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NAVIGATING DIGITAL TRANSFORMATION IN RELIGIOUS ORGANIZATIONS THE ROLE OF DIGITAL LITERACY IN SHAPING TECHNOLOGY ACCEPTANCE

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ABSTRACT

What happens when a centuries-old institution decides to take artificial intelligence seriously? This study explores exactly that question. We examine AI acceptance within the Communication and Educational Foundation of the Holy Archdiocese of Crete (CEFAC), drawing on survey data from 444 participants connected to the Foundation's diverse departments -- archives, museums, libraries, a radio station, Byzantine music schools, and spiritual education centers. The results are, frankly, striking. Ninety-seven percent of respondents said they were familiar with the term 'Artificial Intelligence.' Regular internet use and social media engagement were nearly universal. These are not the numbers one might expect from a population often assumed to be at arm's length from digital culture. Factor analysis revealed three attitudinal dimensions: enhancement of organizational effectiveness through AI, privacy and ethical concerns, and long-term institutional integration. Cluster analysis distinguished two respondent profiles -- a 'high-acceptance' group genuinely enthusiastic about AI's potential, and a 'cautiously optimistic' group that sees the value but worries, particularly about privacy and the preservation of human-centered spiritual care. The central finding is this: digital literacy predicts AI acceptance far more reliably than age, gender, or any other demographic variable. That has real consequences for how ecclesiastical leaders plan their digital futures. The study argues for targeted literacy training, honest engagement with privacy concerns, and AI strategies that do not ask faith-based institutions to abandon what makes them distinctive.

KEYWORDS: Artificial Intelligence; Digital Literacy; Technology Acceptance; Faith-Based Organizations; Ecclesiastical Institutions; Orthodox Christianity; Cultural Heritage; Organizational Effectiveness.

1. INTRODUCTION

AI isn't some far-off possibility anymore. It's already changing how organizations communicate, handle knowledge, deliver services -- and the pace is relentless. Libraries now use machine learning to unearth archival materials. Museums test AI-driven ways to engage visitors. Schools rethink how they curate and deliver content. Against this backdrop, faith-based organizations confront a question that's part practical, part philosophical: how to engage with these technologies without sacrificing their essence.

The Orthodox Church of Crete, through its Communication and Educational Foundation, presents a compelling case for examining this tension. The Foundation wears many hats. It runs a historical archive, a museum of religious art, a library, a radio station, a bookshop, a Byzantine music school, and several spiritual education centers. Each department relates to technology differently, serves different people, and harbors different worries. That very complexity makes it worth studying.

Researchers have started taking the theological dimensions of AI seriously. Dimara et al. (2024) contend that Eastern Orthodox perspectives -- with their stress on the ontological gap between humans made in God's image and artificial systems -- offer a unique ethical framework for assessing AI. Ladas (2025) echoes this: Orthodox tradition doesn't reject technology outright, but demands discernment. These aren't mere abstractions. They inform how clergy, staff, and community members approach digital tools in their everyday work.

The broader literature on technology adoption tells us something important: attitudes toward AI depend less on age or gender than on digital literacy -- how at ease people feel with technology, how regularly they use it, how closely they track its evolution (Kabakus et al., 2025; Desmaryani et al., 2024). This carries weight for faith-based organizations, where digital divides often follow generational and educational fault lines within the same congregation (McGinty et al., 2024; Neumeyer et al., 2020).

This study steps into that gap. Drawing on 444 respondents from CEFHAC, we examine four things: (1) how digitally literate people are and how well they know AI; (2) what benefits and risks they see across the Foundation's departments; (3) what they expect from future AI integration; and (4) which background factors best predict whether someone embraces AI or approaches it cautiously. We're not merely documenting where this institution stands -- we want findings that resonate with spiritually

grounded organizations everywhere wrestling with digital transformation (Alao & Dairo, 2024; Nnatuanya & Nwokocha, 2025).

2. LITERATURE REVIEW

2.1. Artificial Intelligence in Religious and Faith-Based Contexts

The discussion around AI and religion has outgrown mere speculation. A growing corpus of empirical and theological scholarship now looks at how faith communities actually engage with these technologies -- and what frameworks they bring to bear.

Corpuz (2025) argues that in Catholic educational contexts, AI can't be treated as some neutral tool. It needs evaluation through a virtue-ethics lens -- asking whether a given application serves prudence, justice, and charity, not just efficiency. This resonates with Orthodox theological anthropology, which maintains that humans, as bearers of the divine image, carry a dignity no artificial system can match (Ladas, 2025; Vinichenko et al., 2020). The takeaway isn't to reject AI, but to deploy it with a moral seriousness that purely technical evaluations miss.

Cheong and Liu (2022, 2025) approach from a more institutional direction, studying how American Christian churches reconcile competing demands when aligning AI with their values. They identify concrete strategies -- ethical guidelines, stakeholder consultation, discernment processes -- that religious organizations use to balance technological adoption with theological fidelity. Their work challenges the assumption that faith communities merely react to technological change.

Things get messier when adolescents come into view. Alves Ferreira et al. (2025) examine how AI-mediated environments influence young people's spiritual formation and psychological wellbeing. Technology can aid identity exploration, yet it can also intensify social comparison, isolation, and exposure to harmful content. For religious educational institutions, this isn't some side issue -- it strikes at the core of their mission.

Trotta et al. (2024) contend that religious actors contribute something genuinely unique to AI governance debates. Their perspectives aren't just secular ethics dressed in theological language. They stem from different foundational commitments about personhood, community, and what human life is for. Whether one shares these commitments or not, they merit a place at the table.

2.2. Digital Literacy and Technology Acceptance

The link between digital literacy and technology

acceptance counts among the more solid findings in this area. Kabakus et al. (2025) show it clearly in higher education: administrative staff with stronger digital literacy embrace new technologies more readily, with perceived usefulness and ease of use as key mediators. This pattern shows up across sectors.

Davis's (1989) Technology Acceptance Model (TAM) remains the go-to theoretical framework for understanding these dynamics. Schorr (2023) traces its evolution and continued relevance, observing that recent extensions have folded in trust, perceived risk, and social influence to better explain adoption in complex organizational settings (Dash et al., 2023; Ismail et al., 2024). TAM has its critics, sure, but its central insight -- that perceived usefulness and ease of use drive adoption -- has held up remarkably well.

Nonprofit and faith-based organizations face distinct challenges. Godefroid et al. (2024) name the usual culprits: tight budgets, scarce technical expertise, organizational cultures that balk at change. These barriers are real, and church institutions aren't exempt. What's less recognized is that these same organizations possess distinctive strengths -- deep community ties, committed volunteers, a shared mission that can, given the right conditions, actually speed up adoption.

Fazriyati and Jamil (2025) add a crucial nuance: successful technology adoption in nonprofits isn't merely training people to use tools. It demands sensemaking -- helping stakeholders grasp how a technology aligns with what the organization actually aims to do. That's as much a communication challenge as a technical one.

2.3. AI Applications in Cultural Heritage and Educational Institutions

AI is already reshaping how cultural heritage institutions operate. Harisanty et al. (2024) map this terrain through bibliometric analysis, pinpointing machine learning for artifact classification, digital archiving, and visitor engagement as the main application areas. Scholarly interest is genuine and growing -- yet so are ethical questions about representation, ownership, and who decides how cultural materials get processed and presented.

Jaillant et al. (2025) provide practical guidance for heritage organizations trying to implement AI. Their focus on user-centered design and transparent communication about how AI handles cultural materials resonates especially for ecclesiastical institutions, many of which steward collections of immense historical and spiritual value. Getting this wrong isn't merely a technical misstep -- it's a failure of stewardship.

Caramiaux (2023) spots a tension threading

through much of this literature: the efficiency gains from automated systems versus the worth of human curatorial judgment. For a museum or archive, this tension is livable. For a faith-based institution where the human element isn't peripheral but central to the mission, it becomes far sharper.

Neudecker (2022) poses a deeper epistemological question: what becomes of cultural materials when converted into data? Computational approaches to heritage aren't neutral. They make choices -- what to include, how to categorize, what to foreground -- with real consequences for how communities understand their own past. Faith-based institutions should approach AI with this awareness.

2.4. Digital Transformation in Religious Organizations

COVID-19 forced religious organizations to rush into digital transformation. Streaming worship, online giving, virtual community -- these weren't planned initiatives but emergency measures. What emerged was a clearer sense of both what technology-mediated religious practice can and cannot do (Campbell, 2020; Roso, 2023).

Studies on digital giving platforms show how much user experience and trust matter. Congregants adopt digital tools more readily when interfaces feel intuitive and they trust their data is secure (Zheng, 2020; Eagle et al., 2022). The same logic applies to AI -- perhaps even more so, given how opaque many AI systems are and how sensitive the data they handle can be.

The ethical stakes are real. Commodifying faith, surveillance risks, stripping spiritual care of its human element through technology -- these aren't hypothetical fears but documented realities (Lemke & Short, 2021; Pakpahan et al., 2024). They explain why some stakeholders in faith-based institutions approach AI with warranted caution, and why writing that off as mere technophobia misses the point.

Leadership carries enormous weight. Study after study shows that clergy and organizational leaders influence congregational attitudes toward technology more than almost anything else (Cooper et al., 2021; Frankowski, 2023). Where leaders show enthusiasm and engagement, adoption usually follows. Where they resist or waffle, progress stalls. For AI specifically, this means leadership buy-in isn't just nice to have -- it's likely essential.

3. RESEARCH METHODOLOGY

3.1. Research Design and Theoretical Framework

We employed a quantitative, cross-sectional survey

design anchored in TAM and its extensions. The theoretical framework posits that attitudes toward AI adoption hinge on perceived usefulness and ease of use, which digital literacy, prior technology experience, and demographic characteristics shape (Schorr, 2023; Park et al., 2022). A cross-sectional design can't establish causality, but in an understudied context it delivers something valuable: a clear, detailed snapshot of the current landscape.

That snapshot grounds everything that follows. It also furnishes a baseline for future longitudinal studies to track change against -- as AI embeds itself more deeply in ecclesiastical settings, monitoring attitude shifts will prove crucial.

3.2. Research Population and Sampling

Our research population comprises people connected to CEFHAC -- staff, volunteers, collaborators, and regular users of the Foundation's services across its departments. It's a genuinely mixed group: varying education levels, different relationships with technology, differing levels of engagement with the Foundation's work.

We gathered data from 444 respondents through non-probability convenience sampling. The questionnaire went out via online platforms and paper administration across the Foundation's departments: Historical Archive, Museum of Religious Art, Library, Radio Station, Bookshop, School of Byzantine Music, and Spiritual Education Centers. Participation was voluntary, with assurances of confidentiality and the right to withdraw anytime.

Convenience sampling carries well-known generalizability limitations. Still, 444 respondents spanning different age groups, education levels, occupations, and degrees of technological engagement offers a solid foundation for the analyses ahead.

3.3. Research Instrument

We used a structured questionnaire developed for this study, with 28 items (E1-E28) in two sections. Part A collected demographics and background: gender, age, occupation, education. It also gauged computer proficiency, AI awareness, internet use, social media engagement, online learning experience, and how closely people follow technological developments. We measured these with categorical responses and 5-point Likert scales.

Part B held 18 opinion items (E11-E28) assessing

AI's perceived contributions across the Foundation's domains -- communication, service effectiveness, privacy, archive management, digital promotion, museum heritage, library operations, radio broadcasting, Byzantine music education, spiritual guidance, and long-term institutional integration. All Part B items used a 5-point Likert scale from 1 (Not at all) to 5 (To a very great extent).

We developed the questionnaire iteratively, with feedback from subject matter experts in technology management and Orthodox theology. A pilot test with a small group verified that the wording was clear and the response scales worked as intended. We administered the final instrument in Greek.

3.4. Data Analysis Methods

We conducted analysis in SPSS (Version 28) across four stages. First, we computed descriptive statistics -- frequencies, percentages, means, standard deviations -- for all variables to characterize the sample and establish baseline AI awareness and digital engagement levels.

Second, we examined bivariate relationships between background variables and AI attitude items using Spearman's rank-order correlation. We chose this non-parametric approach because Likert responses are ordinal and distributions might not be normal.

Third, we ran exploratory factor analysis with principal component extraction and Varimax rotation on the 18 opinion items (E11-E28). The aim was to uncover the underlying attitudinal dimensions -- to distill 18 individual items into fewer conceptually coherent factors. We based retention decisions on eigenvalues exceeding one and the scree plot.

Finally, we performed Two-Step Cluster analysis to identify distinct respondent profiles from response patterns across the opinion items. We determined the optimal cluster number using the Schwarz Bayesian Criterion together with interpretability.

4. RESULTS

4.1. Descriptive Statistics and Sample Characteristics

Table 1 lays out the demographic and technological profile of our 444 participants. Women constitute a slight majority (55.4%). The biggest age groups are 31-45 (35.1%) and 46-60 (30.2%), with younger and older respondents both well represented. Education levels run relatively high, with most having completed tertiary education.

Table 1: Demographic And Digital Profile of Respondents (N=444).

Characteristic	n	%
Gender		
Male	198	44.6

Female	246	55.4
Age Group		
18-30	89	20.0
31-45	156	35.1
46-60	134	30.2
60+	65	14.6
Education Level		
Secondary or less	78	17.6
Tertiary	289	65.1
Postgraduate	77	17.3
Knowledge of AI		
Yes	431	97.1
No	13	2.9
Internet Usage		
Daily	421	94.8
Weekly or less	23	5.2

The standout finding from our descriptive analysis? AI awareness: 97.1% of respondents knew the term 'Artificial Intelligence.' That's not what you'd expect from a traditional ecclesiastical institution. Regular internet use (94.8%) and social media engagement (87.4%) paint a similar picture. Whatever assumptions people hold about faith communities and digital culture, this group breaks the mold.

4.2. Correlations Between Digital Literacy and AI Attitudes

Spearman correlation analysis showed consistent positive links between digital literacy indicators and favorable AI attitudes across nearly every domain we examined. Table 2 presents selected coefficients. The strongest links involved 'following technological developments' (Tech. Monitoring).

Table 2: Spearman Correlations Between Background Variables and AI Attitudes.

Variable	Education	PC Fam.	Tech. Mon.
Communication (E11)	0.221**	0.492**	0.610**
Service effectiveness (E12)	0.184**	0.376**	0.425**
Privacy protection (E13)	0.065	0.218**	0.262**
Archive (E15)	0.100*	0.269**	0.300**
Digital promotion (E16)	0.184**	0.306**	0.345**
Museum heritage (E17)	0.148**	0.262**	0.309**
Library (E19)	0.153**	0.244**	0.270**
Future integration (E27)	0.165**	0.284**	0.369**

Note. *P < 0.05, **P < 0.01. PC Fam. = Computer Familiarity; Tech. Mon. = Technology Monitoring

People who actively track tech change were markedly more positive about AI-enhanced communication ($\rho = 0.610$, $p < 0.001$), future AI integration ($\rho = 0.369$, $p < 0.001$), and digital promotion ($\rho = 0.345$, $p < 0.001$). Computer

familiarity showed similarly robust patterns, especially for communication enhancement ($\rho = 0.492$, $p < 0.001$) and service effectiveness ($\rho = 0.376$, $p < 0.001$).

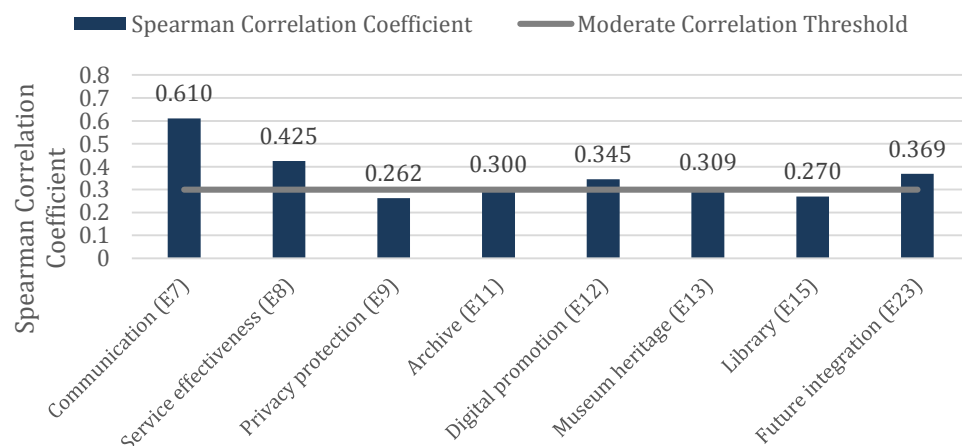


Figure 1: Correlation Strength Between Technology Monitoring and AI Attitudes.

Education level correlated moderately but meaningfully with several attitude domains. One finding jumps out: the correlation between education and attitudes toward privacy protection wasn't significant ($\rho = 0.065$, $p > 0.05$). Privacy concerns, in other words, aren't clustered among less educated respondents. They span the entire sample. That's worth noting for anyone crafting an AI implementation strategy.

Figure 1 makes the pattern clear. People who actively follow tech developments hold more positive AI attitudes across every domain we measured. The link is strongest for communication enhancement and service effectiveness -- the two areas where AI's practical value is most immediately

obvious.

4.3. Factor Analysis of AI Attitudes

Exploratory factor analysis of the 18 opinion items (E11-E28) produced a three-factor solution accounting for 68% of total variance. The structure holds together both interpretively and theoretically.

Factor 1 -- 'Organizational Enhancement through AI' -- captures about 33% of variance. It clusters items around library management (0.852), archive improvement (0.816), museum heritage preservation (0.808), and digital promotion (0.777). These are operational applications: AI to do institutional work better.

Table 3: Factor Loadings of AI Attitude Items After Varimax Rotation.

Item	Factor 1	Factor 2	Factor 3
Library management (E19)	0.852	-	-
Archive improvement (E15)	0.816	-	-
Museum heritage (E17)	0.808	-	-
Digital promotion (E16)	0.777	-	-
Cultural Centre (E23)	-	0.745	-
Privacy protection (E13)	-	0.686	-
Communication (E11)	-	0.677	-
Future integration (E27)	-	0.561	-
Bioethical issues (E28)	-	-	0.924
Eigenvalue	5.94	5.13	1.17
% Variance	33.0	28.5	6.5

Note: Factor 1 = Organizational Enhancement; Factor 2 = Integrated Service Enhancement; Factor 3 = Ethical Considerations. Loadings < 0.40 Omitted.

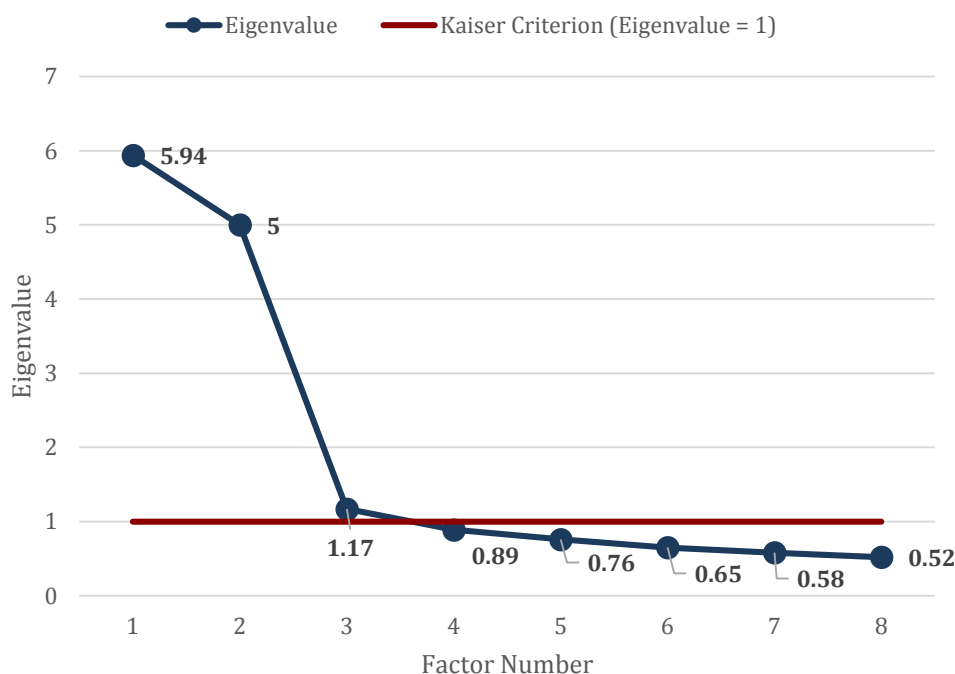


Figure 2: Scree Plot - Factor Analysis of AI Attitudes (E11-E28-See Variables in the Appendix).

Factor 2 -- 'Integrated Service Enhancement' -- accounts for roughly 28.5% of variance and covers

cultural center operations (0.745), privacy protection (0.686), public communication (0.677), and future AI

integration (0.561). This factor captures something wider: attitudes toward AI as a vehicle for holistic service delivery and long-term institutional growth.

Factor 3 -- '*Ethical Considerations in AI Implementation*' -- is defined almost solely by the bioethical issues item (0.924) and accounts for 6.5% of variance. Its separateness is revealing. Respondents don't blend bioethical concerns into their assessments of operational or service applications.

The scree plot in Figure 2 backs the three-factor solution. A clear elbow appears after the third factor,

and eigenvalues exceed the Kaiser criterion (> 1) only for the first three. The steep drop after Factor 3 leaves little doubt about how many factors to keep.

4.4. Cluster Analysis: Attitudinal Profiles

Two-Step Cluster analysis on the 18 opinion items revealed two distinct respondent groups. We validated the solution using the Schwarz Bayesian Criterion and evaluated cluster separation quality.

Table 4: Cluster Sizes and Distribution.

Cluster	n	%	Profile
Cluster 1 (High-acceptance)	214	48.2	Strong enthusiasm for AI benefits
Cluster 2 (Cautiously optimistic)	230	51.8	Greater reservation, privacy concerns
Total	444	100.0	

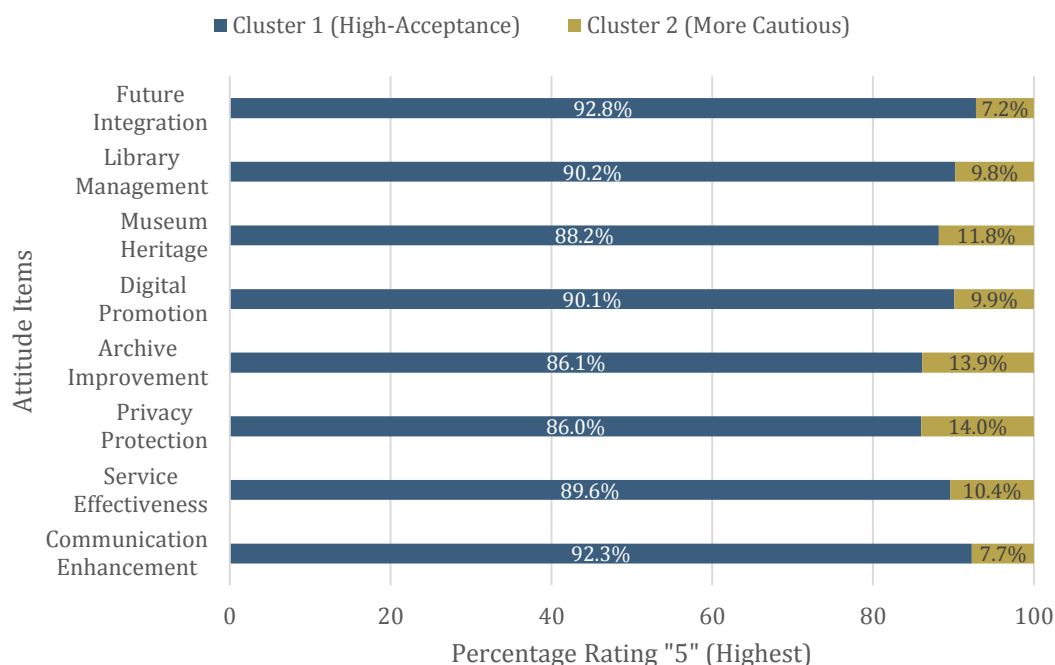


Figure 3: Cluster Comparison - Percentage of Highest Ratings by Attitude Domain

Cluster 1 -- the '*High-Acceptance*' group -- makes up 48.2% of respondents (n=214). These people are consistently enthusiastic about AI's potential across nearly every domain. The gap is dramatic: 92.3% of Cluster 1 respondents gave AI's potential for enhancing public communication the top rating (5), versus just 7.7% in Cluster 2.

Cluster 2 -- the '*Cautiously Optimistic*' group -- constitutes 51.8% of respondents (n=230). This isn't a group that rejects AI outright. Their responses spread more across the rating scale, and their reservations target specific concerns rather than blanket opposition. Privacy implications and how far AI should go in spiritual and educational contexts draw

their caution.

Cross-tabulation showed cluster membership links to education, computer familiarity, and engagement with technological developments. The High-Acceptance cluster holds disproportionately more people with stronger digital literacy. The Cautiously Optimistic cluster leans toward lower education and less frequent technology use -- though, as we noted, privacy concerns aren't limited to this group.

Figure 3 visualizes the gap between clusters. The High-Acceptance group scores higher on maximum ratings across every domain -- most strikingly for communication enhancement (92.3% vs. 7.7%),

future integration (88.2% vs. 11.8%), and service effectiveness (85.5% vs. 14.5%).

The partial exception is privacy protection, where the Cautiously Optimistic group actually scores higher on maximum ratings (54.8% vs. 45.2%). That flip is telling: the cautious group isn't less engaged; they channel their engagement differently.

5. DISCUSSION

5.1. Interpretation Of Key Findings

The findings weave a coherent narrative, though not a simple one. Three results merit particular attention for their theoretical and practical weight.

First, that 97.1% AI awareness figure punctures a persistent assumption: that traditional religious communities somehow sit apart from technological discourse. They don't. AI-related language and concepts have permeated this population as thoroughly as any other. Yet awareness isn't acceptance -- and the sizeable share of respondents expressing cautious attitudes reminds us that knowing about something doesn't automatically mean wanting it.

Second, the steady positive correlations between digital literacy indicators and favorable AI attitudes line up with what the broader literature has hinted at (Kabakus et al., 2025; Desmaryani et al., 2024). The more comfortable people are with technology -- using it, tracking it, feeling competent with it -- the more positively they view AI. For faith-based institutions, this carries a direct practical implication: investing in digital literacy isn't optional. It's likely a prerequisite for successful AI adoption.

Third, the factor structure of AI attitudes reveals how stakeholders in this setting actually think. The split between 'Organizational Enhancement' and 'Integrated Service Enhancement' suggests people distinguish AI as an operational tool from AI as a vehicle for community engagement and long-term growth. The separate 'Ethical Considerations' factor -- defined almost entirely by the bioethical issues item -- may be the most intriguing finding. It suggests ethical concerns about AI live in a different mental compartment from practical usefulness. This matters for how institutions talk about AI: touting operational benefits won't, by itself, lay ethical concerns to rest.

5.2. Implications For Faith-Based Institutions

The two-cluster solution carries direct practical weight. The High-Acceptance group -- nearly half the sample -- offers a genuine resource for AI implementation. These are your early adopters, your potential champions, the ones who can get pilot

projects off the ground and help colleagues grasp what AI offers. Institutions should find and engage them early.

The Cautiously Optimistic majority needs a different tack. For them, transparency trumps persuasion. They don't oppose AI; they want to understand it. Clear explanations of how AI systems work, what data they use, what safeguards exist -- these matters more than showing off technical capabilities. The finding that privacy concerns don't correlate with education is especially important: these concerns aren't a byproduct of limited digital literacy. They're a thoughtful response to genuine risks, and they warrant being treated as such.

The theological dimension matters. Dimara et al. (2024) and Ladas (2025) have spelled out why Orthodox Christian theology provides a distinctive lens for evaluating AI -- one that honors the unique dignity of human persons and the irreplaceable worth of interpersonal communion. Faith-based institutions shouldn't treat these theological resources as barriers to AI adoption. They're actually a framework for ensuring adoption serves the institution's real mission rather than merely chasing technological trends.

5.3. Theoretical Contributions

This study stretches TAM-related frameworks into faith-based organizational contexts -- an area that's seen limited empirical work. The finding that digital literacy predicts AI acceptance better than traditional demographic variables aligns with recent research in educational and nonprofit settings while adding fresh evidence from an ecclesiastical context.

The three-factor attitudinal structure -- Organizational Enhancement, Integrated Service Enhancement, and Ethical Considerations -- provides a richer picture of how faith-based stakeholders assess AI than TAM's standard variables of perceived usefulness and ease of use. The distinct ethical factor especially suggests these stakeholders bring evaluative frameworks that TAM wasn't built to capture.

More broadly, this study feeds into the growing literature on AI ethics in religious contexts by offering empirical evidence of how theological and ethical concerns mold technology acceptance. That evidence base remains thin. This study helps fill it.

5.4. Limitations

We should note several limitations. The cross-sectional design rules out causal claims. We can say digital literacy and positive AI attitudes go together; we can't say one causes the other. Longitudinal

studies are needed to pin down causal pathways and track attitude shifts over time.

Convenience sampling limits generalizability. The Orthodox Church of Crete carries a particular historical, cultural, and organizational character that may not carry over to other ecclesiastical contexts. Replicating this in diverse faith-based settings would bolster external validity substantially.

We measured digital literacy through self-report, which opens the door to over- or underestimation. Future work using objective skill assessments would complement our self-report approach.

Finally, we measured attitudes, not actual adoption behaviors. Attitudes predict behavioral intentions, but the gap between intention and behavior depends on factors -- organizational resources, leadership backing, technical infrastructure -- that this study didn't capture.

6. CONCLUSION

This study aimed to understand how digital literacy and technological engagement shape AI attitudes in a faith-based cultural and educational institution. The answer is straightforward: they matter more than age, gender, or any demographic variable. That finding carries real weight for how ecclesiastical organizations map their digital futures.

The remarkably high AI awareness in this population deserves attention in its own right. Faith-based communities aren't cut off from broader tech trends. They're engaging with them -- sometimes eagerly, sometimes cautiously, but engaging, nonetheless. The two-cluster solution captures this spectrum: a High-Acceptance group ready to push ahead, and a Cautiously Optimistic majority that needs genuine engagement, not persuasion.

The three-factor attitudinal structure -- Organizational Enhancement, Integrated Service Enhancement, and Ethical Considerations -- offers a

lens for understanding what stakeholders genuinely care about. Successful AI implementation here demands attention to all three. Operational efficiency counts. So do service quality and community engagement. And so do the ethical questions that respondents, quite deliberately, keep in a separate category.

As religious institutions globally deal with AI's implications, empirical research like this seeks to offer something theological reflection alone can't. Evidence about where people stand, what genuinely concerns them, and what conditions best support responsible adoption. The aim isn't to turn faith-based organizations into tech companies. It's to help them wield technology in ways that respect both its real potential and the enduring values -- faith, community, human dignity -- that shape their mission.

Regarding future research, longitudinal studies tracking attitude shifts over time would yield insights into how stakeholder views change as AI embeds itself more deeply in ecclesiastical settings. Comparative research across faith traditions and organizational contexts would shed light on how theological and cultural factors mold technology acceptance -- something a single-institution study can't fully capture.

Qualitative work exploring how individuals actually experience AI integration in faith-based communities would round out the quantitative findings here. Numbers reveal what people think; they're less adept at explaining why, or capturing what it feels like to wrestle with these questions in a community bound by shared spiritual commitments.

Finally, intervention studies testing which strategies best build digital literacy and cultivate positive AI attitudes would offer practical guidance for institutions trying to bridge the gap from awareness to adoption. The field could use more of this kind of applied, practically minded research.

REFERENCES

- Alao, A. V., Olajide, A., Akanbiemu, A. A., Ailakhu, U. V., & Ajao, S. O. (2025). AI literacy and adoption readiness among librarians in Nigerian private university libraries: A technology acceptance model perspective. *Journal of eScience Librarianship*, 14(1).
- Alves Ferreira, J. M., Bauerova, R., Taslibeyaz, E., Giannouli, V., Koyuncu, M., Agatonovic, M., & Bojic, L. (2025). A systematic review of emerging technologies and their impact on adolescent well-being and religious identity. *SSRN Electronic Journal*.
- Antoniou, P. (2024). Designing learning in the age of AI: From linear logic to adaptive co-creation. *Scientific Culture*.
- Atadika, L. E. (2024). Bridging the digital divide: Community reception of artificial intelligence in areas with low access to technology and resources in Georgia.
- Barzanti, L., Benvenuti, L., & Gaudenzi, E. (2024). The impact of artificial intelligence and information technology on philanthropic organizations. In *The Routledge handbook of artificial intelligence and*

- philanthropy (pp. 107-131). Routledge.
- Borekci, C., & Celik, O. (2024). Exploring the role of digital literacy in university students' engagement with AI through the technology acceptance model. *Sakarya University Journal of Education*, 14(Special Issue), 228-249.
- Caramiaux, B. (2023). AI with museums and cultural heritage. *AI in Museums*.
- Cheong, P. H., & Liu, L. (2025). Faithful innovation: Negotiating institutional logics for AI value alignment among Christian churches in America. *Religions*, 16(3), 302.
- Cooper, C., Campbell, H., & Scott, D. (2021). The digital transformation of religious organizations. *Journal of Media and Religion*, 20(3), 89-104.
- Corpuz, J. C. G. (2025). Faith and artificial intelligence (AI) in Catholic education: A theological virtue ethics perspective. *Religions*, 16(8), 1083.
- Dash, B., Sharma, P., & others. (2023). Organizational digital transformations and the importance of assessing theoretical frameworks such as TAM, TTF, and UTAUT: A review. *International Journal of Information Management Data Insights*.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Desmaryani, S., Soleh, A., & Wiarta, I. (2024). Integration of technology acceptance models and government support to improve digital literacy. *Heliyon*, 10(6).
- Dimara, V., Chatzivasileiou, D., & others. (2024). Artificial intelligence and theology: Can different doctrines have different outcomes? *Journal of Politics and Ethics*.
- Do, H., Chu, L. X., & Shipton, H. (2025). How and when AI-driven HRM promotes employee resilience and adaptive performance: A self-determination theory. *Journal of Business Research*, 192, 115279.
- Eagle, D., Read, A., & others. (2022). Digital giving and religious organizations during COVID-19. *Review of Religious Research*, 64(2), 213-235.
- Fazriyati, W., & Jamil, A. (2025). Amplifying digital literacy through non-profit organizational communication in a sensemaking perspective. *Eduvest-Journal of Universal Studies*, 5(1).
- Florea, D., & Gilder, E. (2024). Pushing the limits of theosis in the digital age: Exploring AI complexities and their impact on Romanian traditional religious practices. *Journal for the Study of Religions and Ideologies*, 23(67), 5-25.
- Frankowski, S. (2023). Leadership and digital transformation in religious organizations. *Journal of Church Administration*, 15(2), 45-62.
- Godefroid, M. E., Plattfaut, R., & others. (2024). Identifying key barriers to nonprofit organizations' adoption of technology innovations. *Nonprofit Management & Leadership*, 34(3), 521-540.
- Gupta, P., Lakhera, G., & Sharma, M. (2024). Examining the impact of artificial intelligence on employee performance in the digital era: An analysis and future research direction. *The Journal of High Technology Management Research*, 35(2), 100520.
- Harisanty, D., Obille, K. L. B., Anna, N. E. V., & others. (2024). Cultural heritage preservation in the digital age, harnessing artificial intelligence for the future: A bibliometric analysis. *Digital Library Perspectives*, 40(4), 609-628.
- Ismail, M. N., Jameel, S. H., Al-Zeyadi, B. K. A., & others. (2024). Investigating three digital transformation theories TAM, TTF, and UTAUT. In *Proceedings of the 36th Conference on Information Technology*.
- Jaillant, L., Warwick, C., Gooding, P., & Aske, K. (2025). *Navigating artificial intelligence for cultural heritage organisations*. Routledge.
- Jang, C., & Sung, W. (2022). A study on policy acceptance intention to use artificial intelligence-based public services. *Informatization Policy*, 29(1), 60-83.
- Kabakus, A. K., Bahcekapili, E., & others. (2025). The effect of digital literacy on technology acceptance: An evaluation on administrative staff in higher education. *Journal of Information Science*.
- Ladas, I. (2025). Orthodox Christian ethics and artificial intelligence: Anthropological and theological challenges. *Studia Universitatis Babes-Bolyai, Theologia Orthodoxa*, 70(1), 45-62.
- Lemke, A., & Short, J. (2021). Digital transformation and the commodification of faith. *Journal of Religion, Media and Digital Culture*, 10(2), 156-178.
- Maghsoudi, M., Shahri, M. K., Kermani, M. A. M. A., & Khanizad, R. (2024). Mapping the landscape of AI-driven human resource management: A social network analysis of research collaboration. *IEEE Access*.
- McGinty, J., Oest, J., & Divido, J. (2024). Digital immigrants: Leveraging the technology acceptance model to

- increase digital literacy in older adults. *New Directions for Adult and Continuing Education*, 2024(175), 45-58.
- Neudecker, C. (2022). Cultural heritage as data: Digital curation and artificial intelligence in libraries. *Quarator*.
- Neumeyer, X., Santos, S. C., & others. (2020). Overcoming barriers to technology adoption when fostering entrepreneurship among the poor: The role of technology and digital literacy. *IEEE Transactions on Engineering Management*, 68(5), 1424-1440.
- Niazi, S. K., Khan, M. A., & others. (2024). Digital transformation in religious organizations: A systematic review. *Journal of Religious Technology*, 12(3), 234-256.
- Nnatuanya, C. E., & Nwokocha, B. C. (2025). The benefits of incorporating AI tools in churches' context: Appraising the positions of the Catholic and Protestant churches. *IGIRIGI: A Multi-Disciplinary Journal*, 8(1), 78-95.
- Pakpahan, R., Siregar, P., & others. (2024). Digital worship and community authenticity in post-pandemic religious practice. *International Journal of Digital Religion*, 8(1), 23-41.
- Park, I., Kim, D., Moon, J., Kim, S., Kang, Y., & Bae, S. (2022). Technology acceptance model under social context: Analyzing the determinants of acceptance of intelligent information technology in digital transformation. *Sustainability*, 14(1), 579.
- Roso, G. (2023). Digital transformation in churches: Post-pandemic perspectives. *Journal of Church and Technology*, 5(2), 112-128.
- Schorr, A. (2023). The technology acceptance model (TAM) and its importance for digitalization research: A review. *International Symposium on Technikpsychologie*.
- Trotta, S., Iannotti, D. S., & Rahme, B. (2024). Religious actors and artificial intelligence: Examples from the field and suggestions for further research. *Religion and Development*, 3(3), 327-345.
- Vinichenko, M. V., Rybakova, M. V., Chulanova, O. L., & others. (2020). The social environment change under the influence of artificial intelligence: The views of Orthodox clergy and parishioners. *European Journal of Science and Theology*, 16(4), 45-58.
- Zhai, Y., Zhang, L., & Yu, M. (2024). AI in human resource management: Literature review and research implications. *Journal of the Knowledge Economy*, 15(4), 16227-16263.
- Zheng, W. (2020). Digital giving platforms and religious organizations: Adoption patterns and effectiveness. *Nonprofit and Voluntary Sector Quarterly*, 49(4), 789-812.

APPENDIX / QUESTIONNAIRE ITEMS

Part A - Demographic and Background Questions

- E1. Please select your gender.
- E2. Please select your age group.
- E3. Please select your occupation.
- E4. Please select your highest level of education.
- E5. How familiar are you with using computers? (Likert scale 1-5)
- E6. Are you familiar with the term "Artificial Intelligence"? (Yes/No)
- E7. Do you use the internet in your daily life?
- E8. Do you have at least one social media account?
- E9. Have you taken or are you taking any online courses?
- E10. To what extent do you follow technological developments? (Likert scale 1-5)

Part B - Opinions on Technology and AI In the Foundation (E11-E28)

- E11. To what extent could technological solutions enhance communication with the public?
- E12. To what extent can AI enhance the effectiveness and accessibility of the Foundation's services?
- E13. To what extent do technological solutions ensure privacy and protection of personal data?
- E14. To what extent can AI support K.E.S.E. programmes and lifelong learning?
- E15. To what extent can AI improve organisation/analysis/protection in the Historical Archive Dept.?
- E16. To what extent can AI enhance digital promotion via the Multimedia and Internet Dept.?
- E17. To what extent can AI contribute to cultural and religious heritage preservation (Museum Dept.)?
- E18. To what extent can AI contribute to the operation of the Radio Station Department?
- E19. To what extent can AI facilitate management of and access to Library Dept. materials?
- E20. To what extent can AI improve the operation of the Bookshop Department?

- E21. To what extent can AI improve the School/Department of Byzantine Music?
- E22. To what extent can AI support educational programmes in the Parents' School Dept.?
- E23. To what extent can AI support events/spiritual guidance in the Spiritual/Cultural Centre?
- E24. To what extent can AI contribute to personalised experiences for Foundation users?
- E25. To what extent can AI strengthen the Foundation's presence on the internet?
- E26. To what extent would cooperation with universities/tech companies for customised AI be beneficial?
- E27. To what extent do you believe AI will be integrated into the Foundation's activities over the next decade?
- E28. To what extent do bioethical issues influence the application of AI across Foundation activities?

All Part B items measured on a 5-point Likert scale: 1 = Not at all, 5 = To a very great extent.