

Scope of Online Education Industry in Post Covid Era



ISBN: 978-1-943295-20-3

Niyat Shetty
Kohinoor Business School
(niyatshetty@gmail.com)

The pandemic has changed the entire way the world behaves, even the way one learns. E-learning is the new normal and many online education companies have emerged post pandemic. There are pros and cons of online education. The research problem lies in identifying the challenges faced by the students and teachers in this online education ecosystem. This research will explore the scope and factors affecting the online education industry. The research would throw light on the consumer perception towards online education so that the EdTech companies could work on making online education more effective.

Keywords: Online Education, E-Learning, Consumer Perception, Consumer Behavior, Pandemic

1. Introduction

Finally the pandemic is over and we are all where we used to belong. But there is a world of change around us in everything we do or see post pandemic, the way we eat, the way we live, the way we roam, the way we take care of our health and safety and the way we learn too. There has been a paradigm shift in the way we learn today post pandemic. The world of education has mostly shifted to online mode, some has moved back to the old offline mode and still others have opted for the best of both worlds – the hybrid mode. In pandemic, many EdTech companies have started up leveraging the opportunity with their technology base and the need for online learning was created. The scope was enormous, as many learners enrolled in these online courses with a dual motive – to make good use of the time during lockdown as well as some value addition in their CV. But now as the era of pandemic is a passé, is the magic of Online learning still prevalent? What is the scope of these EdTech companies with huge investments post pandemic?

The current scenario also draws a grim picture around the profitability of these EdTech companies. As more and more people are going back to their old offline modes and drying up of investment from the angel investors, these detach companies are facing financial crunch. In a bid to restructure, there has been lot of cost-cutting measures employed as the recent layoffs at BYJUs can be cited as an example. Now, through this research paper, the research will try to understand the future of online education industry in the post-pandemic era. The paper would also throw light on the factors affecting the online education industry, what services are expected from the consumer's point of view and what could be the future of online education in India.

Research Problem

As post pandemic, every industry has shifted to a “Phygital” mode of business model, it is imperative for all EdTech companies and even small companies who are in the industry of online education to somewhat fine tune their working process so as to cater to all their target group and sustain their profitability. The main dilemma for these EdTech companies is to take a decision as to whether continue in the online mode or start up physical mode as now people are back from the pandemic woes. BYJU's have already started their brick – and –mortar tuition classes to cater students who intend to attend regular physical classes whereas it is continuing with its online mode too to retain their online learning customers. To take this important decision, the EdTech companies must identify the factors which can affect the online education industry, the customer preferences and perception towards online learning, the reason as why people intend to learn online and also the areas of concern or challenges students face while learning online. This research would intend to find solutions to these problems and hence EdTech companies would be in a better position to decide whether to go offline or stay online.

Objectives of Study

- To understand the level of willingness of the consumers to shift to online mode of learning post pandemic
- To determine the scope of online education post pandemic
- To analyze the areas of concern in online learning
- To compare and extract the reasons for consumer preferring online mode of learning vis –a vis offline mode.

Hypothesis of the Study

H₀₁: There is no significant difference in willingness to shift to online learning from traditional learning across genders.

- H₁₁**: There is significant difference in willingness to shift to online learning from traditional learning across genders
H₀₂: There is no significant difference in willingness to shift to online learning from traditional learning across age groups.
H₁₂: There is significant difference in willingness to shift to online learning from traditional learning across age groups.
H₀₃: There is no significant difference in the level of effectiveness of online learning across genders
H₁₃: There is significant difference in the level of effectiveness of online learning across genders
H₀₄: There is no significant difference in the level of effectiveness of online learning across age groups
H₁₄: There is significant difference in the level of effectiveness of online learning across age groups
H₀₅: There is no significant difference in the areas of concern in online learning across genders
H₁₅: There is significant difference in the areas of concern in online learning across genders
H₀₆: There is no significant difference in preference for mode of learning post pandemic across genders
H₁₆: There is significant difference in preference for mode of learning post pandemic across genders
H₀₇: There is no significant difference in reasons for opting online learning platforms across genders
H₁₇: There is significant difference in reasons for opting online learning platforms across genders
H₀₈: There is no significant difference in preference for mode of learning post pandemic across age groups
H₁₈: There is significant difference in preference for mode of learning post pandemic across age groups

2. Research Methodology

The researcher has conducted a descriptive research where the sample frame is the consumers of online education across different platforms spread over the location of Mumbai city. The research is based on the responses collected from 104 respondents in a Stratified Random sampling method. The descriptive statistics related to the sample size are as follows

Male or female * Age Group (in years) Crosstabulation					
Count					
		Age Group (in years)			Total
		20-25	26-35	>35	
Male or female	Male	11	26	12	49
	Female	27	17	11	55
Total		38	43	23	104

3. Data Analysis and Interpretation

The researcher would analyze the data and test the hypotheses by using SPSS software and statistical methods like Independent Paired T-test, One way ANOVA method and Chi Square method. The descriptive statistics for the above data is as explained below

Testing of Hypotheses

- H₀₁**: There is no significant difference in willingness to shift to online learning from traditional learning across genders.
H₁₁: There is significant difference in willingness to shift to online learning from traditional learning across genders

Group Statistics					
	Male or female	N	Mean	Std. Deviation	Std. Error Mean
1. How much willing are you to shift to online learning from traditional learning?	Male	49	1.95	1.520	.205
	Female	55	4.43	1.258	.180

Independent Samples Test										
		Levene's Test for		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence	
1. How much willing are you to shift to online learning	Equal	4.179	.044	9.008	102	.000	2.483	.276	1.936	3.030
	Not Equal			9.107	101.473	.000	2.520	.273	1.942	3.024

As the significance or the P-value is less than 0.05 we reject the null hypothesis and accept the alternate hypothesis and hence conclude that there is significant difference in willingness to shift to online learning from traditional learning across genders.

Findings of the Study

- Female students are more willing to shift to online learning from traditional learning as compared to males.
 - Male students are not keen to shift to online learning and are willing to go back to offline mode of learning.
- H₀₃**: There is no significant difference in the level of effectiveness of online learning across genders
H₁₃: There is significant difference in the level of effectiveness of online learning across genders

Group Statistics					
	Male or	N	Mean	Std.	Std. Error
6. Rate the effectiveness of these EdTech companies in delivering online courses from 1 to 5 (1 being lowest, 5 being highest)	Male	49	3.39	1.204	.172
	Female	55	2.33	.883	.119

Independent Samples Test										
		Levene's Test for		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence	
									Lower	Upper
6. Rate the effectiveness of these EdTech companies in delivering line	Equal	11.935	.001	5.158	102	.000	1.060	.206	.653	1.468
	Equal			5.068	87.205	.000	1.060	.209	.645	1.476

As the significance or the P-value is less than 0.05 we reject the null hypothesis and accept the alternate hypothesis and hence conclude that there is significant difference in effectiveness of online learning across genders.

Findings of the Study

- Male students have higher level of effectiveness of online learning as compared to females.
- Female students don't find the online mode of learning as effective as compared to males.

Now here, as proven earlier, a point to be noted is that even though female students do not find online learning as effective as compared to male students, they are still more willing to shift to online learning mode from traditional learning, as compared to males. There must be some factors influencing this willingness of females which needs to be understood.

H₀₂: There is no significant difference in willingness to shift to online learning from traditional learning across age groups.

H₁₂: There is significant difference in willingness to shift to online learning from traditional learning across age groups

Descriptive Statistic			
1. How much willing are you to shift to online learning from traditional learning?			
Age Group (in years)	Mean	N	Std. Deviation
20-25	2.42	38	1.750
26-35	3.47	43	1.830
>35	3.61	23	1.877
Total	3.12	104	1.871

ANOVA					
How much willing are you to shift to online learning from traditional learning?					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	29.176	2	14.588	4.445	.014
Within Groups	331.439	101	3.282		
Total	360.615	103			

As the significance or the P-value is less than 0.05 we reject the null hypothesis and accept the alternate hypothesis and hence conclude that there is significant difference to shift to online learning from traditional learning across age groups.

Findings of the Study

Young age group students are more willing to shift to online learning from traditional learning as compared to older age group students.

H₀₄: There is no significant difference in the level of effectiveness of online learning across age groups

H₁₄: There is significant difference in the level of effectiveness of online learning across age groups

ANOVA					
Rate the effectiveness of these EdTech companies in delivering online courses from 1 to 5 (1 being lowest, 5 being highest)					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.406	2	1.203	.878	.419
Within Groups	138.478	101	1.371		
Total	140.885	103			

As the significance or the P-value is more than 0.05 we accept the null hypothesis and reject the alternate hypothesis and hence conclude that there is no significant difference in the level of effectiveness of online learning across age groups.

Findings of the Study

All the age groups are having similar level of effectiveness of online learning across age groups

H₀₅: There is no significant difference in the areas of concern in online learning across genders

H₁₅: There is significant difference in the areas of concern in online learning across genders

Male or female * 9. According to you, which are the areas of concern in online education? Crosstabulation					
Count					
		9. According to you, which are the areas of concern in online education?			Total
		course content	course delivery	examination	
Male or female	Male	16	27	6	49
	Female	37	12	6	55
Total		53	39	12	104

Chi-Square Tests			
	Value	df	Asim. Sig. (2-sided)
Pearson Chi-Square	13.790 ^a	2	.001
Likelihood Ratio	14.128	2	.001
Linear-by-Linear Association	7.066	1	.008
N of Valid Cases	104		

As the significance or the P-value is less than 0.05 we reject the null hypothesis and accept the alternate hypothesis and hence conclude that there is significant difference in the areas of concern in online learning across genders.

Findings of the Study

- Male students generally find course delivery as the main area of concern in online learning
- Female students generally find course content as the main area of concern in online learning
- Male and female both don't consider examinations as a matter of concern in online learning

H₀₆: There is no significant difference in preference for mode of learning post pandemic across genders

H₁₆: There is significant difference in preference for mode of learning post pandemic across genders

Male or female * 12. Which mode of learning do you prefer post pandemic? Crosstabulation				
Count				
		12. Which mode of learning do you prefer post pandemic?		Total
		Online	Offline	
Male or female	Male	5	44	49
	Female	43	12	55
Total		48	56	104

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	48.183 ^a	1	.000		
Continuity Correction ^b	45.487	1	.000		
Likelihood Ratio	53.558	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	47.720	1	.000		
N of Valid Cases	104				

As the significance or the P-value is less than 0.05 we reject the null hypothesis and accept the alternate hypothesis and hence conclude that there is significant difference in preference for mode of learning post pandemic across genders

Findings of the Study

- Male students would prefer to go back to offline learning mode after pandemic
- Female students would prefer to continue online mode of learning after pandemic

H₀₇: There is no significant difference in reasons for opting online learning platforms across genders

H₁₇: There is significant difference in reasons for opting online learning platforms across genders

Male or female * 10. What are the main reasons you would more likely to opt for online courses? Crosstabulation					
Count					
		10. What are the main reasons you would more likely to opt for online courses?			Total
		industry relevance	convenience	saving of time	
Male or female	Male	32	17	0	49
	Female	9	40	6	55
Total		41	57	6	104

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.930 ^a	2	.000
Likelihood Ratio	31.204	2	.000
Linear-by-Linear Association	27.146	1	.000
N of Valid Cases	104		

As the significance or the P-value is less than 0.05 we reject the null hypothesis and accept the alternate hypothesis and hence conclude that there is significant difference in reasons for opting online learning platforms across genders.

Findings of the Study

- Male students consider industry relevance as the main reason for opting online education courses.
- Female students consider convenience as the main reason for opting for online education courses.

H₀₈: There is no significant difference in preference for mode of learning post pandemic across age groups

H₁₈: There is significant difference in preference for mode of learning post pandemic across age groups

Age Group (in years) * 12. Which mode of learning do you prefer post pandemic?				
Count				
		12. Which mode of learning do you		Total
		Online	Offline	
Age Group (in years)	20-25	15	23	38
	26-35	20	23	43
	>35	13	10	23
Total		48	56	104

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.679 ^a	2	.432
Likelihood Ratio	1.683	2	.431
Linear-by-Linear Association	1.642	1	.200
N of Valid Cases	104		

As the significance or the P-value is more than 0.05 we accept the null hypothesis and reject the alternate hypothesis and hence conclude that there is no significant difference in preference for mode of learning post pandemic across age groups

Findings of the Study

All age groups generally are equally divided into preferring online over offline mode of learning.

4. Findings and Conclusions

The researcher after conducting a primary data research using a structured questionnaire have come up with the following conclusions regarding the scope of online education in India post pandemic.

- Female students are more willing to shift to online learning from traditional learning as compared to males.
- Male students are not keen to shift to online learning and are willing to go back to offline mode of learning
- Male students have higher level of effectiveness of online learning as compared to females.
- Female students don't find the online mode of learning as effective as compared to males.
- Young age group students are more willing to shift to online learning from traditional learning as compared to older age group students
- All the age groups are having similar level of effectiveness of online learning across age groups
- Male students generally find course delivery as the main area of concern in online learning
- Female students generally find course content as the main area of concern in online learning
- Male and female both don't consider examinations as a matter of concern in online learning
- Male students would prefer to go back to offline learning mode after pandemic
- Female students would prefer to continue online mode of learning after pandemic
- Male students consider industry relevance as the main reason for opting online education courses.
- Female students consider convenience as the main reason for opting for online education courses.
- All age groups generally are equally divided into preferring online over offline mode of learning.

5. Recommendations

With the conclusions derived from the research, the researcher would recommend the following course of action for the EdTech companies to ensure smooth functioning in the post pandemic era.

- As females are more willing to shift to online courses, the EdTech companies must target women as its main prospect customers and introduce online courses specifically targeted to women.
- Male consumers of online education generally enroll for such online courses with an objective of industry relevance and also they feel accreditation is one of the most important factors leading to industry relevance. Hence, EdTech companies should have a tie-up or collaborate with prestigious institutions or accreditation bodies and such courses should be specifically targeted to males.
- Males aged between 25-35 are more willing and seeking for courses which will help them in their career. So, EdTech companies should specifically design some value addition or career building courses with some prestigious accreditation and target it specifically to office going males who are in the mid-management phase and looking out for promotions and appraisals.
- Focus should be on designing good course content which can be downloaded and obtained at convenience to the users. Also the course delivery should be easy and in user-friendly mode as these are the two main areas of concern faced by the users of online learning. Pre-recorded videos, audio –visual content can be added to the pedagogy so that users find them interesting as well as convenient to consume according to their busy schedules.

6. References

1. Bhalla, Kritti, "From Byju's to Eruditus — India now has four EdTech unicorns, thanks to a \$4 billion fund flowing in since 2020"
2. Business Insider India (August 14, 2021).<https://www.businessinsider.in/business/startups/news/india-now-has-four-edtech-unicorns-byju-unacademy-eruditis-upgrad/articleshow/85300757.cms> 3.
3. Brooks, Christopher D and McCormack, Mark. "Driving Digital Transformation in Higher Education", ECAR research report. Louisville, CO: ECAR, 2020.<file:///C:/Users/Admin/Downloads/Dx2020.pdf> 4.
4. Chan, Anita Say. "Venture Ed: Recycling Hype, Fixing Futures, and the Temporal Order of EdTech." Digital STS. Princeton University Press, 2019. 161-177.5.
5. Chang, Ethan. "Beyond workforce preparation: Contested visions of 'twenty-first century' education reform." *Discourse: Studies in the Cultural Politics of Education* 40.1(2019): 29-45.
6. T. Muthu Prasad, S. Aiswarya, K.S. Aditya, Girish K. Jha: Students' perception and preference for online education in India during COVID -19 pandemic, *Social Sciences & Humanities Open*, Volume 3, Issue 1, 2021, 100101, ISSN 2590-2911, <https://doi.org/10.1016/j.ssaho.2020.100101>.
7. Sharma, Ca Vinod. (2020). A Study of Innovative Ed-Tech Start-Ups & Businesses in the Emerging Markets and Economies.
8. Williamson, Ben. "Educating Silicon Valley: Corporate education reform and the reproduction of the techno-economic revolution." *Review of Education, Pedagogy, and Cultural Studies* 39.3 (2017): 265-288