UNDERSTANDING GEN Z ACCEPTANCE OF YOUTUBE AS A LEARNING PLATFORM USING TECHNOLOGY ACCEPTANCE MODEL

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Abstract

Gen Z, as digital natives, has grown up in a highly connected and technology-driven world. YouTube, with its vast library of educational videos, tutorials, and expert content, has become a go-to platform for learning. The platform's visual and auditory elements offer a multimodal learning experience that appeal to Gen Z's preferences for interactive and engaging content. The acceptance of YouTube as a learning platform by Gen Z can be attributed to its perceived usefulness in providing on-demand access to a wide range of educational content, accommodating diverse learning styles, and enabling self-paced learning. This empirical study is an effort of understand Gen Z acceptance of YouTube as a learning platform adopting technology acceptance model (TAM). The Technology Acceptance Model (TAM) is a widely-used framework for understanding user acceptance and adoption of technology. The research model explores how perceived usefulness and perceived ease of use influence Gen Z's attitude towards YouTube as a learning platform and then leads to usage intention and usage. Data collected using structured questionnaire containing 29 items along with demography related questions. 245 respondents were interviewed using non-probability convenience sampling technique. The respondents of different parts of the country sharing diverse cultural background responded both online and offline. Structural equation modelling was employed to trace the acceptance of YouTube as learning platforms among Gen Z applying TAM model. The established model holds valid and explains approx. 38% of the variation in YouTube actual usage and the path leading perceived usefulness → YouTube attitude → YouTube usage Intention → YouTube usage found crucial. By examining Gen Z's acceptance of YouTube as a learning platform through the lens of the Technology Acceptance Model, we can gain valuable insights into their motivations, preferences, and expectations. Understanding these factors can help educators, content creators, and platform developers optimize the learning experience on YouTube and cater to the unique needs of Gen Z learners.

Key words: YouTube, Gen Z, Technology acceptance model (TAM), Structural equation modelling (SEM).

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Introduction

India is transforming as one of the largest online markets of the world. The number of active YouTube's users is up surging. India has become one of the rapidly progressing markets for YouTube. YouTube have occupied an indispensable place in the lives of youth across the globe. It has become widely accepted as a learning platform by Generation Z and many other age groups as well. YouTube offers a vast amount of educational content covering various subjects, including science, mathematics, history, language learning, computer programming, and more. The platform has numerous channels created by educators, experts, and enthusiasts who share their knowledge and expertise in an engaging and accessible manner. Its believed that accessibility, visual and interactive nature, diverse range of content availability and personalized learning space made YouTube a popular and preferred learning platform among learners(Lin and Polaniecki, 2009, Celestine and Nonyelum, 2018; Kalogeropoulos and Nielsen, 2018; Stout, 2020). This study emerge as a unique attempt to check whether YouTube gained acceptance among Gen Z as a learning platforms. For this purpose it has adopted technology acceptance model to delve into the phenomenon.

Review of Literature

YouTube has established itself as the most popular online platform since Google bought it in 2006. Literature on YouTube as an educational platform, revealed mixed results. Studies (Lee and Lehto, 2013; Ramírez-Correa et al., 2019) affirmed it as a source of entertainment, knowledge, and resources. Across the world YouTubers exihibit their content as a learning materials (Celestine and Nonyelum, 2018; Kalogeropoulos and Nielsen, 2018; Stout, 2020). By 2022, it is estimated that 2.3 billion people will be monthly YouTube users (Newberry, 2021). Luu et al., 2020 found that YouTube was perceived useful to browse videos of user interest. It elevated the learning – teaching experience between parties through interaction and feedback (Chan, 2010; Ramírez et al., 2014). As a result, it can be used to increase the effectiveness and efficiency of teaching and learning (Bonk, 2011; Kaya et al., 2020). Any instructional materials can be shared or contributed by anyone (Černá and Borkovcová, 2020). Sood et al. (2011) noted that the number of users is on the increase due to the availability of useful information. Some people have discovered that educational films can help students learn more efficiently, comprehend their learning curves, or they can help students keep their interests and achieve their goals (Černá and Borkovcová, 2020). (Kaya et al., 2020; Yoo et al., 2020) However, experts advise exercising caution when utilising the YouTube, especially in science, due to the lack of reliable and important content and high-quality films (Topf and Williams, 2021). Some users realised that it's easier for them to view videos that are pertinent to their interests and top subject areas when they utilise the platform for educational reasons (Torres-Ramírez et al., 2014).

Doo Young Lee & Mark R. Lehto (2013) identified Technology Acceptance Model (TAM) to trace the variables affecting behavioural intention to use YouTube. Ritz, W., Wolf, M., & McQuitty, S. (2019) proposed DIY behaviour model for small business managers and owners to handle tasks that call for specialised knowledge. Maziriri, E. T., Gapa, P., & Chuchu, T. (2020) supported that YouTube has received a lot of attention from researchers and educators as a teaching resource and used modified conceptual model based on the technology acceptance model (TAM) to assess student perspectives, attitudes, and intentions towards the usage of YouTube as a teaching tool. Duffett, R. (2020) discovered that YouTube marketing communications positively impacted the hypothesised attitudinal associations. The

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findings of Al-Maroof, R., Ayoubi, K & et al, (2021) show that PEOU, PU, personal creativity, flow theory, and content richness have an impact on both YouTube and TikTok usage. The results of Hanif, A., Jamal, F. Q., & Imran, M. (2018) show that a user's subjective norm, impression of outside control, enjoyment of using it, and the ability to display the results all greatly affect how helpful and simple they perceive the YouTube as an e-learning system. Overall, YouTube has also been discovered to be the most effective suit for digital learners Net Generation features (students raised since the invention of the World Wide Web) and a legitimate strategy for harnessing their variety of intelligences and learning styles (Liu, 2010) with high acceptance levels (Buzzetto-More, 2014; Donoker, 2011; Kelly, Lyng, McGrath, and Cannon, 2009).

Research Gap

Despite the fact that YouTube research is available in significant number, it is important to note that there is still a lack of empirical proof of relationships between perceived YouTube utility, perceived YouTube usability, student attitudes towards YouTube use, and behavioural intention to use YouTube. As a result, additional academic reflections are deemed necessary. Many articles on the topic are based on data from affluent nations like Saudi Arabia, Hong Kong, Malaysia, and the United Kingdom. In this connection, the current study fill in the gap identified in the literature by examining the Gen Z acceptance of You Tube as a learning platform using technology acceptance model in Indian context. TAM suggests that user acceptance of a technology is determined by two key factors: perceived usefulness and perceived ease of use. In this context perceived usefulness refers to the extent to which Gen Z individuals believe that YouTube can enhance their learning experience and provide valuable educational content. Perceived ease of use refers to the extent to which Gen Z individuals perceive YouTube as user-friendly and accessible for learning purposes.

Methodology

The Technology Acceptance Model (TAM) is a widely-used framework for understanding user acceptance and adoption of technology. The research model explores how perceived usefulness and perceived ease of use influence Gen Z's attitude towards YouTube as a learning platform and then leads to usage intention and usage. An extensive questionnaire was structured to elicit required data to attain the study objective. The initial part of the questionnaire contains demographic profile related queries followed by YouTube user profile related questions. The second part had 29 items measuring perceived usefulness (PU - 5 items), perceived ease of use (PEOU – 5items) (Davis,1985), YouTube attitude (9 items) (Lutfiye Can & Nihat Kaya, (2016), Shanthi,P & Thiyagarajan, S, 2013), intention to use YouTube (5 items) (Al-Rahmi, Waleed, et. al., 2015) and YouTube usage (5 items) (Si Hou, 2017). All scales were customised for the purpose of the study and subjected to Cronbach alpha reliability test. The alpha values were above than .8 for al constructs witnessing high internal consistency of the scales. Structural equation modelling was employed to trace the YouTube usage among youth applying TAM model. Data were collected form 288 respondents (belong to different parts of the country sharing diverse cultural background responded both online and offline) by employing a non-probability sampling method out of which 245 data entries found complete and useful for the study. The Sample respondents comprise of 135 males and 110 females and the mean age is 27. Majority of them are undergraduates and belong to the monthly family income category between Rs 50,001 and Rs 100,000.

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Objective

1. To Trace the YouTube usage among
    Gen Z using TAM model.

Analysis & Interpretation

Figure 1 Understanding Gen Z acceptance of YouTube as a learning platform using Technology Acceptance Model
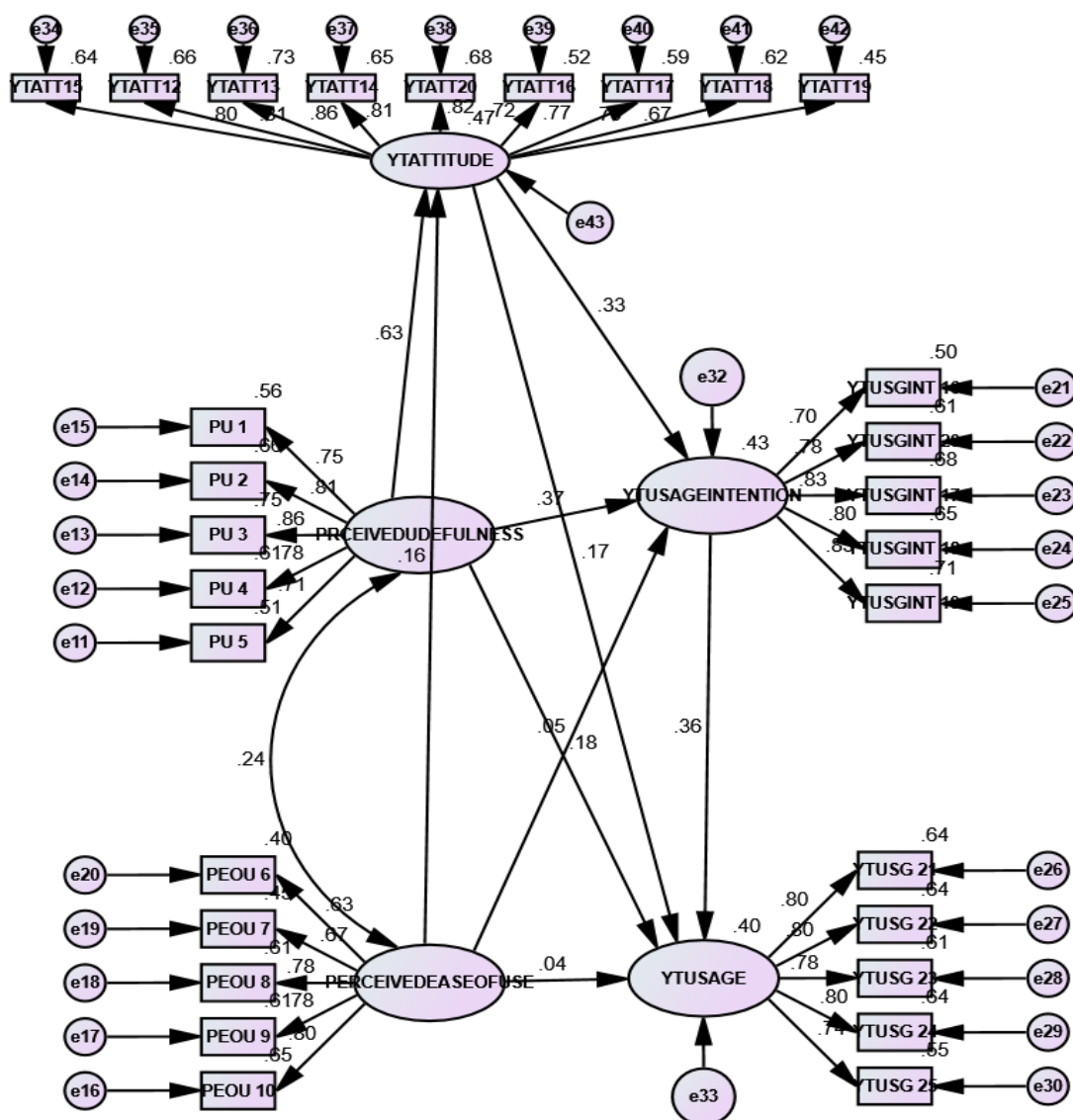
*Note (YTATTITUDE – YouTube Attitude, YouTubeUSGINTENT – YouTube Usage Intention, YouTubeUSG – YouTube Usage)

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The Fig.1 along with the results of table 2 indicate that perceived usefulness positively and significantly impacts with attitude towards network sites ($\beta2 = 0.630$, $p < 0.01$) While perceived usefulness may improve the Intention to use YouTube through attitude towards Yoube. Perceived ease of use positively and significantly with attitude towards YouTube was ($\beta3 = 0.370$, $p < 0.01$). The perceived ease of use found to be exerted lesser effect than perceived usefulness. Attitude towards YouTube as a learning platform had a positive and significant influence over Intention to use YouTube ($\beta2 = 0.331$, $p < 0.01$), while effecting the actual YouTube usage. The standardised beta co-efficient between Intention to use YouTube and actual YouTube usage found to be positive and significant ($\beta2 = 0.361$, $p < 0.01$).

Table 1 Understanding Gen Z acceptance of YouTube as a learning platform using Technology Acceptance Model fit statistics

χ^2	Df	Sig	CMIN /df	RMS EA	R M R	G FI	AG FI	C FI	N FI	AIC	CAIC
Recommended Cut-off			< 5	<.05	<.0 8	>. 8	>.8	>. 9	>. 8	**Lowest for Default model**	
703.76 0	36 7	.00 0	1.918	.050	.04 7	.8 37	.80 6	.9 26	.8 58	839.760	1145.846

Results in Table 1 deal with structural model fit indices of YouTube usage TAM model where it could be seen that all goodness of fit statics like CFI, NFI, GFI and AGFI were well above than the requisite minimum levels and CMIN, RMSEA and RMR were much below than the prescribed tolerant points. All this goodness of fit statistics confirmed that the data fit the model excellently and interpretation of hypothesis could be proceeded.

Table 2 Results of Hypotheses Testing of Understanding Gen Z acceptance of YouTube as a learning platform using Technology Acceptance Model

Hypothesis	Regression Weights
H1: PU→ YTATTITUDE	**0.630**
H2: PEOU→ YTATTITUDE	**0.370**
H3: PU→ YTUSAGE INTENT	0.163
H4: PEOU→ YTUSGAE INTENT	0.048
H5: PU→ YT USGAE	0.178
H6: PEOU→ YT USAGE	0.040
H7: YTATTITUDE→ YTUSGAE INTENT	**0.331**
H8: YTATTITUDE→ YT USGAE	0.170
H9: YTUSGAE INTENT → YT USAGE	**0.361**

(Results in bold are significant $p<0.001$)

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H1: Perceived usefulness has an influence on attitude towards YouTube as a learning platform

The first hypothesis was supported and there is a direct influence of perceived usefulness on YouTube usage implying that perceived usefulness exerts positive impact on attitude towards YouTube as a learning platform. YouTube's ability to offer a multimodal learning experience aligns well with Gen Z's preferences for interactive and engaging content. The platform's extensive library of educational videos, tutorials, and expert content provides Gen Z learners with on-demand access to diverse knowledge and skills.

H2: Perceived ease of use has an influence on attitude towards YouTube as a learning platform YouTube attitude indicating that the extent to which

The second hypothesis was also supported and there is an direct influence of perceived ease of use on attitude towards YouTube. YouTube's intuitive interface, search functionality, and mobile accessibility contribute to its perceived ease of use, making it a convenient and readily accessible learning tool for Gen Z. The platform's integration into their daily lives further strengthens its acceptance as a learning platform.

H3: Perceived usefulness has an influence on YouTube usage Intention

The third hypothesis was not supported and there is no significant influence of perceived usefulness on YouTube usage intention. But it has a indirect influence through attitude towards YouTube.

H4: Perceived ease of use has an influence on YouTube usage intention

The fourth hypothesis was also not supported and there is no influence of perceived ease of use on YouTube usage. Perceived ease of use of YouTube might indirectly effect on YouTube usage intention but it alone could not affect YouTube usage intention significantly.

H5: Perceived usefulness has an influence on YouTube usage

The fifth hypothesis was not supported and there is no influence of perceived usefulness on attitude towards YouTube usage among Gen Z.

HO6: Perceived ease of use has an influence on YouTube usage

The sixth hypothesis was not suppoted and there is no influence of perceived ease of use on attitude towards YouTube.

H7: Attitude towards YouTube has an influence on YouTube usage intention

The seventh hypothesis was supported and there is an influence of attitude towards YouTube on YouTube usage intention. Favourable YouTube attitude leads to positive YouTube usage intention.

H8: Attitude towards YouTube has an influence on YouTube usage

This hypothesis was not supported and there is no influence of YouTube attitude on YouTube usage. Favourable YouTube attitude might work through YouTube usage intention but not directly on YouTube actual usage.

H9: YouTube usage intention has an influence on YouTube usage

This hypothesis was not supported and there is an influence of YouTube usage intention on YouTube actual usage suggesting that YouTube usage intention has got a direct bearing on YouTube actual usage.

Overall, the model explains nearly 36% of the variation in YouTube actual usage and the path leading perceived usefulness → YouTube attitude → YouTube usage Intention → YouTube usage found crucial. All these results support the phenomenon that if the users perceive YouTube highly useful then they tend to form favourable attitude towards YouTube in general, which in turn reflects in their intentions to use the same, which ultimately results in actual YouTube usage. The results were in

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confirmatory with the previous study results (Maziriri, E. T., Gapa, P., & Chuchu, T. (2020)

Table 3 Direct, Indirect and Total effects of TAM model on YouTube usage

Constructs		Standardised Estimate		
IDV	DV	Direct	Indirect	Total
PERCEIVED USEFULNESS	YouTube ATTITUTE	0.630		0.630
	YouTube USAGE INTENT	0.370	0.209	0.579
	YouTube USAGE	0.178	0.316	0.494
PERCEIVED EASE OF USE	YouTube ATTITUTE	0.331		0.331
	YouTube USAGE INTENT	0.048	0.054	0.102
	YouTube USAGE	0.040	0.065	0.105
YouTube ATTITUTE	YouTube USAGE INTENT	0.163		0.163
	YouTube USAGE	0.170	0.120	0.290
YouTube USGINTENT	YouTube USAGE	0.361		0.361

Table 3 provides direct, indirect and total effects associated with each of the determinants in the partially mediated model. All of the hypothesised total effects had a significant impact on the outcome variable. Perceived usefulness and perceived ease of use had a significant direct effect on YouTube attitude and indirect effect on YouTube usage intention and YouTube usage. YouTube attitude had significant direct effect on YouTube usage intention had an indirect effect on YouTube usage. YouTube usage intention had a significant direct impact on YouTube usage. These results affirmed the assumptions of partial mediation in the model. The results have proved the mediating role of intervening variables involved in the model.

Discussion

The Technology Acceptance Model (TAM) provides a useful framework for understanding Gen Z's acceptance of YouTube as a learning platform. Gen Z's acceptance of YouTube can be attributed to its perceived usefulness in enhancing the learning experience and its perceived ease of use as a user-friendly and accessible platform. Gen Z finds YouTube easy to use as a learning platform. Its user-friendly interface, search functionality, and recommended videos make it effortless for them to discover relevant educational content. The convenience of accessing YouTube on multiple devices adds to its perceived ease of use. They perceive the content more engaging, informative, and beneficial to their learning goals and thus developed a positive attitude towards YouTube as a learning platform. Gen Z is influenced by their peers, influencers, and content creators who use YouTube for educational purposes. Recommendations, comments, and discussions from the YouTube community play a role in shaping their perception and usage of YouTube as a learning platform. Gen Z's positive attitude and perceived usefulness of YouTube as a learning platform translate into their intention to use it for educational purposes. They are more likely to engage with educational content, subscribe to relevant channels, and actively seek learning opportunities on YouTube. Gen Z's intention to use YouTube for learning leads to actual use. They regularly consume educational videos, participate in

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discussions, comment, and engage with content creators. The actual use of YouTube reinforces their perception of its usefulness and further strengthens their attitude toward the platform.

Conclusion

The present study hypothesised model to know the relevance of TAM in YouTube usage among Gen Z respondents and it proved useful to explain the relationship among the observed constructs namely perceived usefulness, perceived ease of use, YouTube attitude, YouTube usage intention and YouTube (actual) usage. TAM model helps explain Gen Z's acceptance and adoption of YouTube as a learning platform by highlighting the perceived usefulness ease of use, attitudes, usage intentions, and actual use of the platform for educational purposes. Furthermore, it provides insights into users' acceptance and usage of technology, individual factors and external influences can also impact Gen Z's use of YouTube as a learning platform. These factors may include personal preferences, learning styles, cultural norms, and educational context. Future studies might revolve around these themes to gain better understanding of YouTube usage among different segment of audience. The results provides important cues for educators, content creators, and platform developers enhance the learning experience on YouTube and tailor to the needs of learners. Despite the positive nature of the findings of the study, It's important to note that while YouTube offers many benefits to Gen Z, it also poses some challenges, such as the potential for misinformation, online harassment, and excessive screen time. As with any online platform, it's crucial for Gen Z to practice digital literacy, critical thinking, and responsible internet use.

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