

Factors Influencing the Behavioral Intention to Adopt AI-Generated Buddhist Short Videos on Social Media: A Study of Generation Z Users in Sri Lanka

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Introduction

Technological advancement in the twenty-first century has changed the way humans communicate and consume information through data-driven personalization (Ogugbuaja & Akpan, 2026). While Artificial Intelligence (AI) is contributing to the creation of short-form video content (eg: Facebook Reels, TikTok, Instagram Reels and YouTube Shorts) on youth-led social media platforms, this technological shift is expanding to religious communication, with AI-generated Buddhist short videos increasingly being promoted, using visual and auditory stimuli to capture the essence of Dharma principles, instructions, and mind-calming techniques (Chen et al., 2026). Generation Z in Sri Lanka is highly digitally literate and active on social media (DataReportal, 2026), but empirical research on user acceptance of AI-generated religious content is limited in the local context. Therefore, this study investigates the factors influencing Generation Z users' behavioral intention towards the adoption of AI-generated Buddhist short videos in the Western Province of Sri Lanka, using the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) framework (Venkatesh et al., 2012) in this empirical context.

Objective

The primary objective of this study is to investigate the key factors influencing the behavioral intention to adopt AI-generated Buddhist short videos on social media among Generation Z users in Sri Lanka, using the extended UTAUT2 model.

Methodology

This study used a quantitative research design. Based on the UTAUT 2 model by Venkatesh et al. (2012) as the theoretical framework and predicts the dependent variable, Behavioral Intention (BI), based on seven independent variables: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence

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(SI), Facilitating Circumstances (FC), Hedonic Motivation (HM), Price Value (PV), and Habit (HT). The target population included Generation Z individuals living in the Colombo, Gampaha, and Kalutara districts of the Western Province, which has the highest population density in Sri Lanka (Department of Census and Statistics, 2024). Primary data for the study was collected using a structured questionnaire distributed via Google Forms, using a combination of purposive and random sampling techniques, based on a sample of 500 Generation Z respondents in the Western Province. Survey items were adapted from standardized UTAUT2 scales, and all questions were measured on a 5-point Likert scale (Grassini et al., 2024). The data analysis was conducted using Structural Equation Modelling (SEM) using IBM SPSS AMOS software. Firstly, the measurement model was tested for reliability and validity, followed by the evaluation of the structural model for hypothesis testing.

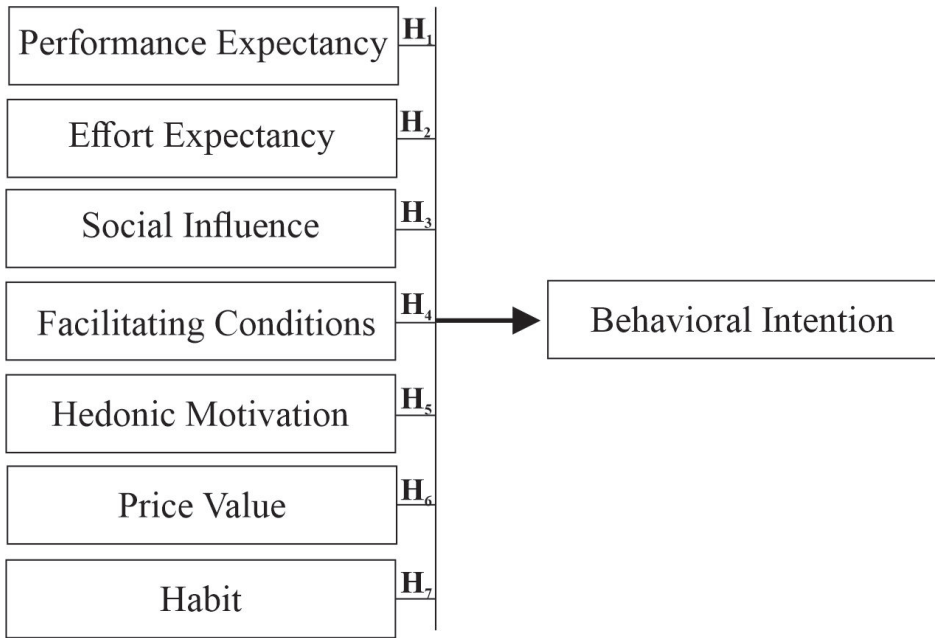


Figure 1: *Conceptual Framework for the Study*

The study hypothesized that Performance Expectancy (H₁), Effort Expectancy (H₂), Social Influence (H₃), Facilitating Conditions (H₄), Hedonic Motivation (H₅), Price Value (H₆), and Habit (H₇) significantly influence the Behavioral Intention to Adopt AI-generated Buddhist short videos on social media

Results

Table 1: Results of the Goodness of Fit of the Measurement Model

The Goodness of Fit Index		Observed Value	Threshold
Absolute fit indices	CMIN/DF	1.027	< 3
	GFI	0.933	Close to 1
	AGFI	0.923	Close to 1
	RMR	0.031	< 0.1
	RMSEA	0.007	< 0.1
Incremental fit indices	CFI	0.998	Close to 1
	TLI	0.998	Close to 1
	RFI	0.929	Close to 1
	NFI	0.922	Close to 1
Parsimony fit indices	PRATIO	0.913	Close to 1
	PGFI	0.810	Close to 1

According to the results of SEM analysis, the measurement model showed high validity and reliability, and Composite Reliability (CR) values for all constructs exceeded the standard threshold of 0.70, confirming strong internal consistency. Also, the convergent validity of the model was confirmed by Average Variance Extracted (AVE) values for the variables exceeding the threshold of 0.50. Discriminant validity was confirmed using the Fornell-Larcker criterion, and the square root of AVE for each construct was higher than its correlation coefficient with any other construct.

After confirming the goodness of fit of the model, Structural Equation Modeling was performed to test the hypotheses based on the UTAUT2 framework and the results indicated that all seven hypothesized paths for Behavioral Intention were significant ($p < 0.05$).

Table 2: Results of the Path Analysis

Path	Coefficient	Standardized Path	
		P value	Decision
EE → BI	0.095 (0.043)	0.027	Support
FC → BI	0.096 (0.039)	0.013	Support
HM → BI	0.290 (0.045)	0.000	Support
HT → BI	0.185 (0.042)	0.000	Support
PE → BI	0.279 (0.044)	0.000	Support
PV → BI	-0.145 (0.041)	0.001	Support
SI → BI	0.140 (0.039)	0.000	Support

According to Table 2, the main factor that had a significant positive effect on Behavioral Intention (BI) in the direct path analysis was Hedonic Motivation (HM). Secondly, Performance Expectancy (PE) had a positive effect on BI. This

confirmed that the visual aesthetic appeal and quick access to religious knowledge in AI-generated Buddhist short videos were key factors in user adoption. Habit (HT), Social Influence (SI), Facilitating Conditions (FC) and Effort Expectancy (EE) showed positive effects on Behavioral Intention. Of particular note was the significant negative effect of Price Value (PV) on Behavioral intention. This suggests that in the context of Sri Lankan Generation Z social media users, perceived monetary cost acts as a barrier rather than a facilitator for content adoption.

Discussion / Conclusion

The findings of this study confirm that the factor Hedonic Motivation had a strong positive effect on determining the intention to adopt AI-generated Buddhist short videos among Sri Lankan Generation Z users. These findings are highly consistent with the study on the adoption of AI applications for creating media content (Ali et al., 2024). This shows that visual aesthetic media experiences generated by AI attract young users to new technologies. Also, in line with that study, the current study further confirmed that the factors Performance Expectancy, Effort Expectancy, Social Influence and Habit positively affect Behavioral Intention. Also, in exploring the behavior of students in using video conferencing tools according to Edumadze et al. (2022) it was revealed that all constructs influence their use and acceptance, in line with our study. In addition, according to Shi et al. (2025) although Hedonic Motivation and Price Value had a positive effect on the adoption of creative products created using artificial intelligence, Price Value had a negative effect in the current Sri Lankan context.

Finally, this study improves the existing understanding of technology use and digital humanities in developing countries like Sri Lanka. Based on the UTAUT2 model, this research highlights how the behavior of Generation Z users in Sri Lanka influences their active engagement with modern digital religious environments. In particular, as cost (financial outlay) acts as a barrier to content consumption, digital religious media operators and Buddhist organizations should work to provide free or minimally-cost digital content. These findings provide important guidance for practitioners in designing, distributing, and optimizing media content to appeal to the younger generation.

Keywords - Artificial Intelligence, UTAUT2, Buddhist Short Video, Generation Z, Behavioral Intention

References

- Ali, M.S.M., Wasel, K.Z.A. and Abdelhamid, A.M.M. (2024). 'Generative AI and Media Content Creation: Investigating the Factors Shaping User Acceptance in the Arab Gulf States', *Journalism and Media*, 5(4), pp. 1624–1645. doi:10.3390/journalmedia5040101.

- Chen, R., Xin, Z., Xiao, Q., Xiao, R., Xiao, J., Zhang, B., Shen, H. and Lu, Z. (2026). 'The Digital Landscape of God: Narrative, Visuals and Viewer Engagement of Religious Videos on YouTube', *Proceedings of the International AAAI Conference on Web and Social Media*, 20(1), pp.469–486. doi:10.1609/icwsm.v20i1.42649.
- DataReportal (2026). *Digital 2026: Sri Lanka*. Available at: <https://datareportal.com/reports/digital-2026-sri-lanka> (Accessed: 9 July 2026).
- Department of Census and Statistics (2024). *Census of Population and Housing - 2024: Final Report*. Colombo: Ministry of Finance, Economic Stabilization and National Policies. Available at: <http://statistics.gov.lk/> (Accessed: 14 July 2026).
- Edumadze, J.K.E., Barfi, K.A., Arkorful, V. and Baffour Jnr, N.O. (2022). 'Undergraduate student's perception of using video conferencing tools under lockdown amidst COVID-19 pandemic in Ghana', *Interactive Learning Environments*, pp. 1–12. doi:10.1080/10494820.2021.2018618.
- Grassini, S., Aasen, M.L. and Møgelvang, A. (2024). Understanding University Students' Acceptance of ChatGPT: Insights from the UTAUT2 Model. *Applied Artificial Intelligence*, 38(1). doi:10.1080/08839514.2024.2371168.
- Ogugbuaja, E.M. and Akpan, I.E. (2026). 'The Impact of Social Media Algorithms on Religious Belief Formation and Community Engagement', *Journal of Humanities and Social Policy*, 12(1), pp. 137–147. doi:10.56201/jhsp.vol.12.no1.2026.pg137.147.
- Shi, W., Li, L., Zhang, Z., Li, M. and Li, J. (2025). 'Research on driving factors of consumer purchase intention of artificial intelligence creative products based on user behavior', *Scientific Reports*, 15(1). doi:10.1038/s41598-025-01258-x.
- Venkatesh, V., Thong, J.Y.L. and Xu, X. (2012). 'Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology', *MIS Quarterly*, 36(1), pp. 157–178. doi:10.2307/41410412.