



Vol. XVI &amp; Issue No. 12 December - 2023

INDUSTRIAL ENGINEERING JOURNAL

## A STUDY ON CUSTOMER RETENTION IN EDUCATIONAL MOBILE APPLICATIONS THROUGH CONSUMER ENGAGEMENT MEDIATING CUSTOMER INVOLVEMENT

Bhairi Swarna Lakshmi

Dr. Ajitha Savarimuthu

Dr. C. Sengottuvelu

### Abstract

*The Ed-tech industry has been recently playing a key role in the education sector since the start of pandemic. Still there indeed a lot of room for growth and advancement in the companies' operations to gain successful retention of customers and also creating strong brand image among the users. The idea behind the study is to understand the significant reasons behind troubled customer retention procedure in the Ed-Tech industry with special reference to Ekalavya Learning app and provide necessary suggestions for its improvement. The study also focuses on ways to engage users and tips for making customer stay interested in the app. The study also looks keenly into the concept of customer involvement in the services and the product the company is offering and sees the point of view of customers regarding the company's functionalities and operations. To create an impactful study, questionnaires was distributed to the target population. Statistical tools like SEM, Karl Pearson's coefficient correlation have been used to prove certain situations in the study. The results focuses on creating a space for customer's effective involvement and efficient strategies to be implemented for their engagement in the company's daily operations.*

**Keywords:** Customer experience, Customer acquisition, Customer interaction, User friendliness, EdTech industry

### INTRODUCTION

Education sector has always been playing a major role in the transformation (Williamson, B, 2021) of society from medieval period to the Gen Z era. It doesn't matter in what era humans live in; education will always be at its top priority for a society to develop. In the recent decade, the technology has been playing a significant role in education sector (Peterson, D, 2016) that led to the emergence of Ed-tech industry that facilitated those who can't pursue what they dreamt of with best infrastructure and quality services essential for successful fulfillment of their dreams. During COVID-19, one of the sectors that had hardly hit is Educational sector (Renz et al., 2020). But with the help of Ed-tech industry and its innovative ideas and operations students were able to continue their studies without any interruptions.

Though there were few difficulties in technological adoption and confusion occurred as the practice of virtual schooling hasn't yet been a trend in the sector, it is quite normal to users to take some time to get adapted in this space. In 2020 when Ekalavya Learning app started its operations by providing necessary services for schools for lowest price possible and helping them to cope up with the situation, it has gained good customer base and accelerated its business by expanding its wings by introducing various features and providing infrastructure on demand for schools (Verma, P., & Manicka, M. M, 2021). But it has been recently facing few challenges in areas related to customers. It is experiencing the downfall in the customer statistics that led to impact their operations. The study is taken to understand the level of customer involvement in the company's activities and operations and analyze how

well customers know about the company. The study helps in figuring out ways to enhance the operations of the company and get them back on track by designing necessary strategies for making customers retain for a longer duration.

### THEORETICAL BACKGROUND

The contemporary academic system (Williamson, B, 2022). was adopted and established by the British in the twentieth century, based on Macaulay's ideas. It is designed and written in a western style (Fuhrman, S. H, 2017). Because the British government does not acknowledge traditional buildings, they declined. Mahatma Gandhi made comparison between the outdated educational system and a beautiful tree that was cut down during British rule. The Education Commission was founded in 1964 with 16 members, including 11 Indian specialists and 5 foreign experts. The Commission also held meetings with a variety of international organisations, experts, and consultants in the domains of science and education. A 1976 constitutional amendment made it so that the government and the Center share responsibility for education (Wikipedia). The national education policy and planning were produced by the Ministry of Human Resource Development's Department of Education in collaboration with state and municipal authorities. Prior to the start of the twenty-first century, all children up to the age of 14 were expected to get free and required education under NPE 1986 and the revised PoA 1992. The grades-based system (National Education Policy, 2020) of education is currently taking the place of the universal marks-based system.

### THE RISE OF ED-TECH INDUSTRY

"Digital education" is a method or approach to education that

makes use of technology (Sharma, H2022) and electronic devices. This is a cutting-edge and vast technology area that will help any student learn from anywhere in the country. Courses for skill development, virtual laboratories, and virtual vocational training have been integrated in the creation of high-quality e-content in regional tongues to satisfy the linguistic diversity of India. To close the digital divide, guidelines for online and digital education (Ramiel, H,2019) have been formulated. Creating digital classrooms through the fusion of technology and educational systems. creating an evaluation system in the age of digital learning (Ramiel, H,2021) ensuring a consistent user experience by providing access to education via several media, including smartphone platforms, websites, TV channels, radio, and podcasts. The emphasis will be on boosting smartphone usage in order to offer “anytime, anywhere” access and enhance adoption. All students in schools should have full access to e-content and e-infrastructure at all times; yet, e-content (Regan, P. M., & Jesse, J, 2019) is being generated with significantly different priorities - The highest grades, which will encompass 6.3 crore kids, are from 12 to 9 (Ministry of Education, India).

On May 17, 2020, PM eVidya, a comprehensive programme, was unveiled with the goal of coordinating all initiatives linked to digital, online, and on-air education in order to offer fair multi-mode access to education. It is anticipated that almost 25 crore school-aged youngsters will benefit nationwide.

- DIKSHA (Digital Infrastructure for Knowledge Sharing: E-Learning)
- TV Channels - Swayam Prabha
- E-textbooks
- Radio transmission

### CATEGORIES OF THE DIGITAL LEARNING MARKET IN INDIA AND MAJOR PLAYERS

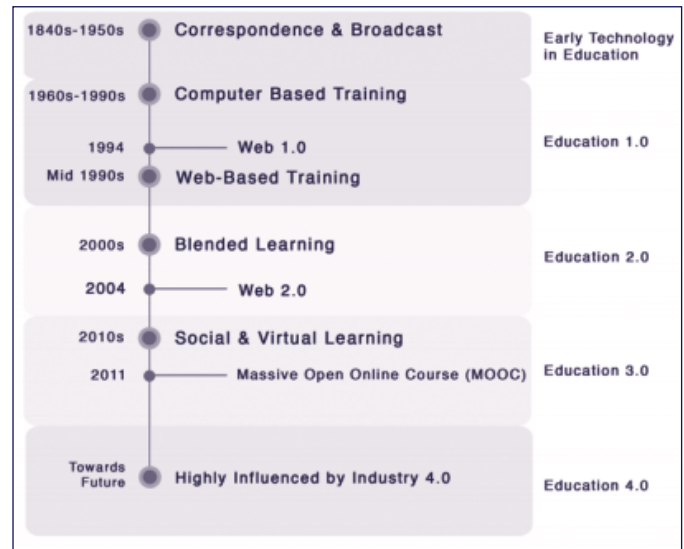
The K–12, exam preparation, web - based certification, skills enhancement, and process automation divisions make up India’s web - based learning market. Large potential markets, accessibility, value perception, pandemic-driven disruptions, and ever-evolving technological prowess are some of these segments’ main growth drivers. Countries like Argentina, Kenya, UK etc., have been playing key roles in the development of digital based education.

### REVIEW OF LITERATURE

Evolution of Education sector: Smart technologies are now being employed more and more in many aspects of our life. The future technology trends predict that smart gadgets known as smart digital networks will predominate. Gartner characterizes the spiral of people, content, devices and services as a ‘intelligent digital network,’ and the, ‘Digital,’ ‘Smart,’ and ‘Network’ components are crucial components that will create the future. Some of these technologies have the potential to drastically alter every facet of existence, from social development to working life and from production to employment. Technologies like IoT, Cloud Computing, Big data analysis, intelligent Sensor, Smart robots and machines,

AI, 3D Printing technologies, AR, MR and VR, Data analytics etc., are going to emerge as the biggest sources of education sector enhancement. This has been regarded as revolutionary process that would help in creating better opportunities for students to learn and grow (HafizeKeser and Ali Semerci 2019).

**Figure 2.1 Technology in Education Timeline**



Source: From Contemporary Educational Researches Journal, Volume 09, Issue 3(2019)

*Critical hopes and Concerns:* Six challenges would impact the future of Ed-tech industry. The six challenges were the emergence of new types of digital exclusion and inclusion, platform economics in the age of AI, learning differences between humans and machines, the IT industry as a major player in education, reimagining Ed-tech forms appropriate for the era of climate change, identifying alternatives to solidarity economies, convivial technology, and respectful design. These 6 challenges lead towards unprecedented big shifts in Ed-tech industry. These would assist in giving the area of educational technology scholarship respectable roots from which to operate in an advantageous way. According to the study, there is a clear need to advance the creation of a critical Ed-tech agenda that employs theoretical and methodological approaches (Neil Selwyn, et.al 2020) to address all the concerns that are currently emerging beyond the broad scope of education research. The importance of customer success and the necessity for businesses to pay attention to it have been explored in the article. when textbooks and papers from the past are no longer used in teaching. It currently relies on online tests, virtual mentoring programs, and e-learning solutions. To meet their curriculum and learning demands, more schools and academic institutions are looking to collaborate with these edtech businesses. For edtech to achieve meaningful levels of user engagement, customer success is essential. Intended to ensure customer success initiatives it is suggested that expectations must be set for students, teachers, and parents to attain their intended goals in online learning. According to the survey, edtech consumer success requires a long-term plan. It passes through three stages of life (Niyathi Rao 2020).

**Consumer Retention:** Retention is a crucial concept that directly affects customer lifetime value and business profitability (Blattberg et al., 2001; Reinartz et al., 2005). It is the outcome of two main factors. The first is goal attainment: Businesses benefit from customer retention when customers believe their goals have been met (Degbey, 2015; Hennig-Thurau and Klee, 1997). According to Kivetz et al. (2006), client retention depends on how far away the customer started from the goal and how much progress they felt they had made. Customers invest more financial and non-financial resources in the company as they approach near to receiving a reward, which boosts retention and subsequent CE behaviour (Kivetz et al., 2006). These findings have been confirmed in settings that require paid membership, such museums and educational websites (Bhattacharya, 1998). Goal completion is also identified as a strong predictor of staying intentions by Temerak and El-Manstrly (2019). Client happiness is the second factor in customer retention. This relationship between satisfaction and retention is supported conceptually and empirically in prior studies (Baumann et al., 2012; Jones et al., 2000; Shankar et al., 2003). Customer satisfaction influences whether customers stick with the company and repurchase its goods and services (Anderson and Sullivan, 1993; Calder et al., 2013). Customers utilize customer satisfaction as a fundamental criterion when comparing different choices. Keeping clients happy is essential (Petrzellis et al., 2006).

**Consumer Involvement:** The marketing trends (Laurent, G., & Kapferer, J. N., 1985) and methods employed by ed-tech businesses must be advantageous. According to the paper, the digitalization of education has significantly advanced during the last several years. The overall importance of technology has steadily increased, from the introduction of online classes and assignments to problem-solving sessions via video conferencing. The article has pointed out the qualitative and timely services the Ed-tech industries have provided should be appreciated. It has mentioned the significance of social media with reference to connecting with target customers by using platforms like YouTube, Twitter, Instagram, Facebook is a crucial step for maintaining the user engagement and customer involvement with the company's products. It has also mentioned that Customer satisfaction can be measured with the help of AI-Powered mechanisms before the decision-makers. AI is going to be the next transformational tool that would be used for up-liftment of Ed-tech services making it more complex at the same time easier and user friendly. Edtech companies to adopt effective marketing strategies and trends and to incorporate the "consumer connect" (Michaelidou, N., & Dibb, S, 2008) function. Businesses must spread the industry's actual message, which is to support universal access to education and knowledge.

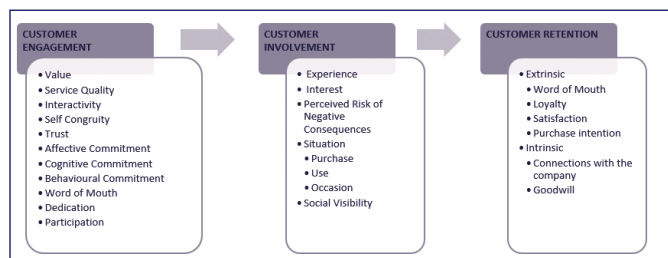
**Consumer Engagement:** As a result of the widespread usage of the word "engagement" in the fields of marketing, organizational behavior, psychology, and communication, several conceptualizations (Achterberg et al., 2003; Hollebeek, 2011; Saks, 2006) and interpretations (London et al., 2007) have been developed. Researchers in communication, for

instance, frequently concentrate on media engagement, which is described as the consumer's psychological experience when consuming media and produces a sense of closeness with the media (Calder and Malthouse, 2008). Instead, according to Higgins and Scholer (2009), engagement is a psychological state that results from a driving urge to cause or prevent something from happening (Higgins, 2006). While some academics describe CE as a set of actions, others see it as a psychological process. As an illustration, Brodie et al. (2011, p. 260) discuss the "psychological state that results from collaborative, co-creative encounters with a focus agent and object in a relationship of concentrated service. CE is viewed by Bowden (2009) as a psychological technique that deals with how consumer loyalty develops and endures.

## METHODOLOGY

The research problem has been identified with the questions regarding the application's operations, customer's retention and their involvement in the company's activities. This research aims in analyzing the customer's engagement and involvement in the activities of the app and understanding the level of their retention rate and design strategies for their commitment as well as engagement. In order to conduct a comprehensive analysis, theoretical and empirical studies have been carried out. For this a general variable of customer retention has been considered and further it has been classified into two sub categories. One is Customer involvement and the other one is customer engagement. The conceptual model that has been proposed in the study along with the variables are displayed in fig 3.1.

**Fig 3.1 :The flowchart to understand the customer retention through**



## Customer Engagement and Customer Involvement

The variables have been taken based on the studies and research materials that has been thoroughly studied and proved by renowned research scholars and professors in understanding the customer related concepts like customer involvement, customer engagement and customer retention. To understand the level of involvement of customers, variables like Experience, Interest, Perceived Risk of Negative Consequences, Situation (Purchase, Use and Occasion), Social Visibility are taken into account. To know how much and in what way does the company engages its customers that might lead to longer period for retaining customers. The variables considered for studying customer engagement are Value,

Service Quality, Interactivity, Self Congruity, Trust, Affective Commitment, Cognitive Commitment, Behavioral



Commitment, Word of Mouth, Dedication and Participation has been taken into consideration to conduct the study. To keenly observe the customer retention level, the company values have been categorized into two. They are Intrinsic and extrinsic value. The intrinsic value is to be sub categorized into connections with the company and goodwill. For extrinsic value the variables which are considered are Word of Mouth, Loyalty, Satisfaction and Purchase intention.

### CONFIRMATORY FACTOR ANALYSIS USING AMOS

Using AMOS, a confirmatory factor analysis was carried out. Factor analysis was used to extract the majority of underlying variables, also known as factors, from a huge number of variables. It is helpful to use confirmatory factor analysis to look at the variability of the observed variables and to extract variability from the items and load it into a common factor. The Confirmatory Factor Analysis Using Amos is shown in fig3.2

Fig. 3.2 Confirmatory Factor Analysis Using Amos

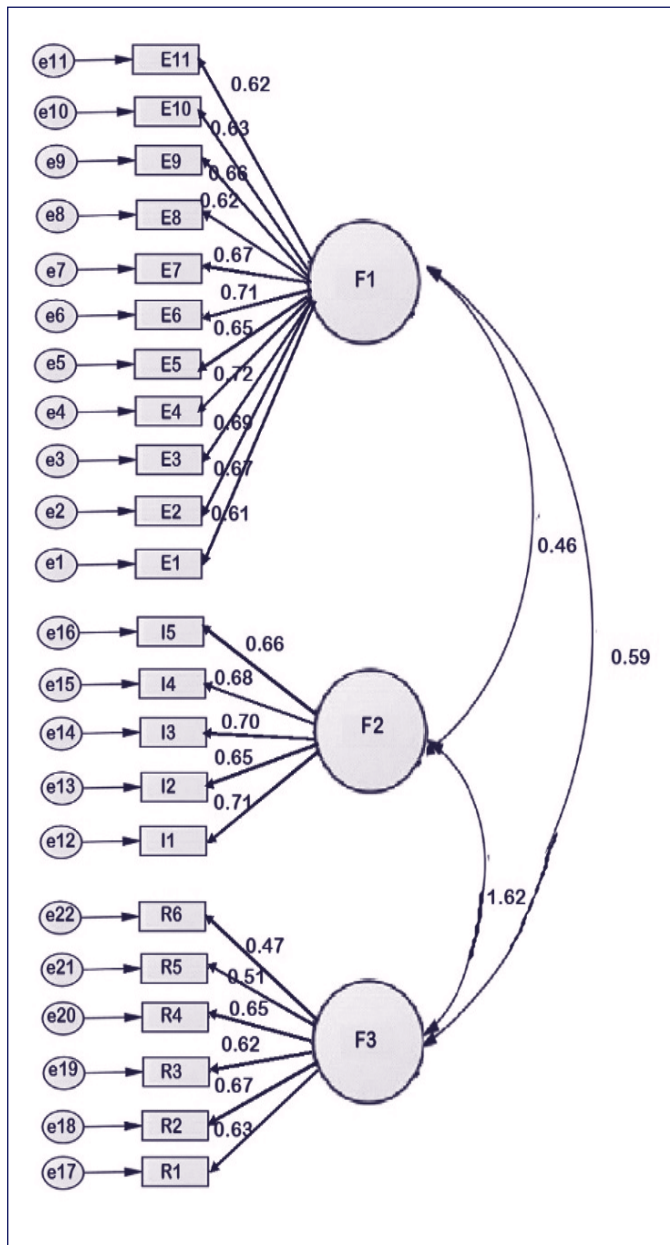


Table 3.2 Standardized Regression Weights

Latent Variable	Item Label	Item Description	Standardized Factor Loading
Customer Engagement	E1	Value	0.61
	E2	Service Quality	0.67
	E3	Interactivity	0.69
	E4	Self Congruity	0.72
	E5	Trust	0.65
Customer Involvement	E6	Affective Commitment	0.71
	E7	Cognitive Commitment	0.67
	E8	Behavioural Commitment	0.62
	E9	Word of Mouth	0.66
	E10	Dedication	0.63
	E11	Participation	0.62
Customer Retention	I1	Experience	0.71
	I2	Interest	0.65
	I3	Perceived Risk	0.70
	I4	Situation	0.68
	I5	Social Visibility	0.66
	R1	Word of Mouth	0.63
Customer Retention	R2	Loyalty	0.97
	R3	Satisfaction	0.62
	R4	Purchase intention	0.65
	R5	Connections with the company	0.51
	R6	Goodwill	0.47

The aforementioned table 3.2 displays the standardized factor loading for every item as well as the relationships between various things and the extract construct. Each item's factor loading shows a moderate to solid relationship with the underlying concept.

Table 3.3: SEM results indicating reasonably good model fit

Independent Variable	→	Dependent Variable	Estimate,β	P
Value	→	Customer Engagement	0.440	.01
Service Quality	→	Customer Engagement	0.179	.05
Interactivity	→	Customer Engagement	0.327	.001
Self Congruity	→	Customer Engagement	0.357	.001
Trust	→	Customer Engagement	0.352	.001
Affective Commitment	→	Customer Engagement	0.074	NS
Cognitive Commitment	→	Customer Engagement	0.216	NS
Behavioural Commitment	→	Customer Engagement	0.160	NS
Word of Mouth	→	Customer Engagement	-0.036	NS

Dedication	→	Customer Engagement	0.719	.001
Participation	→	Customer Engagement	0.144	.05
Experience	→	Customer Involvement	-0.125	NS
Interest	→	Customer Involvement	0.243	.05
Perceived Risk	→	Customer Involvement	0.077	NS
Situation	→	Customer Involvement	0.315	.001
Social Visibility	→	Customer Involvement	0.368	.001
Word of Mouth	→	Customer Retention	0.412	.01
Loyalty	→	Customer Retention	0.257	.05
Satisfaction	→	Customer Retention	-0.045	NS
Purchase intention	→	Customer Retention	-0.176	NS
Connections with the company	→	Customer Retention	0.155	.05

Goodwill	→	Customer Retention	0.176	.05
CE → CI → CR		Model Fit	0.243	.05

First, we examined the variables to find the relation with customer engagement. Results suggest that value ( $\beta = .420$ ;  $p < .05$ ), service quality ( $\beta = .199$ ;  $p < .05$ ), interactivity ( $\beta = .327$ ;  $p < .05$ ), self congruity ( $\beta = .357$ ;  $p < .05$ ), trust ( $\beta = .352$ ;  $p < .05$ ), dedication ( $\beta = .179$ ;  $p < .05$ ), participation ( $\beta = .179$ ;  $p < .05$ ) positively and significantly impact consumer engagement.

Next, we examined the variables to find the relation with customer involvement. Results suggest that Interest ( $\beta = .412$ ;  $p < .05$ ), situation ( $\beta = .257$ ;  $p < .05$ ) and social visibility ( $\beta = .368$ ;  $p < .05$ ) positively and significantly impact consumer involvement.

Third, we examined the variables to find the relation with customer retention. Results suggest that Word of Mouth ( $\beta = .412$ ;  $p < .05$ ), loyalty ( $\beta = .199$ ;  $p < .05$ ), connectivity with the company ( $\beta = .155$ ;  $p < .05$ ) and goodwill ( $\beta = .176$ ;  $p < .05$ ) positively and significantly impact consumer retention.

**Table 2: Correlation Matrix for Consumer Engagement**

Constructs	Value	Service Quality	Interactivity	Self Congruity	Trust	Affective Commitment	Cognitive Commitment	Behavioural Commitment	Word of Mouth	Dedication	Participation
Value	1										
Service Quality	0.735	1									
Interactivity	0.536	0.486	1								
Self Congruity	0.323	0.312	0.263	1							
Trust	0.530	0.635	0.097	0.682	1						
Affective Commitment	0.443	0.112	0.375	0.215	0.603	1					
Cognitive Commitment	0.578	0.135	0.328	0.314	0.108	0.568	1				
Behavioural Commitment	0.478	0.167	0.402	0.112	0.125	0.325	0.243	1			
Word of Mouth	0.314	0.564	0.312	0.216	0.169	0.251	0.001	0.325	1		
Dedication	0.237	0.421	0.203	0.513	0.321	0.211	0.545	0.410	0.167	1	
Participation	0.412	0.324	0.215	0.265	0.126	0.104	0.412	0.169	0.564	0.535	1

The variables in the customer engagement are found to be correlated with each other ranging from 0.001 to 0.735. This shows that all the variables are interlinked and related to each other and also contribute to each other's identity.

**Table 3: Correlation Matrix for Consumer Involvement**

Constructs	Experience	Interest	Perceived Risk	Situation	Social Visibility
Experience	1				
Interest	0.135	1			
Perceived Risk	0.436	0.445	1		
Situation	0.368	0.333	0.271	1	
Social Visibility	0.153	0.536	0.187	0.542	1

The variables in the customer involvement are found to be correlated with each other ranging from 0.135 to 0.542. This

shows that all the variables are interlinked and related to each other and also contribute to each other's identity.

**Table 4: Correlation Matrix for Consumer Retention**

Constructs	Word of Mouth	Loyalty	Satisfaction	Purchase intention	Connections with the company	Goodwill
Word of Mouth	1					
Loyalty	0.935	1				
Satisfaction	0.566	0.586	1			
Purchase intention	0.233	0.412	0.763	1		
Connections with the company	0.130	0.295	0.397	0.282	1	
Goodwill	0.473	0.512	0.475	0.415	0.613	1

The variables in the customer retention are found to be correlated with each other ranging from 0.130 to 0.935. This shows that all the variables are interlinked and related to each other and also contribute to each other's identity.

## RESULTS

Ekalavya is striving to solve problems of its customers by bringing in new ideas and also by offering its services at the lowest price possible. It is found that Ekalavya has helped its customers solving one of their major issues that has got majority of responses i.e., interaction with parents. It has made it easy for its clients in solving problems like conducting classes virtually, offering a structured systematic school management system, providing instant communication infrastructure, bridging the gap of maintaining and tracking student information as they provide readymade tools for it. Speaking about the issue resolution, majority of the respondents responded positively but still there has been a neutrality in their responses while being dig deeper. This shows that there is still a room for improvement in this space. About communicating the changes or updating occurred to customers by the team this needs to be improved as it is observed that 30 percent of the respondents have stayed either neutral or opted for almost never while asked. It is also observed that there are issues with the operations of the app. The respondents complained about sudden issues popping up while using some of the app's features. The adaptation rate of the app by the chosen respondents proved to be at a maximum range of 2-3 weeks to understand the app, its functions etc.

### FINDING OUT THE LEVEL OF CUSTOMER ENGAGEMENT

Though Ekalavya is striving to provide quality services related to Ed-tech for lowest prices possible, it should consider advertising on different platforms. This is essential for any business as it would help in creating customer traffic. Regarding inquiry answering, 80 percent expressed their satisfaction with the response of customer service team while interaction between them happened. But 20 percent still were not satisfied which shows there is a need of improvement in this space. It is found that the customers are able to understand the difference among the Ed-tech apps along with Ekalavya.

This shows that it does have a competitive edge of uniqueness with its competitors. There are customers who have completed an year and above with Ekalavya being their trusted customers whereas the incoming of new customers is at its lowest. There were not many customers who are new which says that there is an issue with accumulation of new customers. It is seen that before using Ekalavya, the schools which are now customers, they used to operate on either Zoom or Google meet at the time of Pandemic. While asked about their participation in the company's meetings, majority of the respondents are willing to take active part in it.

### UNDERSTANDING SIGNIFICANCE CUSTOMER INVOLVEMENT AND CUSTOMER ENGAGEMENT IN STUDYING CUSTOMER RETENTION

During Pandemic, Ekalavya has solved and showed tremendous support for schools which run in low budget in their initial stage of operations in Andhra Pradesh and Telangana. Ekalavya has been voted as an Easy-to-use enabled app with user-friendly operations by the respondents in the study. While asked about which part of the app they would want to improve, majority of the respondents voted to improve interaction with customer service team. The other options like problem solving and complaint resolution, responding to demands have also got mixed responses. This shows that these areas have to be focused by the company.

### FROM THE INTERVIEWS AND DISCUSSIONS WITH EKALAVYA'S EMPLOYEES

While interviewing the employees, it is observed that there is a shift from Ekalavya to other apps. When the reasons asked according to employee point of view attracting new customers and communicating with them. There are 50 percent of full time customers, 42.9 percent in internship and 7.1 percent as part-timers. According to the employees of the company, they think that product's features are the most fascinating. The other likeable one by customers which is why they like to do business with Ekalavya is easy communication. They can reach out to the team whenever they face any issue or have a demand to be granted. They think Ekalavya is efficient in solving problems faced by customers. But above all these positive points, the

employees have expressed their concern regarding the delay of operations that which is not liked by the customers. Also the product quality too has been addressed as there is a need for lot of improvement by the customer service team. They think that Ekalavya's competitors are successful in maintaining customers by communicating and interacting with them. It is also observed that the customers or the leads are not ready to listen to the executives which is why has been a difficult job for employees who interact with leads directly to turn them to customers and bring in new customer base. Make the preview of available or offering courses in the official website of Ekalavya be accessible to the leads that would help them in decision making process of whether to take the app or not.

## DISCUSSIONS

Speaking out the situation that is being faced by Ekalavya learning app, there are few recommendations to be suggested which being applied would help in coping up with the situation. Ekalavya needs to create a community which would help in developing rapport with their customers and users to retain them for a longer period of time. It is essential to review the operations in this space and the attitude they have towards it, realign the process and build a strong procedure for customer involvement. There are various ways to make customers stay for a long period by conducting relevant events, competitions and levels to segregate them according to their performance and usage of app in their school daily operations. The company has to look into human resources department to keenly observe the hiring and training of the right candidates in business development and customer executive departments as these two are the direct connect point with customers and leads. Partnering with the customers would help the company to indirect advertising of their product which they are offering to their target segment. Interaction with customers and users is essential as this would lead to long term bonding with the company and build a trust-able relationship with customers. It is essential for the company to look into digital marketing that would help in connecting with leads and prospects and create traffic for the other social media platforms of the company.

## CONCLUSION

Online education is a growing industry. The space in which Ekalavya is operating has a vast area to expand its opportunities as well as operations. It is also essential to follow and keep an eye on the future perspectives and current trends in the industry. If not, it will be huge problem for companies. The best example is Nokia which hasn't had follow up with those times market trends which led it to loss its place in the business world. Hence, it is essential for Ekalavya to follow up recent trends and keep a track of it and work accordingly. The world of Ed-tech will be at uncertain times as in a country like India, people would give more preference to physical classes than virtual. So the company has to find out and explore new ways to expand their business operations not depending only on classes and content offerings. Do research on what can be the possible opportunities that would help the app to accelerate its opportunities and help in up-scaling its performance and gain desirable market share has to be on the top priorities of the

management team. A society where education is worshipped as Goddess Saraswathi, looks up for cheapest and qualitative education provider or institutions. It is the responsibility of ed-tech companies to follow that path as this industry's main purpose itself is to provide qualitative and comfortable education with affordable price.

## REFERENCES

1. Anderson, E.W. and Sullivan, M.W. (1993), "The antecedents and consequences of customer satisfaction for firms", *Marketing Science*, Vol. 12 No. 2, pp. 125-143.
2. Baumann, C., Elliott, G. and Burton, S. (2012), "Modeling customer satisfaction and loyalty: survey data versus data mining", *Journal of Services Marketing*, Vol. 26 No. 3, pp. 148-157
3. Bhattacharya, C.B. (1998), "When customers are members: customer retention in paid membership contexts", *Journal of the Academy of Marketing Science*, Vol. 26 No. 1, pp. 31-44.
4. Blattberg, R.C., Getz, G. and Thomas, J.S. (2001), *Customer Equity: Building and Managing Relationships as Valuable Assets*, Harvard Business School Press, Boston, Massachusetts
5. Bowden, J.L.H. (2009), "The process of customer engagement: a conceptual framework", *Journal of Marketing Theory and Practice*, Vol. 17 No. 1, pp. 63-74.
6. Brodie, R.J., Hollebeek, L.D., Juric, B. and Ilic, A. (2011), "Customer engagement: conceptual domain, fundamental propositions, and implications for research", *Journal of Service Research*, Vol. 14 No. 3, pp. 252-271.
7. Calder, B.J., Isaac, M.S. and Malthouse, E.C. (2013), *Taking the Consumer's Point of View: Engagement or Satisfaction?*, Marketing Science Institute, Cambridge, California
8. Calder, B.J., Isaac, M.S. and Malthouse, E.C. (2013), *Taking the Consumer's Point of View: Engagement or Satisfaction?*, Marketing Science Institute, Cambridge, California.
9. Degbey, W.Y. (2015), "Customer retention: a source of value for serial acquirers", *Industrial Marketing Management*, Vol. 46, pp. 11-23.
10. Fuhrman, S. H. (2017). *Eight steps to improve the ed-tech industry*. Education Week.
11. Hennig-Thurau, T. and Klee, A. (1997), "The impact of customer satisfaction and relationship quality on customer retention: a critical reassessment and model development", *Psychology and Marketing*, Vol. 14 No. 8, pp. 737-764.
12. Higgins, E.T. (2006), "Value from hedonic experience and engagement", *Psychological Review*, Vol. 113 No. 3, pp. 439-460
13. Higgins, E.T. and Scholer, A.A. (2009), "Engaging the consumer: the science and art of the value creation process", *Journal of Consumer Psychology*, Vol. 19 No. 2, pp. 100-114.
14. Hollebeek, L.D. (2011), "Demystifying customer brand



- engagement: exploring the loyalty nexus", *Journal of Marketing Management*, Vol. 27 Nos 7/8, pp. 785-807
15. Jones, M.A., Mothersbaugh, D.L. and Beatty, S.E. (2000), "Switching barriers and repurchase intentions in services", *Journal of Retailing*, Vol. 76 No. 2, pp. 259-274.
  16. Keser, H., &Semerci, A. (2019). Technology trends, Education 4.0 and beyond. *Contemporary Educational Researches Journal*, 9(3), 39-49.
  17. Kivetz, R., Urminsky, O. and Zheng, Y. (2006), "The goal-gradient hypothesis resurrected: purchase acceleration, illusionary goal progress, and customer retention", *Journal of Marketing Research*, Vol. 43 No. 1, pp. 39-58.
  18. Laurent, G., &Kapferer, J. N. (1985). Measuring consumer involvement profiles. *Journal of marketing research*, 22(1), 41-53.
  19. London, B., Geraldine, D. and Shauna, M. (2007), "Psychological theories of educational engagement: a multi-method approach to studying individual
  20. Michaelidou, N., &Dibb, S. (2008). Consumer involvement: a new perspective. *The Marketing Review*, 8(1), 83-99.
  21. Peterson, D. (2016). Edtech and student privacy: California law as a model. *Berkeley Tech. LJ*, 31, 961.
  22. Petruzzellis, L., D'Uggento, A.M. and Romanazzi, S. (2006), "Student satisfaction and quality of service in Italian universities", *Managing Service Quality: An International Journal*, Vol. 16 No. 4, pp. 349-364.
  23. Ramiel, H. (2019). User or student: constructing the subject in Edtech incubator. *Discourse: Studies in the Cultural Politics of Education*, 40(4), 487-499.
  24. Ramiel, H. (2021). Edtech disruption logic and policy work: the case of an Israeli edtech unit. *Learning, Media and Technology*, 46(1), 20-32.
  25. Regan, P. M., & Jesse, J. (2019). Ethical challenges of edtech, big data and personalized learning: Twenty-first century student sorting and tracking. *Ethics and Information Technology*, 21(3), 167-179.
  26. Reinartz, W., Thomas, J.S. and Kumar, V. (2005), "Balancing acquisition and retention resources to maximize customer profitability", *Journal of Marketing*, Vol. 69 No. 1, pp. 63-79.
  27. Renz, A., Krishnaraja, S., &Schildhauer, T. (2020, June). A new dynamic for EdTech in the age of pandemics. In *Conference Paper presented at ISPIM innovation conference virtual*.
  28. Saks, A.M. (2006), "Antecedents and consequences of employee engagement", *Journal of Managerial Psychology*, Vol. 21 No. 7, pp. 600-619.
  29. Selwyn, N., Hillman, T., Eynon, R., Ferreira, G., Knox, J., Macgilchrist, F., & Sancho-Gil, J. M. (2020). What's next for Ed-Tech? Critical hopes and concerns for the 2020s. *Learning, Media and Technology*, 45(1), 1-6.
  30. Shankar, V., Smith, A.K. and Rangaswamy, A. (2003), "Customer satisfaction and loyalty in online and offline environments", *International Journal of Research in Marketing*, Vol. 20 No. 2, pp. 153-175
  31. Sharma, H. (2022). Mapping the Global EdTech Revolution during the pandemic: From 'determinism' to 'solutionism'. *Re-imagining Educational Futures in Developing Countries*, 119-137.
  32. Temerak, M.S. and El-Manstrly, D. (2019), "The influence of goal attainment and switching costs on customers' staying intentions", *Journal of Retailing and Consumer Services*, Vol. 51, pp. 51-61
  33. Thakur, R. (2016). Understanding customer engagement and loyalty: a case of mobile devices for shopping. *Journal of Retailing and consumer Services*, 32, 151-163.
  34. Verma, P., &Manicka, M. M. (2021). Comparison of EdTech Industry in the United States of America, India and Kenya. *SPAST Abstracts*, 1(01).
  35. Williamson, B. (2021). Meta-edtech. *Learning, Media and Technology*, 46(1), 1-5.
  36. Williamson, B. (2022). Big EdTech. *Learning, Media and Technology*, 47(2), 157-162.

## AUTHORS

**Bhairi Swarna Lakshmi**, Student, Department of management studies, Acharya Bangalore B School, Andhrahalli, Bengaluru, Karnataka  
Email: swarnabhairy184@gmail.com

**Dr. Ajitha Savarimuthu**, Associate Professor, Department of management studies, Acharya Bangalore B School, Andhrahalli, Bengaluru, Karnataka  
Email: dr.ajitha@abbs.edu.in

**Dr. C. Sengottuvelu**, Professor and Head-Research, Acharya Bangalore B-School, Bengaluru, Karnataka  
Email : sengottuvelu138@gmail.com