satisfactory level of validity of the questionnaire (table 1).

Objective 1: Examining the extent of consumer awareness and perception of Edtech startups.

**Figure No. 5- Awareness about edtech startups**
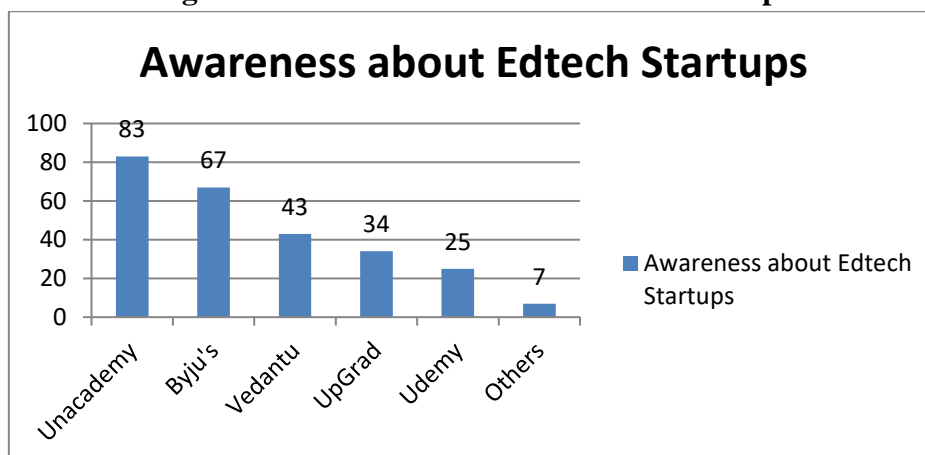
Interpretation: As per fig. 5, most of the respondents were aware about Unacademy as an educational startup followed by Byju's, Vedantu, UpGrad, Udemy, and some others such as Testbook, Scaler, etc.

**Figure No. 6- Frequency of digital marketing campaigns**
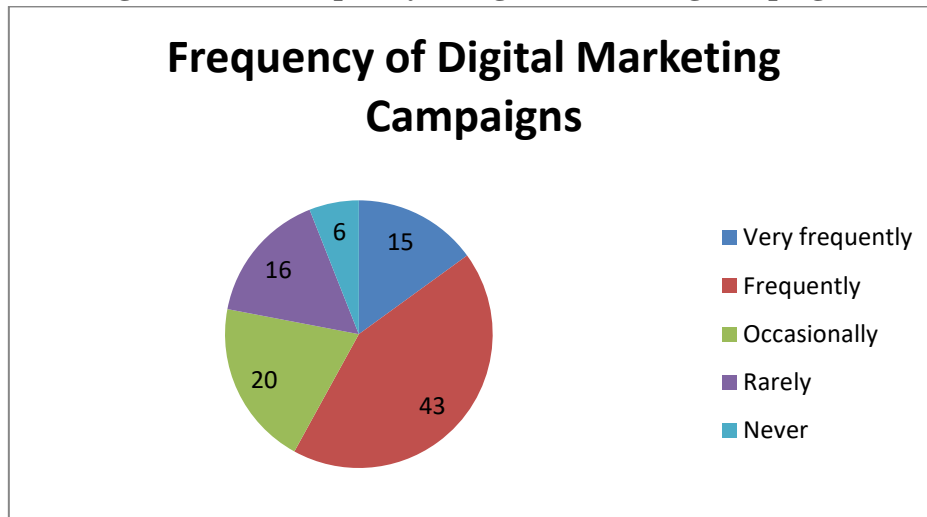
Interpretation: Precisely, 43% respondents frequently come across digital marketing campaigns run by edtech startups, followed by people (20%) who viewed them occasionally, 16% saw them rarely. Among 15% people, the frequency was high, and only about 6% never saw any of the campaigns (fig. 6).

Figure No. 7- Digital marketing channels
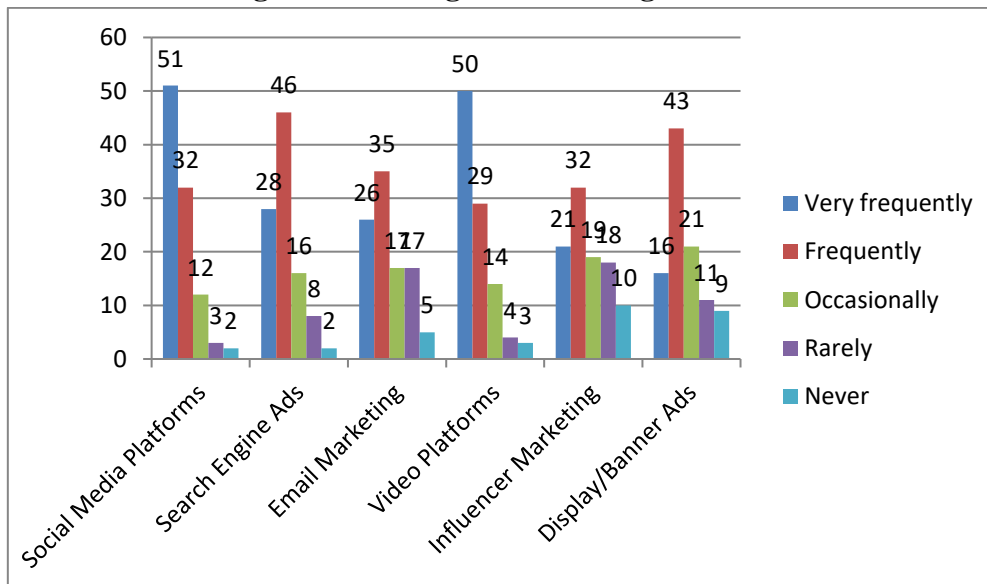
Interpretation: According to fig. 7, social media and video platforms are the two most popular channels of digital marketing, where 50% of the respondents come across digital marketing campaigns very frequently, followed by search engine ads, email marketing, influencer marketing, and display ads on a frequent basis.

Figure No. 8- Consumer Behavior
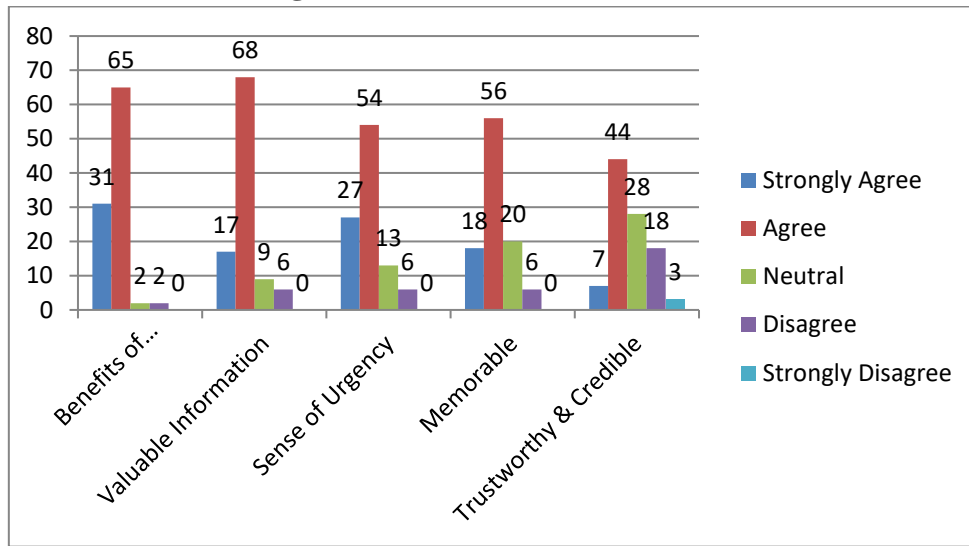
Interpretation: From the data mentioned in the above graph (fig. 8), it can be clearly stated that digital marketing campaigns influencer consumers' behavior by providing relevant and valuable information, followed by benefits of products/services offered, are memorable, create a sense of urgency or excitement and seem trustworthy and credible.

Objective 2: To identify and analyze the relationship between various factors influencing consumers to engage with Edtech startups.

Figure No. 9- Primary factors
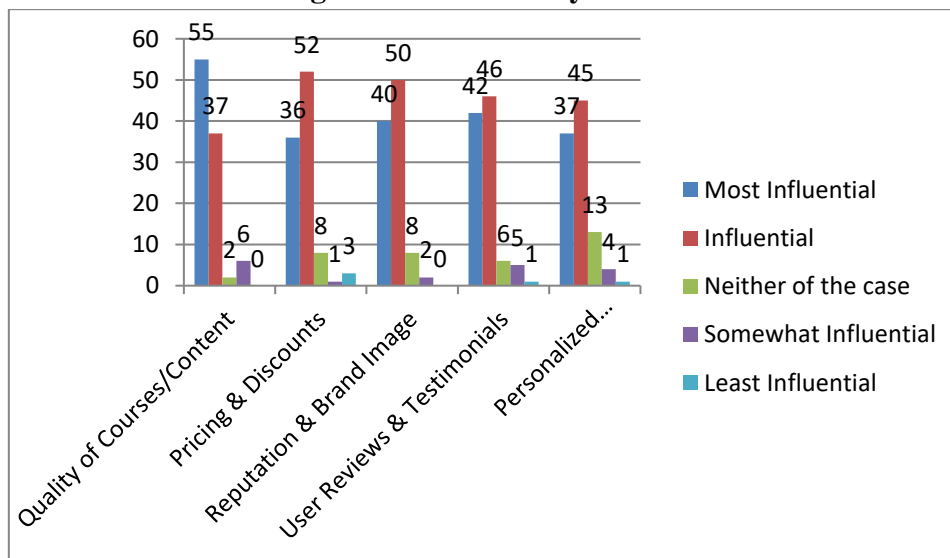
Interpretation: From the data in fig. 9, it can be clearly stated that quality of content/courses is the most influential factor influencing consumers as 55% respondents agree to it, followed by pricing, brand image, user reviews and personalized recommendations.

Table No. 2- Correlation between factors

Correlations

|		FactorQuality	FactorPricing	FactorBrandimage	FactorReviews	FactorRecommendations
FactorQuality	Pearson Correlation	1	.412**	.351**	.333**	.170
	Sig. (2-tailed)		<.001	<.001	<.001	.091
	N	100	100	100	100	100
FactorPricing	Pearson Correlation	.412**	1	.394**	.335**	-.003
	Sig. (2-tailed)	<.001		<.001	<.001	.977
	N	100	100	100	100	100
FactorBrandimage	Pearson Correlation	.351**	.394**	1	.367**	.040
	Sig. (2-tailed)	<.001	<.001		<.001	.695
	N	100	100	100	100	100
FactorReviews	Pearson Correlation	.333**	.335**	.367**	1	.373**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001
	N	100	100	100	100	100
FactorRecommendations	Pearson Correlation	.170	-.003	.040	.373**	1
	Sig. (2-tailed)	.091	.977	.695	<.001	
	N	100	100	100	100	100

**. Correlation is significant at the 0.01 level (2-tailed).

Interpretation: The table no. 2 highlights the level of correlation between several factors included in the study. The confidence interval was set at 95% but the correlation came out to be statistically significant at 99% i.e. p-value of 0.01 (2-tailed). As per the results, the first factor quality has moderate correlation with pricing, low correlation with brand image and user reviews and negligible correlation with factor personalized recommendations. Factor pricing has low correlation with brand image and user reviews and negative correlation with recommendations. Factor brand image has moderate correlation with all other factors except recommendation (moderate). Factor reviews has low correlation with all the factors.

Therefore, we can say that the alternate hypothesis has been accepted, and there is a significant relationship between the factors influencing consumer to engage with Edtech startups.

Objective 3: To assess the impact of digital marketing on consumer behavior and engagement with Edtech startups, including the relationship between the level of satisfaction, trust, and recommendation.

Figure No. 10- Effectiveness of digital marketing campaigns
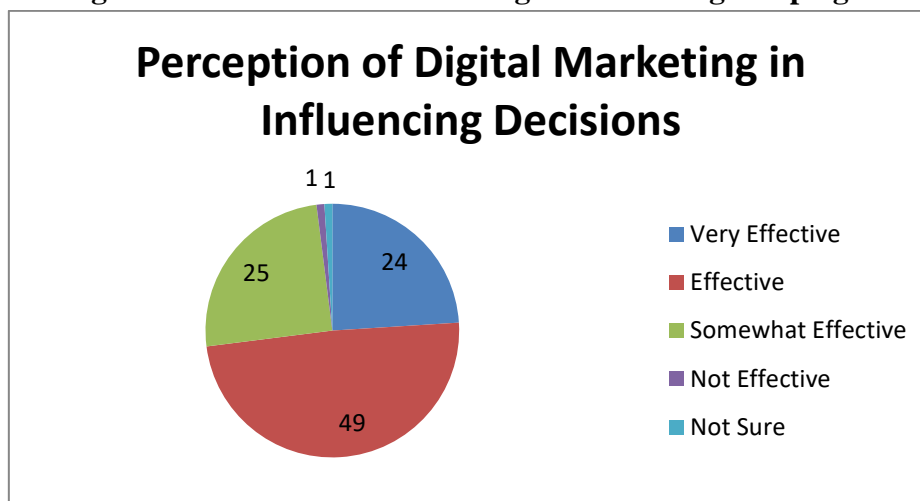
Interpretation: As per fig. 10, nearly half of the respondents (49%) consider the digital marketing done by Edtech startups effective in influencing their decisions to engage with them. In addition to it, 24% respondents consider it very effective, and 25% people take it as somewhat effective. It can be seen that only 2% of the total respondents were not sure or do not digital marketing effective.

Figure No. 11- Levels of Satisfaction, Trust and Recommendations
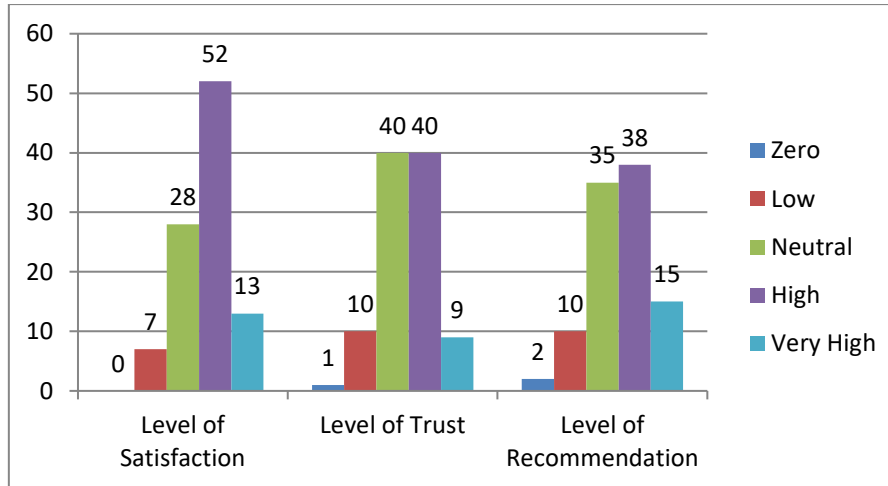
Interpretation: Most of the respondents agreed that there levels of satisfaction (52%), levels of trust (40%), and levels of recommendation (38%) were high, followed by people 28%, 40% and 35% who had neutral opinion.

Table No. 3- Correlation between level of satisfaction, trust and recommendation

Correlations

		LevelofSatisfaction	LevelofTrust	LevelofRecommendation
LevelofSatisfaction	Pearson Correlation	1	.645**	.261**
	Sig. (2-tailed)		<.001	.009
	N	100	100	100
LevelofTrust	Pearson Correlation	.645**	1	.400**
	Sig. (2-tailed)	<.001		<.001
	N	100	100	100
LevelofRecommendation	Pearson Correlation	.261**	.400**	1
	Sig. (2-tailed)	.009	<.001	
	N	100	100	100

**. Correlation is significant at the 0.01 level (2-tailed).

Interpretation: For the above variables, the confidence interval was set at 95% but the values came out to be statistically significant at 99% i.e. 0.01 level (2-tailed). As per table no. 3, level of satisfaction has moderately high correlation with level of trust and low correlation with level of recommendation. The level of trust has moderate correlation with level of recommendation and vice versa for all the variables. Therefore, we can say that the alternate hypothesis has been accepted, and there is a significant relationship between the levels of satisfaction, trust and recommendation.

Findings

- With respect to the awareness about Edtech startups, it was found that Unacademy is the most popular startup amongst others followed by Byju's, Vedantu and others.
- Most of the respondents frequently come across the digital marketing campaigns run by Edtech startups, and only a few people never saw any such marketing campaigns.
- Social media platforms such as Instagram, Facebook, Twitter, etc. are the most popular channels were people usually come across digital marketing of Edtech startups followed by video platforms namely, YouTube.
- Majority of the respondents said that digital marketing provides them with relevant/valuable information and they clearly state the benefits of products/services offered which influences their behavior to engage with them.
- The most important factor influencing consumers to engage with Edtech startups is their quality of courses/content offered followed by their pricing/discount structures. There was a positive and low to moderate correlation found between the factors included in the study.
- Nearly half of the respondents opine that the digital marketing done by Edtech startups is effective in influencing their decisions.
- The levels of satisfaction, trust and recommendation were high for majority of the respondents. There was a positive and low to moderately high correlation found among the above levels.

Conclusion

The present research focused on the impact of digital marketing on consumer behavior towards edtech startups. A quantitative data analysis was conducted which showed that the digital marketing strategies adopted by edtech firms have a significant impact on consumer behavior, including their awareness and perception towards these platforms. Moreover, social media platforms have a big role to play when it comes to addressing the masses, and reaching out to them. Digital marketing is really crucial as it fosters the growth of the firms by attracting more and more potential customers to buy or engage with their products/services. It has the power to influence consumers' behavior, attitude, actions, and preferences. If marketers or entrepreneurs can design their digital marketing strategies as per the needs or desires of the customers, and effectively present it to their target audience frequently, then their levels of trust and satisfaction would definitely rise. Firms should focus on providing relevant, valuable, and memorable information about their products/services to the target group which would lead to higher satisfaction levels, and the customers will ultimately recommend the same to their peers. This will eventually help the firms in luring and acquiring more number of customers by influencing their behavior.

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