FACTORS AFFECTING CONSUMER SATISFACTION TOWARDS E-LEARNING APPS –GRADUATE STUDENTS PROSPECTIVE

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ABSTRACT
In today's dynamic environment, it is very essential to have a diverse area of knowledge and even companies prefer candidates having such diverse knowledge. Thus, E-learning apps help you to study more and varied courses especially in your free time at the comfort of your home. E-learning apps are widely used by students to gather knowledge and study various courses of their interests along with their main course of study. These apps also provide with certification providing a proof that the candidate has attended the course and also passed the evaluation of the same thereby building their Curriculum Vitae. This study is basically aimed at evaluating the factors affecting satisfaction of the students for E-learning apps especially with reference to graduate students. For this study, the factors considered are price of the courses, quality of the content delivered and brand. The findings of the study showed that price and brand has very significant relationship with consumer satisfaction towards the E-Learning app while quality of content has a moderate relationship.
Keywords: E-learning Apps, Curriculum Vitae, Price, Quality, Brand.

Introduction
India being a country with the highest amount of population within the age bracket of 5-24 which is also the major age bracket where most of the students complete their overall education, there exists a huge opportunity and potential in the education sector. Even after the pandemic began, education sector is one such sector which did not suffer much as compared to others thanks to the online platforms and E learning apps which kept on the flow of learning.

After the United States, India is the second largest market for e-learning. By 2021, the industry is estimated to be worth Rs 14532 crore ($1.96 billion), with 9.5 million consumers. By 2026, the online education market in India is expected to reach Rs 86007 crores (US$ 11.6 billion.). With the rapid growth of the country and rapid digitalization, this sector has a huge growth in future times to come.

Even today the traditional education system in our country is not flexible enough to accommodate the subjects as per the interest of the candidate. Even if a student is not interested in a particular subject, he is forced to learn that. Also, in many cases the syllabus taught is outdated. This is where the e leaning apps helps you to pursue your learning in the subject of your choice. The courses in such apps are flexible and the course can be done as per the interest of the student, the time availability of the student and along with his regular course of study. At the same time doing courses from such apps enhances your curriculum vittae as it proves that as a student the person is keen to learn, ready to go out of the box or out of the regular course of study to explore a particular area of interest.

The success of such e learning apps depends upon the satisfaction of the consumers and hence it is essential for the e learning companies to focus on the major factors that affect the satisfaction of the consumers and work upon that. This will enable them to increase their market share in the industry. This research paper will help to understand the major factors and its relationship with the consumer satisfaction.

Literature Review
Sun, Yeh (2008) conducted a survey to analyse the critical aspects affecting learner's satisfaction in e- learning. The study showed that the learner's anxiety of using computer, the instructor's approach and attitude towards the course, the flexibility, quality, utility, easiness of use and evaluation diversity are major factors affecting learner's satisfaction. Alqahtani, Mohammad (2015) studied the impact of mobile applications on the student performance and satisfaction wherein questionnaire survey was distributed to 118 students for evaluating the

performance and satisfaction of using the "Say Quran" app for learning Holy Quran. The findings proved that there was a positive impact on the student performance and satisfaction of Say Quran mobile application. Liu (2018) studied the facets coaxing fulfilment with smart learning app in China. The research revealed that perceived responsiveness which is the quick response to the user demand and perceived content which is the structure of the text becomes crucial factors affecting end user expectation with e learning app. Mason ,Weller (2000) examined about the factors affecting student satisfaction on a web technology and revealed that the support of their tutor, staff or peer students, the time and effort they have to devote and the expectation of the student of the course and learning style are major factors which affects customer satisfaction for a web course. Chen, Rong & Cong (2020) study on user satisfaction with online education platforms in China during Covid 19 pandemic showed that the user's personal factors do not have unswerving effect on user contentment while platform accessibility is a major factor influencing user satisfaction.

Alenezi (2020) studied the relationship between the teaching and learning behaviour of teachers and students respectively with the use of e learning tools and materials. The study exposed that more the e-learning materials as well as resources used in an educational setting, the better will be the students' performance and the quality of teaching practices. Rao, Palathil (2020) conducted an analysis of customer sentiments towards EdTech apps to understand online customer reviews on platforms like Google Play Store and also the overall sentiments associated with the EdTech apps. The study found that although there are majority of positive reviews there also exists negative and neutral reviews as well. Time to be spent on the app, the quality of question and its addressal, video are some factors on which the sentiments are based upon. Yagami, Park (2021) conducted a research to analyse learner's continuance intention for online learning in China through a questionnaire. The study found that facility and course eminence and the teacher student interface have a positive impact on continuance purpose. It also found that the perceived value is one of the major determining factor for the online learner's retention. Hammouri, Abu-Shanab (2018). Conducted a study to understand the factors affecting student's satisfaction with e learning in Jordan. The results showed that there are five major factors affecting satisfaction which are the professed comfort of use, alleged usefulness, system excellence, statistics quality and smart machine self-efficacy. The study had limitation such that other factors could also be taken, and this study can be done in future in other geographical areas also to confirm this study. Martín, Fernández-Molina, González-Gómez, (2015) in their study analysed the main components of satisfaction with e learning involving students from Spain. They key findings from the study is that the design of the course, the contents offered in the course, the ability to obtain and see material on the teaching platform, as well as the ability to interact, were important features.

Shahjad, Mustafa (2019) did research in to understand the trend analysis on demand of learning apps. Research found that there are various devices but drastic change came in 2014 when people started using the latest technology and not keen to depend on traditional modes. Author also talked about that now generation is very much active on learning apps as they are more friendly and easy to understand. Munkvold (2016) discuss about the consequences of a descriptive study of free smart educational apps in Norway between September 2015 & March 2016, concentrating on the usage of learning apps for better learning. The learning apps meant for students were based on variety of educational segments, criteria of educational method are the app constructed upon, what glassy of the advanced Bloom's taxonomy acclimate for the app cover and the countless additional values of the e learning app that can be better way compare to traditional way of teaching.

Garwe (2018) did study to understand the role of using smart devices, learning apps, institution updated websites, word of mouth, radio and other mode of advertisement to market and promote the program to potential students. Existing batch students and alumni can become ambassador to interact with potential candidate and can influence the young talent about the quality and standard of education about the college.

Objectives of Study
1) To study the relation between price and customer satisfaction towards E learning apps for graduate student.
2) To understand the impact of Quality Content and customer satisfaction towards E-Learning apps from graduate student prospective.
3) To examine the relation between brand and customer satisfaction towards E apps.

Hypothesis of Study
H1-There is a significant relation between price and consumer satisfaction with ref to e-learning apps.
H2-There is a significant relation between Quality of Content and consumer satisfaction for E-Learning Apps.
H3- There is a significant relation between Brand and consumer satisfaction with reference to E-Learning Apps.

Data Analysis

A) Demographic Analysis:
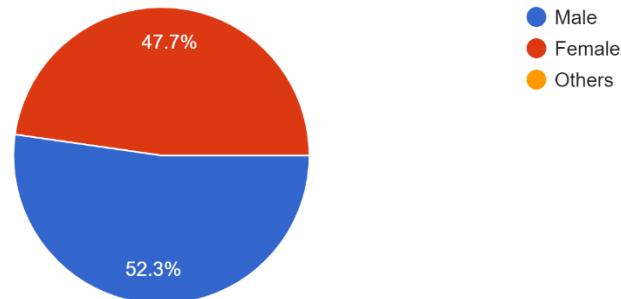
Gender

155 responses

Figure 1 Gender wise description of users

The pie chart shows in the table highlights that out of the 155 users 52.3% i.e., 81 respondents were males and 47.7 i.e., 74 respondents were females.
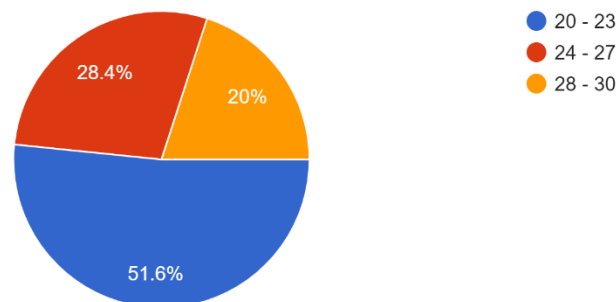
Age Group

155 responses

Figure 2. Age Group

The pie chart shows above that from 155 respondents 51.6% i.e., 80 responses were in the age bracket of 20-23, 28.4% i.e., 44 responses were in the age group of 24-27 and 20% i.e., 31 respondents were in the age group of 28-30

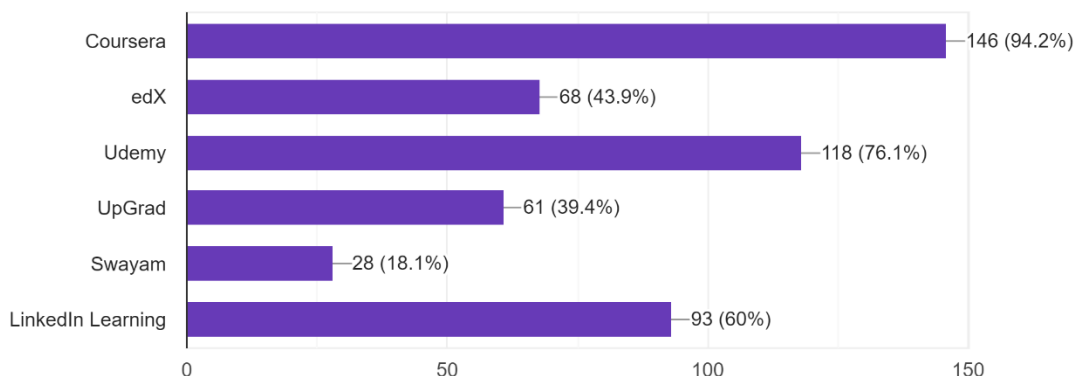Which of the following E-Learning Apps are you aware of
155 responses

Figure 3 Awareness of E learning apps

The above pictorial description says that majority of the defendants are conscious about Coursera learning app shadowed by Udemy and LinkedIn Learning. Respondents are least aware about Swayam app.

Which of the following E-Learning apps have you used
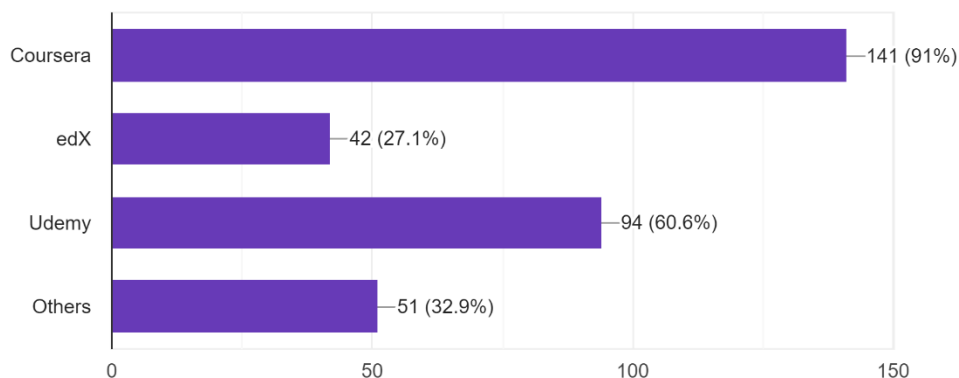155 responses

Figure: 4 users of the E Learning Apps

The above chart explains than majority of the respondents have used Coursera E learning app followed by Udemy. edX have the least number of users.

(B) Analysis & Interpretation
The data collected from the each of the independent questions for each variable are summed up and averaged. This was done for the sole purpose of combining responses so that it will be easier for conducting other tests.

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Price	.250	155	.000	.795	155	.000
Quality of Content	.203	155	.000	.793	155	.000
Brand	.171	155	.000	.887	155	.000
Satisfaction	.194	155	.000	.881	155	.000

Table no 1 Test of Normality

As the significant value is coming less than .05 so price, quality of content, brand make an impact on customer satisfaction by Shapiro Wilk's Test. ($p < 0.05$). The researcher chose to run a non-parametric test Spearman's Rank Correlation.

H1: - Price have significant relation in increasing the satisfaction level of customer with ref to eLearning apps.

			Price	Satisfaction
Spearman's rho	Price	Correlation Coefficient	1.000	.673**
		Sig. (2-tailed)	.	.000
		N	155	155
	Satisfaction	Correlation Coefficient	.673**	1.000
		Sig. (2-tailed)	.000	.
		N	155	155

Correlation is significant at the 0.01 level (2-tailed).
Table 2 Spearman's Rank Order Correlation

As assessed by Spearman's Correlation, there is strong correlation between price and satisfaction which is 0.673. Also, the significance value (p value) is 0.000 which is less than 0.05 which shows that there is a statistically significant relationship between the two variables that is price and satisfaction level of customer. Hence we accept alternate hypothesis and reject null hypothesis.

H2 - Quality of content have positive significant role in customer satisfaction towards E learning apps.

Correlations				
			Quality of Content	Satisfaction
Spearman's rho	Quality of Content	Correlation Coefficient	1.000	.479**
		Sig. (2-tailed)	.	.000
		N	155	155
	Satisfaction	Correlation Coefficient	.479**	1.000
		Sig. (2-tailed)	.000	.
		N	155	155
**. Correlation is significant at the 0.01 level (2-tailed).				

Table 3 Spearman's Rank Order Correlation

As assessed by Spearman's Correlation, there is moderate association among Quality of content and satisfaction which is 0.479. Also, the significance value is 0.000 which is less than 0.05 which indicates that there is a statistically significant relationship between the two variables. As the significant value is in range of acceptance level we accept the alternate hypothesis.

H3- There is a positive significant relationship between Brand of E learning and consumer satisfaction.

Correlations

			Brand	Satisfaction
Spearman's rho	Brand	Correlation Coefficient	1.000	.600**
		Sig. (2-tailed)	.	.000
		N	155	155
	Satisfaction	Correlation Coefficient	.600**	1.000
		Sig. (2-tailed)	.000	.
		N	155	155

Table 4 Spearman's Rank Order Correlation

As assessed by Spearman's Correlation, there is strong correlation between brand and satisfaction which is 0.600. Also, the significance value is 0.000 which comes in acceptable range and indicate that there is a statistically significant relationship between the two variables. So we can say that brand of e learning apps in the market has major role to increase the satisfaction level of customer. Hence we accept the alternate hypothesis.

Correlation Interpretation and results

Spearman's Rank Correlation is used to assess the relation between the variable viz., price and consumer satisfaction, quality of content and consumer satisfaction, brand and consumer satisfaction. One hundred and fifty-five participants were analysed for this study

Initial analysis showed that the relationship between the variables to be linear when the data were not normally distributed, as assessed by Shapiro Wilk's test of Normality ($p < 0.05$) and there were no outliers.

(Hypothesis1) There was statistically significant, strong positive correlation between price and consumer satisfaction, $r (155) = 0.673$, $p = 0.000$. Hence, we say that there is a significant relationship between price and consumer satisfaction towards E-Learning Apps

(Hypothesis2) There was statistically significant, moderate positive correlation between quality of content and consumer satisfaction, $r (155) = 0.479$, $p = 0.000$. Hence, we say that there is a significant relationship between quality of content and consumer satisfaction towards E-Learning Apps

(Hypothesis3) Its statistically proven that a, positive correlation between brand and consumer satisfaction, $r(155) = 0.600$, $p = 0.000$. Hence, we say that there is a significant relationship between brand and consumer satisfaction towards E-Learning Apps**.**

Findings

The survey conducted shows that out of the 155 respondent 52.3% respondents were males and 47.7 respondents were females. The survey conducted shows that out of the 155 respondents 51.6% respondents were in the age group of 20-23, 28.4% respondents were in the age group of 24-27 and 20% respondents were in the age group of 28-30.The study found that majority of the respondents are aware about Coursera learning app followed by Udemy and LinkedIn Learning. Respondents are least aware about Swayam app. The study revealed that majority of the respondents have used Coursera E-learning app followed by Udemy, edX have the least number of users. The study proved that price and brand have a significant and strong relationship and they affect with consumer satisfaction towards E-Learning apps. Quality of Content have significant but moderate relationship with consumer satisfaction.

Recommendations

Price and Brand are the major two factors affecting consumer satisfaction and hence focus has to be given more on these factors along with Quality of Content. From the study it has been revealed that edX has the least number of users and hence it is recommended that company should work to increase its awareness. EdX, one of the company marketing strategy is to focus more on the branding, giving some discount to the users especially the customer who are coming to buy for the first time. Few consumers are aware about apps like Swayam although these apps are made by the Government of India. Hence, awareness should be increased on these apps so that it reaches to maximum students. As per new education policy, students should register in Swayam and get some certification of courses which are under Swayam guidelines. Further Research is recommended using other factors of study and also in other geographical areas. Further research can also be conducted on the impact of these factors on consumer satisfaction.

Limitations

The study is limited to Pune region and only for graduate students as during data collection most of the universities were conducting exams so future research can be done to understand the prospective of post graduate students and more cities can be added to understand the impact of quality of e learning apps in increasing the satisfaction level of students. Further study can be done to understand the parent view as they are the decision maker in this business. So scope of this study can be done to find out the prospective of parent as well as post graduate students with reference to eLearning apps.

Conclusion

The E-Learning industry has gained a great boom especially during this pandemic. But technology and E-Learning is the future even after this pandemic and hence the study of consumer satisfaction towards E-Learning is need of the hour. From this study we can conclude that all the factors namely price, brand and quality of content have a significant relationship with consumer satisfaction. Out of these price and brand have strong relationship while quality of content has moderate relationship.

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