Topic :- Personalization of Digital Marketing in Ed tech Industry : A case study on customer Perspective

Rahul Kumar Singh, Akshay Tyagi, Shivam Singh Bhadouria, Anup Sharma

MBA, Student, Student , Professor

Lovely Professional University

Abstract:

This research aims at unraveling the intricacies of personalized digital marketing in educational technology (EdTech). It pays special attention to learner behavior, adoption of digital technologies, delivery of content, strategies for engaging learners, ethical issues and finally how improvement can be made. Through a case study approach involving students from diverse backgrounds and regions in India, the study examines their understandings and reactions towards digital advertising within EdTech. A look into student preferences as well as expectations about tailored Internet advertising and their expectation from ed tech found support through open-ended questionnaires. The main objective is to give practical recommendations and a model to Ed Tech on how they can refine their online marketing strategies and content with a focus on personalized digital marketing strategies that underscore privacy and transparency. In essence, by providing insights into meeting needs of current generation students this research contributes to the ongoing debate about personalized digital marketing in EdTech.

Introduction:

Digital technology applications have caused a shift in how educational content in the modern education era is presented and received. In this context, the emerging trend of edtech or education technology necessitates personalized online advertising as a critical enabler to elevate user experience, drive students' motivation, and lead to a positive learning result. The present research paper takes a deep dive into complex facets associated with personalized digital marketing in the EdTech industry. Therefore, it provides a case study report on Consumer preferences and behaviours with the Educational Institute scenario.

The education world has been turned on its head by technology innovation and shifting consumer tastes, converging to an astonishing level of personalized learning possibility never seen before. The foundation of this revolution is understanding student preferences, something you need to know to develop customized digital marketing strategies that work. Input from personal preference, Behavior patterns, and learning histories enables schools to pin down audience segment more effectively.

Thus, a claim is made by Garvanova that 'academic institutions that do not understand students' preferences and behaviours when they come to school are not only seen to lack credibility but also diminish the essence of being predictable'. At the same time, the other side of this issue presented in the article of Al-Abdullah and Hassan let the authors substantiate their claim that "There is a need to assess student behaviours as well as sociocultural values while implementing EdTech projects" . From the perspective of their study conducted in India, it became obvious that the sociocultural issues of the rural area hinder the teachers' work due to the infrastructure problems and limited sociocultural realization.

On the other hand, EdTech's tailoring digital marketing strategies should include digital tools on different levels. For example, to enhance the quality of marketing solutions related to special consumers' demands, schools can employ several digital sources: social media platforms, big data analytics companies, artificial intelligence or machine learning technology. A particular example described by Kumar et al. is that the AI "can also enable personalized learning which is impossible humanly, for example, creating educational services for one person at a time

In the TechEd market, which is high in suggestions and content distribution programs that personalize digital marketing plans, you must agree. Education institutions can be more confident that the delivery of content that is a good fit for learner styles and individual interests can lead to greater user engagement and, thus, offer the chance of a more personal learning experience. El-Gayar, Moran & Hawkes (2011) turn their spotlight onto college learners' perception of era technology in education. This research highlights the pivotal role of shaping students' view and accepting technological tools positively in the study circles. Agrawal et al. (2022) conducted a randomized trial to see whether personalized referrals would increase children interactions, in an educational app meant for kids. They found, in fact, there was an escalation in both usage of content and overall app use.

Not only this, in the realms of EdTech industry, where personalised digital marketing matters most, one must focus on engaging the target audience and keep them interested. Developing insightful and engaging learning activities facilitates the continuous active learning process which, in the end, can be said to achieve learning goals. The point of the "design road mapping" shaped by Krause, Beckman and Agogino (2018) is to occupy the position of designing 'user experience' instead of selling 'products.' In the study published in 2023, Pratama, Sampelolo, and Lura, address the question of how AI permeates the classroom and how the students see the technology's place in educational activities as well as its contribution to better learning in classroom. The study by Kamat and Nasnodkar (2019) highlight how EdTech in rural schools requires engagement, interaction, and involvement of all participants in digital learning settings.

EdTech businesses need to conduct highly customized digital marketing efforts minding the ethics in light of the increasing consumer's savviness about digital marketing. Maintaining data security, making sure personal information is protected, and being open and honest are the fundamental cornerstones of building trust, and preserving ethical values. Their article, "Customized Learning: Implications of Privacy and Data Security in US Schools" (2019), focuses on that matter. It emphazises seriousness of students' privacy issue and data security. As per Kumar et al. (2019), the most significant role AI can play is one of offering personalised products and services without invading customers' privacy or their autonomy. According to the above-mentioned research article, Al-Abdullah and Hassan (2023) emphasize the necessity of addressing ethics concerns including data safety and privacy.

The distinctive trait of the EdTech business is that decision-making process is not a one-time deal, it proves to be a continuous evolution for achieving the desired goal. Through the establishment of assessment and improvement mechanisms on a running basis, colleges and universities may gain the position to always channel their marketing efforts exactly in such direction that meets the particular needs and tastes of their students. Agrawal et al., (2022) performed a randomized controlled study aiming at examining the influence of posts with personalized suggestion on the quality of children's academic application. This work demonstrates that recommendation algorithms developed based on specific user data are good for engagement of users. In their 2019 article, Kamat and Nasnodkar is now emphasized, the facotors that contribute to the impactful use of EdTech, were identified as the barriers and the facilitators which will lead to the continual upgrade of strategies to overcome implementation hurdles. They (2018, Kim and Beckman and Agogino) mentioned that the built-in iterative and economical testing are the top advantages of digital marketing strategies and also they affirmed that customer experience focus is vital for the digital marketing for the fast growth of a business.

Briefly stated, the research goal in this study is to analyze modes and reasons of customized digital marketing provision in the sector of EdTech. Considering client options, using digital technologies, efficiently distributing the content, motivation, addressing ethical questions, and seeing continual enhancements would be the keys to success in educational marketing and the learners' outcomes. Case study technique was the research method used in this research to exemplify students from different parts of India who are enrolled in the Educational Institutes. It points out those steps already being taken toward better implementation of digital marketing in the institutions of learning and further explores strategies for survival of this continuously changing world.

In conjunction with the topic we have the factors that are must important for educational technology personalization and those are the following

Factors :
1. Understanding Learner Preferences and Behaviour
2. Utilization of Digital Technologies
3. Effective Content Delivery and Recommendations
4. Engagement and Interactivity
5. Ethical Considerations
6. Continuous Assessment and Improvement

Understanding Learner Preferences and Behaviour :

Underlining the student interest and wasted is paramount to the educational technology (EdTech), because it makes up for narrowed online marketing and hence increases the user engagement. This feature rather points out the importance of collecting and measuring of individual preferences, actions and cognitive processes in order to successfully personalize the information to suit all individual learners.

New research offers viewpoints that highlight the significance of grooming students' attitudes and habits in a multitude of situations. Reputation management and trust building were pointed to as important factors by Garvanova (2020) for academic institutions; specifically, she explained how the reputation can influence students' decisions about choosing their educational institutions. Considering that student preferences and habits form the basis of marketing efforts help educational institutions to reform their marketing tactics in order to adjust to the students' demands, bringing in new users and hence the success of the university.

Besides, Al-Abdullah and Hassan (2023) underlined the matter of accounting as well as students' social and cultural features in the Edtechnet development. They also signal the hurdles that might be accrued by rural academic institutions that are mostly considered because of cultural issues and inadequacies of the infrastructures; the researchers therefore advocate for increased community participation and collaboration as one of the ways these challenges can be overcome. Implication of the digital marketing tactics which are sensitive to the trends in learner behaviors and cultural differences brings about an opportunity for the educational institutions to respond to the divergent needs of the different learner groups, at the same time creating an avenue for all students to access educational resources.

As well, Kamat and Nasnodkar (2019) share advantages and difficulties in rural school involvement in developing countries with the use of modern technologies. Thus, research conducted by them in financial and community members' roles will eventually be able to solve adoption problems that emerge and to close the digital divide. Interaction throughout the stage of planning and carrying out of educational technology projects can create equitable education and at the same time, enhance the overall learning experience that are tailored according to student taste and conditions in these places.

In other words, it is a must to know student knowledge and behavior to deploy relevant and efficient digital marketing tools, which will surely strengthen students' ties to higher education. Institutes may eventually target the population of students, and by asking about their goals, needs, and lifestyle environments, they may improve the classroom atmosphere.

2. Utilization of Digital Technologies in Personalized Digital Marketing

The strategic implementation of digital tools as a support of the personalized digital marketing regime, which is a mix of digital platforms, will develop the educational technology (EdTech). One of the main points here is using new tech like social media, artificial intelligence (AI), machine learning, and big data analysis to carefully tune the strategies and provide a variety of choices to students.

The research suggests that AI-based approach has a pivotal role to play in shaping interacting marketing strategies in the Today's education sector. Kumar et al. (2019) stress AI's ability to provide students the services with material it adapts for personalization, hence so that it matches individual student choices and interests closely. Next, it is also true that this trend is in sync with the larger transformation of the economy operating on the information management-powered knowledge enterprise where firms use the consumer data to send personalised services and thus enhancing their competitive advantage.

AI and big data analysis is recommended by Boninger, Molnar, and Saldaña (2019) to understand how students gestures and liking (preference). As a result students that offer interesting and useful facts and show all stages of the study will be a powerful tool to learn and understand how students engage with studying materials and what learning styles are the best one.

Furthermore, the study conducted by Agrawal, Athey, Kanodia, and Palikot (2022) a prove the fact that unique personalized tips which are created by digital technology are already contributing a lot of beneficial outcomes. Their findings confirm the fact that pushing through this recommendation results in the overwhelming rise in user engagement and content consumption rates, which actually means that if they do something innovative in the area of EdTech environment, they can expect improvement in user interaction and engagement.

In brief, the whole processes through data-driven technologies like AI, machine learning and big data analytics serve as the base of creating the personalized digital marketing strategies in EdTech. Adopting these kinds of technologies makes the educational system able to collect the data that it needs, as well as tailor the curriculum and foster all round engagement. Consequently, the overall learning process is positively enhanced for the students.

3. Effective Content Delivery and Recommendations in Personalized Digital Marketing

In educational technology (EdTech), personalized digital marketing is essentially driven by enhanced content delivery, as well as by customized suggestions that essentially meet an individual learner's requirements. This method enhances user engagement especially in personified education that fits to each individual learning with regard to their preference and learning style, evoking personalization and customized learning content delivery.

Research results stressed the significance of the value proposition concept "content of excellence" and tailored internet marketing channel to reach the EdTech sector. Such as El-Gayar, Moran, and Hawkes (2011) who explores into attitude of college freshmen about of preparedness with tablet pc. Their studies point to the challenge of redesigning students' thinking in general and their perception on learning tools in particular in educational settings. Establishing the general interests and features of technology essential to students provides a basis for the educational institution to personalize the approach applied to delivery of content. The end intention is the lines of communication are opened up with increased acceptability of the use of technology in education.

Moreover, Agrawal, Athey, Kanodia and Palikot (2022) that conducted a parallel controlled trial to tested the effects of personalized content suggestions on active use by kids in a children's educational app. Their data indicate that by doing so, changes in both content consumed and overall engagement will be hugely dramatic. This draws people's attention to the necessity of providing the learners with what they actually need and what suits them most in their ways of learning, rather than other materials that doesn't fit them with their needs, which one of the best ways to increase engagement of users and the learning results.

Raspopovic, Cvetanovic, Medan and Ljubojevic (2017) also look into the possibility that combination of a SLE with e-learning system will eventually lead to successful outcome. Their research mastered that virtual education necessitates the practice of physical interaction and performance, and the major role of SLE in strengthening the relationship between students and teachers. Through merging social learning elements into digital learning systems, the educational institutions would in this case be in a position of realizing better learning content delivery alongside class suggestions as well as facilitating for collaborative learning experiences and deep involvement of learners.

After all, correctly chosen dispersal of information and propositions cannot be missing in a thoroughly customized strategy in the EdTech's digital market. Education could increase user involvement, make learning tailored to our preferences, and engender desirable learning outcomes by adjusting the flow of information to the specific parameters of different learners and using technologies such as recommendation algorithms and social learning environments.

4. Engagement and Interactivity in Personalized Digital Marketing

The successes of personalized digital marketing within the educational technology (EdTech) sector mainly rest on their powers of engagement and response. One of the key points towards our purpose is to provide entertaining and exercising teaching process as this leads to better student engagement and involvement, which will conclude positively on the learning outcomes.

The research results are indicative of the role that both interaction and interactivity are playing in precision marketing when it comes to EdTech. To illustrate, Kim, et al (2018) propose the concept of "design road mapping", which argues for the attractiveness of producing user experiences as opposed to just issuing with products. The findings revealed the need for

concentrating on the enhancement of customer experience development at learning institutions in terms of the quick pace nature technological advancement and diversifying consumer taste.

Through using the schemes that focus onto participation and cooperation education institutions may combine the integrated educational experiences that do attract students and successful results of learning process.

Likewise, Artificial Intelligence (AI) has the capacity, says Pratama, Sampelolo, and Dureruku, to change education. The are formed around the way the students perceive AI presence in the classroom. They realize that AI is able not only to improve learning but also to act as a tutor or absentees angel. One way of AI tools having a major impact on conventional learning is imparting of knowledge and interactivation. AI powered tools and platforms can learn, be immersive and engage more students by availing modern platforms, making learning more dynamic and enjoyable for the students.

Next Kamat and Nasnodkar (2019) pursue and examine the burdens and facilitators in rural school in poor countries while moving to EdTech adoption also. They revealed that community participation, awareness and groups, and professional development programs had a huge role in the adoption of education technology, thus tipping their hats at all level involved to make sure EdTech fully implemented. Educational institutions can improve learners' engagement and increase the need for interactivity through strategic partnerships with collaborative partners and by involving all stakeholders in marketing decision making processes irrespective of education goals, delivery or approach.

Communication and immersion in last tactics for digital marketing in EdTech industry is one of necessity. Instructional systems, to make learners excited if not fully, there may still be develop deep learning and provide positive learning outcomes by considering design models that attach their learners to learning environment if not interactive as well ensuring technologies like AI and digital social learning interventions are employed.

5. Ethical Considerations

Ethical dilemmas are extremely important in tailoring and the implementation of digital marketing strategies in the production of the technological sector of the EdTech industry. It is necessary to adhere to the principles of openness, fairness, and respect for the rights of individuals, which in turn is synonymous with developing trust along with upholding ethical standards.

Research findings furnish solid facts about the implications of ethical issues with targeted digital marketing in Education Technology (EdTech). The Boninger, Molnar, and Saldaña (2019) article deals with the case of the customized learning systems in American schools and the researchers raise questions to students' privacy and data security. Their results underpin the risks that result from the integration of those digital platforms and types of learning system that are owned by right holders into skill-centered education systems which might threaten student and instructor data safety. Educational institutions have a responsibility to obey the ethical standards that include this protection of individuals' privacy rights. This issue can be resolved with the use of legally-binding privacy rules and open data management.

Thus, the research of Kumar et al. (2019) aims to examine the AI use in personalized engagement marketing strategy. The AI utilization study that the firm carries out points out that it is important to employ AI responsibility to offer personalized experiences and services to clients keeping in mind the respect of clients' autonomy and privacy. As well as instilling trust, education institutions may encourage the use of tactics such as AI that encourage transparency and permission validation by enabling ethical marketing practices.

Moreover, Al-Abdullah and Hassan(2023) identify the key aspects that can make or break the implementation of an EdTech program in a rural school, among which they highlight data privacy and security as essential issues that need to be solved. Their studies prove what society needs to involve more infrastructure projects and laws that protect individuals on the issue of privacy as well as equality of the educational resources distribution. Educational institutions shall significantly reduce the chance of hazards and at the same time uphold ethical norms in this context by create ethical standards and guidelines in data collection, storage and using them.

Overall, ethical issues raise the greatest concerns when specific digital marketing strategies for edtech business are created as well as executed. Educational institutions may engender the sense of trust and cooperation with their stakeholders as well as technology use through proper and adequate regulation of transparency, fairness and respect to individual rights.

6. Continuous Assessment and Improvement

The sense of development and improvement is a crucial element for effective individualized digital marketing strategy in the field of educational technology (EdTech). Universities could making use of wide range of tools to refine the marketing process in order to establish a close connection and better negotiate the most accurate the demands of the target audiences.

Studies findings present us not only with specific assumptions about how tailored digital marketing and EdTech should be continuously examined and developed but also with suggestions and directions as for marketing digitalization. As an example, Agrawal, Athey, Kanodia and Palikot (2022) did a RCT in order to evaluate the impact of user engagement in personalized visual aids on a children's educational app. Data has shown that their audience reacted very positively to those personalized recommendations and spent much more time in the related areas and using the platform than those who did not receive the recommendations. Education institutes could improve the effectiveness of their marketing by constant study of user engagement metrics and changing the recipe of recommendation algorithms of personalized marketing strategy which would and in the end result in the level of user satisfaction.

The same focus is attained in the study made by Kamat and Nasnodkar during the year 2019 where the investigators asked about the challenges faced by these nations and made suggestions on choosing and implementing appropriate technology in the rural teaching areas. They show that persistent effort can change the technology to be able to function in situations where this may be not possible by working with local groups who are familiar with the surroundings and meet the changing requirements and constraints. Schools usually review and improve their technological programs to achieve the best outcomes, thus providing the strictest practicality when employing technology, in order to cope with limited resources.

In 2018, the trio of Kim, Beckman, and Agogino stated that customer experience is the key performance metric affecting how digital marketing is designed today. They brought to the table the need for formative assessments in order to design and test new products, as well as listening to their consumers to help sharpen their strategic approach. It refers to an inclusiveness and an improvement in the marketing techniques, which in turn, attracts more people, and hence, the sales increase. Through this kind of life-long learning that adds into the development, schools have the ability to catch up with the trend of the market and offer learners what they may prefer to have. This leads to high engagement and retention who are mostly learners.

In conclusion, constant assessment and progress are those key things; which improve the effectiveness of the tailored online marketing in EdTech. Employing data-driven insights and learning cycles, educational institutions can achieve an improvement to marketing activities, which can consequently lead to students' high level of engagement and joy.

Research Methodology:
Research Design:

While traditional marketing methods focused on mass- marketing to a broader audience, this study aims to investigate the current trends in using a qualitative research approach to study the impact personalized digital marketing methods have on the Behavior of consumers in the business of educational technology (EdTech). Qualitative research gives a complete understanding of people's attitudes and experiences, hence the emergence of nuanced stories.

Sampling Technique:

A hailed sample frame will be applied to select individuals who had used EdTech equipment prior. This strategy gives participants a chance to carry out practical demonstrations of the use of equitable digital marketing strategies in the EdTech sector. We would be narrowing the gap of sociocultural bias by inviting people from all over India for participation.

Population:

In our study, we shall mainly focus on the students, who were previously involved in educational technologies within confines of the academic facility. This category of students might be considered as the best group for obtaining the evidence of members contemplation digital marketing campaigns in EdTech

Sample Size:

The task requires doing non-structured brick lay-out of newcomers with 10 groups, ensuring enough number for data saturation and receiving different stands. Within each group, there will be individuals who can share their personal experiences with different platform and this may be extremely helpful to the content created which is equipped with tailored digital marketing.

Data Collection:

Interviews are semi-structured and the participants of the educational establishment will be an active data-gathering subject. The interviews will be done in English because it is the medium of communication among all the participants. Interview questions will be open-ended, allowing participants to in their own words talk about their feelings and moods of their time as volunteers. An interview in the form of a group has an advantage of satisfying the interest of audiovisual material on interaction or conversations which ensures qualitative data obtained will be enriched.

Data Analysis:

This research will be inductive and will involve thematic analysis, which will look into the common themes and patterns. Transcripts will be strictly monitored, the primary target areas being to find keywords and sentences that are connected with the six scoring criteria set out in the study. The analytical method would do this by conducting coding of the data, extracting the themes, and analysing the results, as a result of which we are expected to get greater insights into the impact of personalized digital marketing on education technologies.

Ethical Considerations:

Integrity, honesty, and compassion for the subjects will be the dominant compass values. Sign-in is a pre-requisite for all participants and it includes an informed consent before participating in the group interviews. All participants' confidentiality will be respected. Their personal details, including their names, will be anonymised in the report writing of any research outcome. Data security mechanisms will be implemented to guard the privacy of the information from the involved persons.

Possible Hurdles:

Several of the problems are that group discussions can be arranged and how to manage group dynamics during presentations, and of course distributing the opportunities appropriately between the group members. Overcoming these obstacles calls for such planning and facilitation strategies. The interview should be welcoming and non-threatening. Moreover, dissuading reflectivity will detect and lessen any biases in such processes as data collection and analysis.

Questionnaire:

Question Asked :

1. Tell me about your leaning style and preferences while studying .
2. How should an ed tech company utilize the digital technology for their platform?
3. Where do you learn new things from?
4. How should the ed tech deliver the effective content and recommendations for interacting more users ?
5. How can you be engaged and feel interactive while learning?
6. What do you feel about the personal data while using the ed tech platform ?
7. What should be done by ed tech company for the continuous assessment and improvement in their platform and digital marketing

Important Factors Identified from Survey and Questions asked :

Customer 1								
Factor	Question	Attribute	Liker Scale Rating					Agg.Score
			1	2	3	4	5	
Learning Style and Preference	how important is this atrtritute to you while learning and keeping your preferences ?	Reading				4		4
		Visual learning				4		
		Use of AI				4		
		Practice				4		
		MCQs				4		
Utilization of Digital Technologies	how important is this atrtritute to you while Utilization of Digital Technologies ?	AI algorithms				4		4.4
		AR/VR				4		
		Interactive content				4		
		Personalized learning paths					5	
		Voice commands					5	
Effective Content Delivery	how important is this atrtritute to you while looking for effective content delivery ?	Tailored recommendations				4		3.8
		Interactive content				4		
		Real-time feedback				4		
		AI-driven explanations			3			

| Factor	Question	Attribute						Average	
		Conducting surveys.			4				
Engagement and Interactivity	how important is this attribute to feel engaged and intractive ?	Group activities					5	3.6	
		Interactive videos.			4				
		VR simulations.			4				
		Quizzes	2						
		Polls		3					
Ethical Considerations	how important is this attritute while considering ethical considerations ?	Data privacy		3				3.4	
		Transparency		3					
		Informed consent			4				
		Policy updates			4				
		Security measures		3					
Continuous Assessment and Improvement	How important is this atrtritute for Continuous Assessment and Improvement?	User feedback			4			3.6	
		Ratings		3					
		Surveys			4				
		PPT ratings		3					
		Staff training			4				

Importance of the factors:

AS1 = average score of person 1

| Factor	a.s1	a.s2	a.s3	a.s4	a.s5	a.s6	Avg of Attributes
Understanding Learner Preferences and Behaviour	4	5	3	4	4.4	3.6	4.0
Utilization of Digital Technologies	4.4	4.8	4.4	3.6	4	4	4.2
Effective Content Delivery and Recommendations	3.8	3.6	3.6	4.4	4.4	4.4	4.0
Engagement and Interactivity	3.6	3.8	4.2	4.2	4.4	4.2	4.1
Ethical Considerations	3.4	4	3.6	4.4	4.8	4.8	4.2
Continuous Assessment and Improvement	3.6	4	3.8	4	4.6	4	4.0

These factors are identified by the qualitative survey conducted on an educational institute students and their factor of importance are said on the quantitative survey on the scale of 5 on each attributes identified.

Attribute liker scale data is from 1-5 and the result obtained by the survey are taken as total points attained by all Attributes /Maximum points which can be achieved.
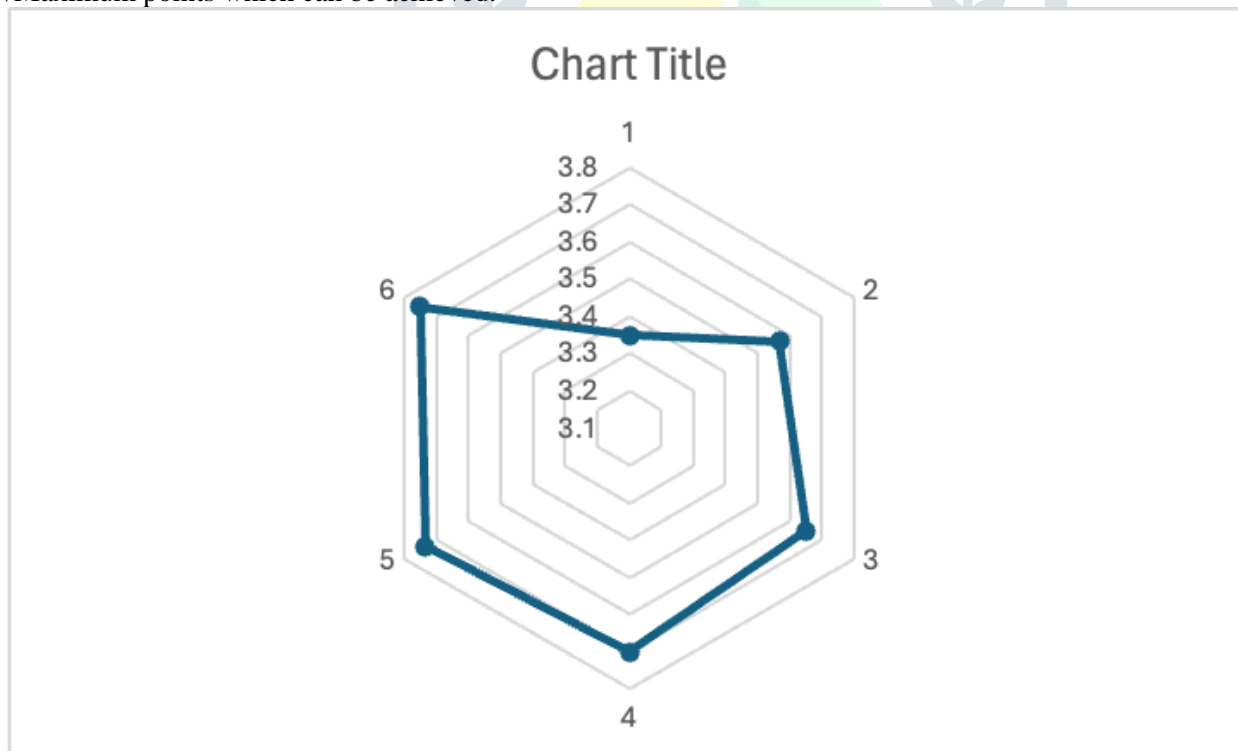
ABC Company model:

SAS1 = Ssample average score of person 1 from ABC							
Factor	S.a.s1	S.a.s2	S.a.s3	s.a.s4	S.a.s5	s.a.s6	Avg of Attributes
Understanding Learner Preferences and Behaviour	3.4	2.8	3	4	3.3	3.6	3.4
Utilization of Digital Technologies	2.6	4.8	3.4	3.6	4	3	3.6
Effective Content Delivery and Recommendations	3.4	3.1	3.6	4	3.4	4.4	3.7
Engagement and Interactivity	3.4	3.8	3.4	4.2	4.4	3	3.7
Ethical Considerations	2.8	3	2.6	4.4	4.8	4.8	3.7
Continuous Assessment and Improvement	3	4	3.8	4	4.6	3.1	3.8

Avg of Attributes for ABC
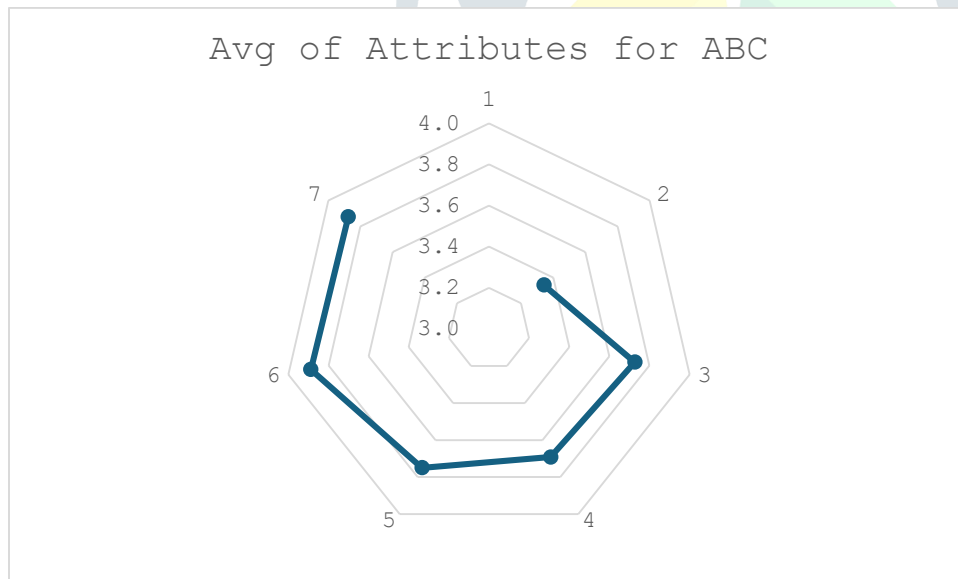
Comparing with Model :

To follow this approach, a business can use the factor significance model as a reference model and compare itself to other benchmark industries, as shown in the example model radar chart.
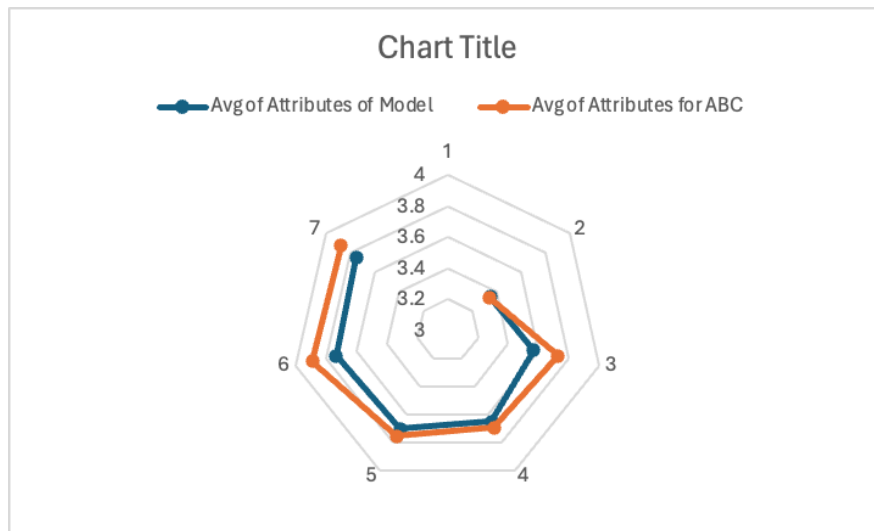
Further Scope:

This research could additionally segue into investigating language competence roles on student answers in order to harvest language barrier implications as well as enhance inclusion. One technique might be to have a chat with students in their native languages so you'll have a conversational session where youthful and new ideas can be got.. Besides, studying comparative cross-cultural pronouncements in countries other than English speaking nations may arrive at common root problems and discrepant difficulties. Arranging for feedback or reflections sessions prosecuted to participants who can share their views on the procedures there assist in drawing out the problem areas and give advice on the right courses of action. While researcher trainings and support, including communication skills, interact skills and other related skills, should equally be given a priority as the latter is the core of the volunteer interaction with the assorted participants. Longitudinal studies are a good option, which enable continuous examination of language capacities and academic performance depending on time, and make it possible to design an effective language support system. As the final point, incorporating policies that encourage the university to embrace the participatory research methods within the structures of research institutions should be included in any future research efforts.

The model is proposed through a set of nine quantitative surveys from nine groups, while their credibility can be upheld by subjecting them to the scrutiny of more subjects.

Survey of 5 students from this educational center is utilized to create a sample model, and a hypothetical reference model is used for improving of future models, which all are most better for being followed by industrial enterprises by increasing the number of persons in the survey.

Conclusion:

Finally, this scientific work related how customization takes place in the digital marketing for an educe company through six major lenses considered in recent papers. However, meeting and interacting with students from different countries and posing the 'why' question helped in gaining the deep insights into their preferred learning styles, choices, and expectations from a learning environment model. The evidence calls for use of a well-tailored approach in developing digital experiences for the particular needs and applying tools like AI and VR to boost the engagement and effectiveness of people. Also the fact that data should be the sources for the execution and promoting the continuous improvement of satisfaction to the customers has been mentioned as a part of what should be done because this helps to create confidence and happiness of the customers. Besides that, this research focuses on the rigorous creation of various cognitive level delivery devices and interactivity in relation to students' interest. Focusing ahead, it is suggested that these teched companies make their operations more learners-customized and engaging with the help of the discovered variables in their marketing efforts and on the development of the learning platforms. The study has become additional content on customized digital marketing,

which specifically caters to educational technology stakeholders as they seek to meet their customer expectations through the creation of personalized products that are unique and fulfill their needs.

Reference:

1. Garvanova, M. (2020). The significance of reputation in choosing and recommendation a university. Test Engineering, March-April 2020, 8545-8553.

2. Andersson, C., Antelius, J., Månsson, J., & Sund, K. (2017). Technical efficiency and productivity for higher education institutions in Sweden. Scandinavian journal of educational research, 61(2), 205-223.

3. Dinc, E. (2017). Web-based education and accessibility. International Journal of Technology in Education and Science, 1(1), 29-35.

4. El-Gayar, O., Moran, M., & Hawkes, M. (2011). Students' acceptance of tablet PCs and implications for educational institutions. Journal of Educational Technology & Society, 14(2), 58-70.

5. Kim, E., Beckman, S. L., & Agogino, A. (2018). Design road mapping in an uncertain world: Implementing a customer-experience-focused strategy. California Management Review, 61(1), 43-70.

6. Kamat, Y., & Nasnodkar, S. (2019). A survey on the barriers and facilitators to edtech adoption in rural schools in developing countries. International Journal of Intelligent Automation and Computing, 2(1), 32-51.

7. Al-Abdullah, A., & Hassan, L. (2023). Factors determining the success and failure of EdTech initiatives in rural academic institutions. AI, IoT and the Fourth Industrial Revolution Review, 13(7), 47-60.

8. Raspopovic, M., Cvetanovic, S., Medan, I., & Ljubojevic, D. (2017). The Effects of Integrating Social Learning Environment with Online Learning. International Review of Research in Open and Distributed Learning, 18(1), 142–160.

9. Hong, Y., Li, X., Lin, Y., Xie, J., Yan, X., & Lin, Z. (2020). A comparative study of online education and traditional offline education during COVID-19. Journal Name, Volume(Issue), Page Range. [DOI]

10. Narsingoju, V. (2021). Comparative Study based on the Effectiveness of Online & Offline Learning Outcomes. Turkish Journal of Computer and Mathematics Education (TURCOMAT), 12(12), 3541-3544.

11. Agrawal, K., Athey, S., Kanodia, A., & Palikot, E. (2022). Personalized Recommendations in EdTech: Evidence from a Randomized Controlled Trial. arXiv preprint arXiv:2208.13940.

12. Boninger, F., Molnar, A., & Saldaña, C. M. (2019). Personalized Learning and the Digital Privatization of Curriculum and Teaching. National Education Policy Center.

13. China, D. R., Brentley, C., Thomas-Browne, C., Richey, J. E., Gul, A., Carvalho, P. F., ... & Koedinger, K. R. (2022, July). Educational Equity Through Combined Human-AI Personalization: A Propensity Matching Evaluation. In International Conference on Artificial Intelligence in Education (pp. 366-377). Cham: Springer International Publishing.

14. Pratama, M. P., Sampelolo, R., & Lura, H. (2023). Revolutionizing education: harnessing the power of artificial intelligence for personalized learning. Klasikal: Journal of Education, Language Teaching and Science, 5(2), 350-357.

15. Kumar, V., Rajan, B., Venkatesan, R., & Lecinski, J. (2019). Understanding the role of artificial intelligence in personalized engagement marketing. California Management Review, 61(4), 135-155.

16. McStay, A. (2020). Emotional AI and EdTech: serving the public good?. Learning, Media and Technology, 45(3), 270-283.

17. Agrawal, K., Athey, S., Kanodia, A., & Palikot, E. (2022). Personalized recommendations in EdTech: evidence from a randomized controlled trial. arXiv preprint arXiv:2208.13940.

18. Veleva, S. S., & Tsvetanova, A. I. (2020, September). Characteristics of the digital marketing advantages and disadvantages. In IOP Conference Series: Materials Science and Engineering (Vol. 940, No. 1, p. 012065). IOP Publishing.

19. Kusumawati, A. (2019). Impact of digital marketing on student decision-making process of higher education institution: A case of Indonesia. Journal of e-Learning and Higher Education, 2019(1), 1-11.

20. Sharma, J. (2020). Marketing Factors in Education Technology.

21. Serrano-Santoyo, A., & Cabrera-Flores, M. R. (2014). Channeling Digital Convergence in Education for Societal Benefit [Commentary]. IEEE Technology and Society Magazine, 33(4), 29-31.

22. Mishra, K. (2021). Fear of Missing out (FOMO) Guerrilla Marketing Strategy: A Case Study of Ed-tech Platform WhiteHat Jr.

23. Baltezarevic, V. (2023). The Role of Digital Marketing in The Education Sector.

24. Bessette, D., & Burton, S. (2014). Methods in digital marketing through social media technology to advertise higher education blended learning programs. In INTED2014 Proceedings (pp. 4479-4486). IATED.

25. Hamdani, N. A., Muladi, R., & Maulani, G. A. F. (2022, July). Digital Marketing Impact on Consumer Decision-Making Process. In 6th Global Conference on Business, Management, and Entrepreneurship (GCBME 2021) (pp. 153-158). Atlantis Press.

26. Chandra, S., Verma, S., Lim, W. M., Kumar, S., & Donthu, N. (2022). Personalization in personalized marketing: Trends and ways forward. Psychology & Marketing, 39(8), 1529-1562.

27. Smith, K. T. (2011). Digital marketing strategies that Millennials find appealing, motivating, or just annoying. Journal of Strategic marketing, 19(6), 489-499.

28. Nilsah, Cavdar, Aksoy., Ebru, T√°mer, Kabadayi., Cengiz, Yilmaz., Alev, Ko√ßak, Alan. (2021). A typology of personalisation practices in marketing in the digital age. Journal of Marketing Management, 37:1091-1122.

29. ZhaoBin, Li., Luna, Yee., Nathaniel, Sauerberg., Irene, Sakson., Joseph, Jay, Williams., Anna, N., Rafferty. (2020). Getting Too Personal(ized): The Importance of Feature Choice in Online Adaptive Algorithms

30. Leonard, Tetzlaff., Florian, Schmiedek., Florian, Schmiedek., Garvin, Brod., Garvin, Brod. (2021). Developing Personalized Education: A Dynamic Framework. Educational Psychology Review, doi: 10.1007/S10648-020-09570-W

31. (2022). Personalized Recommendations in EdTech: Evidence from a Randomized Controlled Trial. doi: 10.48550/arxiv.2208.13940

32. 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, 167-179.

33. Shustova, I., Polevaya, E., & Ivanov, A. (2023). The impact of Edtech: strengths and opportunities. In E3S Web of Conferences (Vol. 458, p. 06012). EDP Sciences.

34. Bhattacharya, L., Nandakumar, M., Dasgupta, C., & Murthy, S. (2023). Adoption of quality edtech products in India: a case study of government implementation towards a sustainable edtech ecosystem.

35. Oré Calixto, S. (2021). The effect of digital marketing on customer relationship management in the education sector: Peruvian case.

36. Maghsudi, Setareh & Lan, Andrew & Xu, Jie & Schaar, Mihaela. (2021). Personalized Education in the Artificial Intelligence Era: What to Expect Next. IEEE Signal Processing Magazine. 38. 37-50. 10.1109/MSP.2021.3055032.

37. Schembri, F. M. (2018). The promise and perils of personalized learning: keeping students at the center of the ed tech revolution (Doctoral dissertation, Massachusetts Institute of Technology).

38. Alkooheji, L., & Al-Hattami, A. (2018). Learning style preferences among college students. *International Education Studies*, *11*(10), 50-63.

39. KR, M. (2020). Educational Technology Awareness and Utilization Among Engineering Faculty Members: A Study. *Institute of Scholars (InSc)*

40. Bedenlier, S., Bond, M., Buntins, K., Zawacki-Richter, O., & Kerres, M. (2020). Facilitating student engagement through educational technology in higher education: A systematic review in the field of arts and humanities. *Australasian Journal of Educational Technology*, *36*(4), 126-150.

41. May, M., & George, S. (2011). Privacy Concerns in E-learning: Is UsingTracking System a Threat?. *International Journal of Information and Education Technology*, *1*(1), 1.

42. Sekhar, C. R., Farook, O., & Bouktache, E. (2008). Continuous improvement process based on outcome based education. In *Proceedings of the 2008 IAJC-IJME International Conference* (Vol. 5, p. 2013).