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Digital sanctuary: exploring security and privacy concerns of congregants in the virtual church

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ABSTRACT

As contemporary churches continue to hire media teams to create and disseminate growing amounts of online content, questions of safety, security, and privacy are warranted. This study focuses on the case of a church in Ghana and explores the complex interplay between, ethical, security, and privacy issues in the online church. Data collection involved 170 survey respondents and eight (8) interview participants. The study found that convenience, flexibility, and device accessibility drove congregants' reliance on the digital platforms of the church. However, there were discernible privacy and safety concerns like invasion of privacy, unauthorized access to personal information, potential for identity theft, and misuse of personal data for targeted advertising. While diverse perspectives were held by members of the media department of the church, there was a general lack of concern about the safety and security ramifications of disclosing personal sensitive information to audiences outside of the physical church as it was viewed as a potential point of inspiration for others. We recommend that churches develop guidelines around concerns raised by congregants to optimize congregants' online security and safety, while also providing continuous awareness programs for congregants to protect their security and safety and be ethical users of digital platforms.

Introduction

Due to a paradigm shift and the widespread use of social media, modern-day churches can successfully share the gospel without worrying about geographical restrictions (White et al., 2016). Notably, the COVID-19 pandemic sparked a remarkable transformation in this regard, as churches swiftly embraced digital platforms to ensure the continuity of religious activities during the period when there were physical and mobility restrictions. Live streaming services on platforms, like Facebook and YouTube, allowed congregants to participate in worship right from their homes. This preserved the spiritual connection in situations when it was impossible to be physically present in the church (Boaheng, 2021). During the pandemic, virtual prayer meetings, Bible studies, and pastoral care became integral to fostering community amidst social distancing. Digital giving options also ensured compliance with the physical contact restrictions while sustaining financial support to the church. Moreover, churches leveraged social media for outreach and evangelism, broadening their reach and message impact. This adaptation not only helped churches to survive but also showcased their resilience and innovation and offered valuable lessons for the future of religious engagement in an increasingly digital age (Iddi et al., 2021).

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Africa's church landscape and the use of communications and digital technologies

With over 600 million Christians – roughly a quarter of all Christians worldwide – Christianity has currently spread throughout many parts of Africa (Oyedokun, 2023). These Christians represent a variety of denominations, traditions, and faiths, including the Anglican Church, the Roman Catholic Church, and the Pentecostal and Charismatic movements (Gala, 2024). As of 2024, Ethiopia had the greatest number of Christians in Africa, with approximately 77.5 million self-identifying as Christians; Nigeria had the second-highest number, with 74.4 million (Gala, 2024). According to the Ghanaian census of 2021, 71.3% of Ghanaians identified as Christians, making Christianity the country's most common religion (Data Commons, 2022).

The early religious leaders in Africa used a variety of media platforms to interact and communicate with society to spread Christianity. Books, pamphlets, magazines, and musical works were among the channels used (Ihejirika, 2009). In Ghana, the history of the press/media cannot be told without mentioning the establishment of the first missionary newspaper, the Christian Messenger and Examiner in 1859 which was edited by white Methodist missionaries, and later the Christian Messenger, established in March 1883 by the Basel Mission. These publications laid the groundwork for significant media engagement in Ghana (Schweizer, 2000), and played a crucial role, beyond evangelistic and missionary literacy initiatives, in political and social activism (Andrews, 2009).

The expansion of the media landscape to include broadcast services saw growth and integration of electronic media into Pentecostalism and considerably enhanced the reach of Christianity (Maxwell, 1998). Currently, the strategic use of television and other mass media, including digital platforms, in Ghana has emerged as a significant means of extending invitations to the public and promoting and advertising churches to a wider audience and for the general facilitation of church activities (White et al., 2016). Notably, many charismatic and Pentecostal religious leaders have a sizable following on social media and actively engage with their followers. At the time of finalizing this article, the Facebook pages of some notable clergy in Ghana such as Dr. Mensa Otabil, of the International Central Gospel Church, had 1.2 million followers. Bishop Dag Heward-Mills, the founder of the Lighthouse Group of churches, had 3.6 million followers and Archbishop Nicolas Duncan-Williams of Action Chapel had 1.4 million followers. There are millions of followers on their official church pages as well.

The Keeper's House Chapel International (TKHCI), which is used as a case in this study, is a member of the Ghana Pentecostal and Charismatic Council (GPCC). The church complements its physical services with active digital platforms, including its website and various digital media channels such as Facebook, Instagram, Snapchat, TikTok, X, and WhatsApp. These digital platforms serve as vital channels for outreach and engaging with congregants and virtual platform followers.

Problem statement

Within the context of communication studies, privacy is a concept that has undergone diverse scrutiny, drawing from a range of disciplines and characterized by varying descriptive, empirical, and normative perspectives (Sevignani, 2016; Trepte & Reinecke, 2011). The initial postulations of privacy were positioned as a fundamental human right and articulated as the 'right to be left alone' (Warren & Brandeis, 1890, p. 75). Subsequently, privacy has been subject to more nuanced definitions, such as 'the assertion of individuals, groups, or institutions to determine the when, how, and to what extent information about them is conveyed to others' (Westin, 1967, p. 7) or 'the purposeful regulation of access to one's personal self' (Altman, 1975, p. 24).

Digital safety, often referred to as e-safety or virtual safety, carries a shared definition that holds the aim of safeguarding individuals and communities within the virtual realm, with direct relevance to the church. In essence, digital/virtual safety is about mitigating risks related to cyber threats, ensuring privacy protection, and preventing exposure to harmful content. These considerations are particularly pertinent in the church's online presence, where fostering responsible internet usage is crucial (Knijnenburg et al., 2022). Therefore, as churches rapidly take on digital technologies, they should

not lose sight of the potential dire consequences related to privacy and security risks within the online sphere. Badmos (2014) argues that as the digital church continues to flourish, the intricate and often unforeseen concerns around security and privacy become more apparent. Consequently, various scholars (for example, Crumpton, 2018; Hutchings, 2014; Dyikuk, 2019 have explored the merits and demerits of the utilization of digital platforms within religious settings. While such studies are relevant, most of them did not delve deeply into the virtual safety concerns of congregants in particular nor ethical issues that guide the church's online activities.

Moreover, Samarasinghe et al. (2023) assert that the definition of digital safety places a dual responsibility on both users and platform owners. Thus, we argue that both parties (congregants and church leadership/platform managers) are instrumental in upholding digital safety and security in the church's virtual environment. This is because security alerts and user awareness are linked to actions (on the part of users and platform owners/managers) that safeguard an individual's online privacy and security, as well as the privacy of members in the case of a virtual church (Benson et al., 2015). Thus, in a context where virtual churches have become the norm, compelling churches to invest in technology and human resources to be able to reach and maintain church membership, it is crucial to examine how a church that has positioned itself as vibrant and modern considers issues of privacy and security when deploying digital platforms for its engagements and what concerns of safety and security its members may have.

Furthermore, in Ghana, various research endeavors have explored the utilization of digital platforms in the context of the church, with notable contributions from scholars such as Asare-Kusi (2007), White et al. (2016), Bonsu and Belk (2010), Acheampong (2014) and Animante et al. (2021), exploring the broader aspects of the adoption and impact of social media within religious environments. Remarkably, there is a dearth of empirical evidence for the nuances of privacy and security issues related to Ghanaian churches' use of digital platforms.

Therefore, by providing empirical evidence and insights into the particular privacy and security concerns of members of a thriving church that has fully incorporated digital technology into its operations, this study aims to address this gap. The study, therefore, aimed to explore the safety and privacy concerns that congregants have regarding their church's online engagements and the privacy, security, and safety measures taken by the church to ensure members' privacy in the virtual church. The research questions of the study were thus:

(1) What privacy and safety issues arise when members interact with their church's digital platforms and what recommendations or strategies do they offer to address these concerns?
(2) What ethical considerations, including established boundaries, direct the church's online engagements?

Literature review

The rise of virtual churches represents a unique convergence of faith and technology. But just as there are concerns about safety in the physical church (Russell et al., 2023), offering both novel opportunities, there are complex challenges, like online threats, within the virtual church sphere that need to be given scholarly attention. Wisniewski et al. (2017) contend that although there are many privacy settings available, users of digital platforms rarely utilize them all or do so in the same way. Rather, they follow one of a limited number of unique privacy management techniques that are partly correlated with their understanding of privacy features. Benson et al. (2015) also discovered that information sharing is statistically and adversely correlated with control over personal information in social networking environments. Nonetheless, there was a statistically significant positive impact on information disclosure from both security alerts and user awareness.

A 'privacy paradox' between privacy attitudes and behaviors has also been found, wherein people who care about their online privacy divulge personal information – often only to get the attention of peers in an online social network (Kokolakis, 2017). This may be an unintentional action borne out of

inadequate knowledge about the consequences of virtual/digital platform usage. Linking this to the virtual church environment, information about congregants, including their testimonies and photos, can be shared with the intent of disseminating them to other members and followers exclusively. However, because of the way algorithms operate, this information might leave the church setting – whether it be physical or virtual – and reach other platform users who might chance upon it online. So, although one, might be careful about their security and privacy in the virtual environment, the church may compromise them.

The studies above support the need to educate platform users about privacy and safety features and how to configure them to maximize their online security and safety. It also points to some form of agency on the part of those who set up platforms, like church digital platforms, to control the platforms to ensure the safety and security of their followers. We, hence, argue that religious organizations' appreciation of the essence of digital safety and integrating it into their strategies is of utmost significance as digital technology usage inherently presents diverse threats. This may entail implementing measures to safeguard congregants from a spectrum of risks linked to online platforms, including cyberbullying, identity theft, scams, malware, and inadvertent exposure to inappropriate content (Samarasinghe et al., 2023) since the virtual church operates within a bigger virtual community. Hence, by prioritizing digital safety within the church's online presence, religious organizations contribute to establishing a safer and more secure digital landscape that aligns with their mission of spiritual and societal well-being.

Animante et al. (2021) studied the relationship between church activities and digital media and pointed to the need for comprehensive policies that direct churches' usage of these platforms. They contend that to protect the church's interests, such policies ought to clearly define acceptable and inappropriate uses. Their study, however, did not account for the security and safety concerns of congregants that would warrant or inform the provision of guidelines or policies. Significantly, most studies within the Ghanaian context did not look at how churches are safeguarding their virtual followers. Studies conducted in Nigeria revealed that church virtual platforms exposed congregants to online harassment, inappropriate interactions, and other risks (Badmos, 2014; Nsereka & Nwanze, 2021). In the Ghanaian context, the few related studies essentially explored the relationship between the church and virtual platforms, including how they use them and the benefits they obtain from them (Animante et al., 2021, Asamoah-Gyadu, 2005; Ayikwei, 2020; Benyah, 2018; White et al., 2016). There is still a knowledge vacuum about the ethical and security worries that church stakeholders might have about their digital interactions within the virtual church space. Considering how much churches rely on their congregants to build their virtual platforms, it is imperative to ascertain the safety and security concerns congregants might have and what ethical guidelines inform the church's virtual engagements in a bid to secure the safety and security of virtual church congregants.

Theoretical framework: communication privacy management (CPM) theory

The communication privacy management (CPM) theory was propounded by Sandra Petronio in 1991. The goal of the theory is to provide an understanding of the considerations based on which individuals maintain and coordinate their privacy boundaries within different communication contexts and with different communication partners, largely based on the costs and advantages of information disclosure (Petronio, 1991). According to the CPM, people rely on a rule-based management system to regulate the accessibility of their disclosed private information. The theory suggests that in negotiating privacy boundaries when conflicting expectations for privacy management are found, or when established assumptions are violated, whether on purpose or accidentally, it can cause a troubling sense of 'border turbulence' (Petronio, 2002).

According to Petronio, the five pillars of CPM are as follows: people believe they should have control over their personal information because they are its owners; personal privacy rules provide people control over their data (thus, churches must provide avenues to do so even in the virtual church environment); a person's private information becomes jointly owned with others when they disclose it

to them or grant them access to it (in this case the church and the congregants); co-owners of confidential data must agree on reasonable privacy guidelines for disclosing information to third parties; and boundary turbulence is likely to occur when co-owners of private information fail to successfully negotiate and abide by mutually held privacy norms (Griffin et al., 2023).

These five pillars call for the ability of congregants to control their personal information by setting out some rules or guidelines around the sharing of information within the church environment, without which people may have concerns about the unauthorized and indiscriminate sharing of personal information to third parties, who may be outside the physical church (i.e., virtual church). Consequently, CPM requires that sensitive personal information is kept confidential or, at least, anonymized in the case of a church.

The CPM theory alludes to the importance of respecting boundaries and managing shared information to uphold confidentiality and trust within the church community. In the physical church environment, congregants may share personal information, such as prayer requests, personal struggles, or testimonies about their achievements, based on the safety, confidence, and trust they have in the church and the congregants present, expecting that the information stays within the confines of the physical church. But it is also important for the church to provide other avenues for congregants who want to privately or anonymously share sensitive personal information even in the physical church, bearing in mind that some sensitive details could be disclosed to third parties and could lead to negative repercussions.

The dynamics become more complex when churches livestream their services. This is because, during live-streamed services, individuals in the physical church may share personal stories, prayer requests, or other sensitive information with the confidence that they are in a secure environment. However, by the nature of live streaming, there is no control over who has access to the content, how widely it is distributed, and what and how the content is used by third parties. Besides, some congregants may attend church services and may not want persons outside the physical church to know where they are or what they share in the church. Thus, although churches livestream their services, they must carefully ensure the privacy of those participating in services, particularly when sharing their personal or sensitive information, by instituting some confidentiality and anonymity measures.

Methods

The case – the keeper's house chapel International (TKHCI)

The rationale for selecting the Keeper's House Chapel International (TKHCI) as the focal point of this research stems from its enduring and robust online presence across various digital platforms both preceding and following the COVID-19 pandemic when there was a massive adoption of digital media for church services. The church's sustained engagement on these platforms presented an intriguing and pertinent context for the study and provided a unique opportunity to delve into the multifaceted dynamics of online interactions within a religious community.

Research approach

The research adopted a mixed methods approach. The approach is grounded in the belief that the integration of diverse data collection methods yields a more comprehensive and insightful understanding of a research problem than relying solely on either quantitative or qualitative data (Creswell & Creswell, 2017)., As also highlighted by Shorten and Smith (2017), this approach allows researchers to explore a broader spectrum of a subject, examining it from multiple perspectives (Poth & Munce, 2020), and incorporating data from various sources to investigate complex phenomena, thereby mitigating the limitations inherent in exclusive reliance on quantitative or qualitative methods. In this case, the mixed methods approach helped us explore the two research questions grounding the

study. The quantitative approach helped get quantitative responses from congregants, including factors influencing their participation in virtual church services, church programs that congregants participated in online, congregants' ethical and safety concerns in digital church interactions, awareness of church digital policies, proposed strategies to address safety and ethical challenges. The qualitative approach helped us establish the ethical considerations that direct the church's online engagements from the perspective of the Media Department.

Recruitment of survey respondents

An introductory correspondence, which spelled out the project aims and scope, was addressed to the head pastor of TKHCI, Madina branch, to secure access to the congregation. Following this, the head pastor consented and facilitated our access to the second service congregants, which constituted a population of 300. Survey respondents were randomly selected to take part in the study. The specific detail about each approach are discussed in the next sections.

Quantitative: survey

The study employed a survey methodology to investigate congregants' preferences in terms of engagement modes, the impact of virtual participation, ethical and security concerns, and their perceptions of the church's security measures.

Participants in the survey were randomly selected. Data collection took place over two Saturdays and three Sundays. Questionnaires were self-administered during church meetings, with forms completed and returned on the spot or during subsequent visits to church services. The respondents used an average of 18 minutes to fill the questionnaire. At the end of the data collection, 170 respondents had taken part in the study, representing a 57% response rate out of a population of 300. The sample size was considered representative as it was consistent with Krejcie and Morgan's (1970) formula which suggests a sample size of 169 for a population of 300.

The gathered data were cleaned, coded, and subjected to rigorous quantitative analysis, addressing the key research questions and objectives. Data coding and analysis were aided by the Statistical Package for Social Sciences (SPSS).

Profile of survey respondents

The survey cohorts predominantly comprised a balance of male and female respondents, and a broad array of age groups, thus offering a valuable diversity of viewpoints and enhancing the depth and richness of the research data set. A detailed breakdown of the number of male and female participants can be found in Table 1, providing a quantitative overview of the gender composition within this study.

Table 1. Demographic profile of respondents.

Gender	Frequency	Percent
Male	70	41.2
Female	100	58.8
Total	**170**	**100.0**
Age distribution	**Frequency**	**Percent**
18–24	32	18.8
25–34	68	40.0
35–44	47	27.6
45–54	14	8.2
55–64	5	2.9
65 or above	4	2.4
Total	**170**	**100.0**

Source: **S**urvey data.

Table 2. Profile of interview participants.

Pseudonym assigned	Designation/Unit
Interviewee 1	Media Department
Interviewee 2	Videography Unit
Interviewee 3	Videography Unit
Interviewee 4	Videography Unit
Interviewee 5	Editing Unit
Interviewee 6	Social media Unit
Interviewee 7	Videography Unit
Interviewee 8	Cinematography Unit

Source: Qualitative data.

As seen in Table 2, close to 60% (58.8%) of the respondents were females, while 41.2% of the respondents were males. Respondents also represented a broad array of age groups, showcasing a heterogeneous representation of individuals. Respondents aged between the ages of 25–34 years formed the largest cohort (40%) who responded to the survey, followed by those aged between 35–44 years (27.6%). The youngest cohort of respondents were between the ages of 18–24 (less than 20% of the total respondents). Respondents between 45 to 65 and above cumulatively formed less than 15% of the total respondents.

Qualitative: in-depth interviews

The purposive sampling technique was employed for the selection of interview participants. This approach facilitated the deliberate selection of participants based on predefined criteria that aligned with the research question: What ethical considerations direct the church's online engagements? following the guidelines proposed by Saumure et al. (2008).

Recruitment of interview participants

Participants were recruited through purposive sampling. Inclusion criteria included individuals who were actively involved in the church's media department, and playing roles such as managing the church's social media accounts, being involved in live streaming of church events, and capturing detailed shots of congregants during church services to manage the church's digital platforms. Each interview lasted between 30 minutes and one hour. A total of eight (8) interviews were conducted.

Instrumentation, data collection processes and data analysis

A semi-structured interview guide was utilized, allowing flexibility to explore additional details based on the interviewees' responses. The interviews were semi-structured, which enabled the interviewer to adapt questions and delve deeper into the participants' experiences and perspectives

The interviews were recorded, transcribed, and subjected to thematic analysis, following Braun and Clarke's (2006) six-step framework for conducting thematic analysis. Pseudonyms were assigned to interview participants per the agreement to grant them anonymity. Below is a demographic profile of interview participants.

Data presentation

This research employed an integrative mixed methods approach, known as a convergent design (Fetters et al., 2013). In this concurrent design, both qualitative and quantitative data were collected and analyzed simultaneously, enabling an interactive process where modifications to data collection procedures were made iteratively. This also informed how results are presented.

Ethical considerations

Gatekeeper permission was sought before data were collected. No participant was offered an incentive to take part in the study. Following Schinke and Gilchrist's guidelines, as referenced in Kumar (2011), informed consent of participants was sought for all data collection methods. To safeguard participant confidentiality all information provided by respondents remained anonymous. Additionally, participants were made aware of their right to discontinue the interview at any time without facing any consequences.

Results

Before delving into specifics about safety and security, it was thought necessary to ascertain the role that virtual platforms play in the lives of respondents and the church. We posed a few questions to respondents to ascertain this. The findings indicated a variety of communication techniques and technologies that served as platforms to know about the church, participate in church activities and maintain ties to the church. Specific results are discussed below.

The function of virtual platforms in the church and congregants' lives

To determine the role that digital platforms play in attracting people to the church and eventually helping them become members, we asked respondents to indicate the means through which they first learned about TKHCI. Table 3 contains specifics regarding the results.

The results indicate that although social media accounts for nearly a quarter (22.9%) of how members came to learn about the church, word of mouth remains the primary method (53.5%) through which individuals learn about and join the church. Additionally, approximately 12.9% of respondents were introduced to the church through church events, while nearly five percent were reached through community outreach efforts. This distribution underscores the significance of a varied approach to communication, emphasizing the role of interpersonal connections alongside digital and community-based strategies in shaping individuals' awareness and involvement.

Factors shaping congregants' choices to engage in virtual church services

We asked about congregants' motivations and reasons for opting for virtual participation. Dominantly, convenience and relevance of content were the main reasons respondents joined the Church's online church service as shown in Table 4.

Interviews with key members of the media department of the church revealed a conscious effort by the church to provide an opportunity for members to seamlessly engage with church activities even when they are not physically present.

> We decided to be on all the platforms. We want to connect with our other congregants outside the country and that is why we are on most major social media platforms. At the same time, we want them to be blessed with our Daddy's sermons. We post the sermons the man of God preaches every morning on the church's WhatsApp platforms and share the same video on Facebook and Twitter. Normally, the video is about two minutes. We post these messages to

Table 3. How congregants first learned about the church.

	Frequency	Percent
Word of Mouth	91	53.5
Online search/social media	39	22.9
Church events	22	12.9
Community Outreach	8	4.7
Other	7	4.1
Total	167	98.2

Source: Survey data.

Table 4. Factors influencing congregants' participation in virtual church services.

	Responses	
	N	Percent
Convenience	127	45.4%
Relevance of content	72	25.7%
Availability of technology/devices	49	17.5%
The desire for social interaction	26	9.3%
Other	6	2.1%
Total	280	100.0%

Source: Survey data.

ensure that our church members and followers are growing in the Lord. We also stream our mid-week service which takes place on Wednesdays as well as our morning flavours [morning prayers] which takes place every Saturday morning. We also stream live our major programs, such as Take-Off Conference and prophetic programs. (Interviewee 1)

The above quote highlights how TKHCI has integrated virtual platforms into its church operations in a comprehensive way. This adaptation follows current trends in using virtual platforms for spiritual outreach and involvement. The church efficiently communicates its message to members and followers by utilizing virtual platforms such as Facebook, WhatsApp, Twitter, and live streaming. This encourages spiritual development and ensures active involvement in a variety of church events. This strategy highlights the church's dedication to growing and supporting its congregation in the digital era while also facilitating accessibility.

How congregants utilize church virtual platforms

The use of virtual platforms by congregants of TKHCI is influenced by factors such as convenience, information relevance, and the quest for social interaction, as indicated in Table 3. The church programs that church members actively participate in online are outlined in Table 5.

From the survey, nearly 33% of the respondents had engaged with online sermons provided by the church, while over half had participated in online live-streamed events, such as conferences and seminars (25%), and online prayer meetings offered by the church (24%). Participation in online Bible study groups was comparatively lower, with approximately 16% of the respondents taking part since Bible studies are normally done in person. These results emphasize the importance of optimizing virtual platforms as a communication strategy to cater to varying congregational preferences, enabling the church to better serve its members through its digital platforms.

Table 5. Congregants' participation in virtual services.

	N	Percent	Percent of Cases
Sermons	115	32.8%	69.3%
Prayer Meetings	85	24.2%	51.2%
Bible Study Groups	55	15.7%	33.1%
Live-streamed events such as conferences, seminars, etc.	89	25.4%	53.6%
Other	7	2.0%	4.2%
Total	351	100.0%	211.4%

Source: Survey data.

Table 6. Congregants' ethical and safety concerns in digital church interactions.

	N	Percent	Percent of Cases
Invasion of privacy	88	34.4%	55.3%
Unauthorized access to personal information	70	27.3%	44.0%
Potential for identity theft	44	17.2%	27.7%
Misuse of personal data for targeted advertising	35	13.7%	22.0%
Other	19	7.4%	11.9%
Total	256	100.0%	161.0%

Source: **S**urvey data.

Safety and security concerns in the virtual church and ethical principles guiding the church's online activities

Table 6 offers insights into the ethical and safety concerns held by congregants during their digital interactions within the virtual religious community. The results provide evidence for congregants' apprehensions regarding privacy invasion (55%), unauthorized access to personal information (44%), potential identity theft (28%), and the improper use of personal data for targeted advertising (22%).

Although the survey results reveal congregants' ethical concerns regarding their church's digital platforms, it is worth noting that various members within the media department held diverse perspectives on this matter. A camera crew member expressed a viewpoint that presumes that the virtual church is a spiritual environment that does not have ethical or safety implications:

> The church is not like any other secular institution. Immediately you enter the church everything goes on our platform. You see, if the man of God is revealing something about you and it's on camera, to me there is nothing wrong with it. Your story might even increase the faith of someone watching on Facebook or Instagram. Spiritual things are different. So, I don't see any security and ethical issues here. Our main aim is to preach Christ in many ways, [...] and this is also our way. We reveal to encourage others to watch. (Interviewee 3)

A member of the social media team also held the view that the virtual church could serve as a publicity platform for congregants which could potentially accrue positively to them:

> Sometimes if the man of God is preaching and he mentions the occupation of church members and even their names, there is nothing wrong with it. He mostly does it intentionally, kind of an advertising strategy for that individual. You see a lot of people watch our digital platforms, and he uses these channels to advertise some of the things that some of the church members do so that he can get a lot of market for them. So, immediately the man of God starts to talk about a church member and what he/she does, you see that the cameramen put the camera on the person for the person to be seen, so it is all about advertising. It is to help the individual and not the church. (Interviewee 6)

Although there is a seemingly oversimplified perspective about the ethical implications when it comes to the virtual church among those in charge of the church's (virtual) communications and media platforms, the ethical and safety concerns among congregants in digital interactions call attention to critical issues, notably privacy invasion and unauthorized access to personal data. The findings underscore the imperative for the church to address these concerns comprehensively in their digital interactions. Churches need robust strategies to bolster privacy and security in the context of online church services, acknowledging the inherent relevance of ethics and safety in all forms of communication.

Ethical considerations directing the church's online engagements

There seemed not to be any formally-established standard guidelines driving the church's virtual engagements. Thus, the team in the media department relies mostly on subjective assessments, as indicated by Interviewee 2:

Table 7. Proposed strategies to address safety and ethical challenges.

	Frequency	Percent
Access control/more safety measures	4	15.4
Privacy/Anonymize responses	15	57.7
Already enough measures	2	7.7
Prevent unnecessary ads	2	7.7
Online Education	3	11.5
Total	26	100.0

Source: Survey data.

> *No documented policies or layout framework of rules says don't do this or do that in Keeper's House Chapel International [...] whatever we do virtually as a church is based on our individual intuition.*

In the absence of formalized guidelines, the team in the media department relies mostly on subjective assessments and judgment. This means that when the team is ethically aware and conscious they would likely factor in issues of safety, security, and other ethical practices to ensure virtual church members are safe in the virtual church space. A member of the videography crew alluded to this:

> *There are no policies that guide our virtual engagements [...] sometimes you are shooting and you put the camera on somebody and the person will tell you don't put the camera on me. We could see that the person is not comfortable having the camera on him/her so you spot the person that this person does not want the camera to be on him or her. So, we look at the reaction of the congregants and it directs whom we should put the camera on or whom to avoid. There are no policies but from our conversation so far with you, I think the church must think of one.* (Interviewee 7)

Congregants' recommendations for addressing safety and ethical concerns

In response to the wide array of ethical and security concerns voiced by congregants within the context of digital interactions, respondents were asked to make some recommendations for addressing the challenges and issues that are inherent to the church's use of digital platforms. Results are discussed in Table 7.

When asked about their preferences for ethical and safety measures within the church, a significant 57.7% of participants expressed a need for enhanced privacy and anonymity during sensitive activities like impartation services, anointing services, and healing services. An additional 15.4% of participants expressed interest in the implementation of access control and enhanced safety measures, while 11.5% favored the introduction of online education initiatives.

Discussion of results

The findings of this study point to the evidence that digital platforms, particularly social media, play a crucial role within the TKHCI community by enhancing engagement with activities of the church and also strengthening interpersonal bonds which Animante et al. (2021) allude to. Additionally, this study validates the findings that imply social media platforms give churches access to a wider audience and serve as advertising and promotion tools (Asamoah-Gyadu, 2005; White et al., 2016). The church's media activities are also manned by a dedicated team, similar to what Roberto (2022) refers to.

Interview results underscored one significant advantage of the church's digital presence: its commitment to inclusivity for members unable to attend physical services. This commitment is demonstrated through consistent live-streaming of various services and events, including Sunday services, mid-week services, annual conferences, and prophetic services, across digital platforms, notably Facebook. Survey data further indicated that the majority of participants joined digital services due to the convenience they offer, similar to what Crumpton (2018) found. This finding also signals

how digital platforms have become essential for spiritual connection, offer a sanctuary for worshippers (Campbell, 2020), and make the church accessible to members who are unable to attend in-person gatherings (White et al., 2016).

The findings further spotlight the advantage TKHCI, as a church, gains from digital platforms, particularly through the effective use of social media, in broadening the church's outreach beyond traditional geographical boundaries. It was revealed that a considerable number of congregants initially discovered the church through various digital media platforms, and subsequently became actively engaged members. The strategic utilization of digital platforms hence serves as a significant method for extending invitations to the wider public. Notably, beyond the efforts of the church, members can reshare materials on the church's social media platforms and e-invitations sent to them with their networks as an evangelistic campaign and contribute to the church's outreach and growth efforts.

The study thus confirms that digital platforms are a useful tool in promoting churches to a diverse audience and undoubtedly contribute to the grounding and signals fruitful facilitation of church activities within Ghana's charismatic and Pentecostal church landscape (White et al., 2016). Consequently, churches that are leveraging digital platforms for their operations can attract and engage individuals who may not have otherwise encountered the church, ultimately leading to their integration into the congregation (Awulley, 2020). This underscores the significant role of digital media platforms in aiding religious leaders to amass substantial followership and foster congregation growth and accounts for church leaders' favorable disposition toward the deployment of digital platforms for church-related activities (Animante et al., 2021).

Survey respondents admitted actively engaging in a wide range of church programs available on digital platforms of TKHCI, including sermons, prayer meetings, Bible study groups, conferences, and summits. Furthermore, the church utilizes WhatsApp, Facebook, and Twitter to circulate daily sermonettes to foster spiritual growth among its members. This trend reflects the ongoing movement toward utilizing digital platforms for spiritual outreach, underscoring the church's commitment to supporting its members and enhancing accessibility to church activities (Johnson, 2023).

Digital platforms carry the risk of exposing congregants to inappropriate content, thereby heightening the likelihood of cyber-related breaches and potentially posing ethical, security and safety challenges to individuals who fall victim to such activities (Deora & Chudasama, 2021). This study found that congregants had a range of ethical concerns, including worries about privacy invasion, unauthorized access to personal information, the risk of identity theft, the potential misuse of personal data for targeted advertising, and apprehensions about cyberbullying. Respondents were generally positive that guidelines or policies and sensitization could be useful to cater to these concerns. In parallel, church members in a different study gave privacy and security policy concerns around social media use in the church setting a high priority (Badmos, 2014), pointing to concerns about cyber safety and security breaches that need not be taken for granted.

Curiosity (and sometimes ill motives) drives some people to gather information and make assumptions about others based on what they or others have shared about them online (Adjin-Tettey & Garman, 2023). Therefore, deducing from the Communication Privacy Management theory, because churches sometimes rely on photos, videos, testimonies, and achievements to build their social media profiles, there must be a rule-based system to manage the accessibility of disclosed private information in the online sphere. This implies that private boundaries need to be governed by rules or norms that the church (leadership) and members of the congregation agree upon about specific private/personal information entering the larger public domain (online) uncontrollably. To safeguard those who would feel more at ease in the physical church, steps must be taken to anonymize specific information and content about members that are posted online. The established norms must be complied with to avert border turbulence (Petronio, 2002).Additionally, it must be noted that, even without formal rules around the church's online engagements, border turbulence may occur when there are conflicting expectations of either party (Petronio, 2002). Therefore, whether there are formal

rules or policies or not, churches must ensure a certain level of privacy (in the sense of anonymity when they share sensitive information) to give congregants a sense of safety in the virtual church environment.

A certain level of ethical (security and safety) compliance of the media team is largely borne out of their judgment and sometimes a nudge from congregants, as the study found. In the absence of any guidelines, it would be useful for the church to engage congregants to negotiate the boundaries of the church's engagement on virtual platforms, which Griffin et al. (2023) refer to as mutually held privacy norms. A shared guideline is beneficial because it takes congregants' views into account, safeguarding congregants' collective space (Surendra & Peace, 2009).

As previously discussed, safety and security are mutually reinforcing (Samarasinghe et al., 2023). While the church does what it can, it will be necessary for members of the virtual church to take precautions to protect their safety and security when using the internet. However, the church can help with this by using knowledge both within and outside the church to raise awareness among members. When this is done, congregants will be well-equipped to avert a range of online platform threats, some of which may even occur outside of virtual church settings (Deora & Chudasama, 2021).

Practical implications

The study underscores the need for religious organizations to prioritize privacy and security in their online engagement strategies because of the documented concerns some have. It also signals the need for digital communication policies to foster trust and encourage greater participation in virtual services. This may warrant incorporating congregants' input to ensure that the policies are both responsive and practical as well as a dedicated team to oversee implementation and enforcement. The study also points to the significance of digital safety education, so that virtual congregants also ethically engage online and navigate risks in an informed manner

Another significant point of implication of this study is the maintenance of open channels for feedback to allow churches to adapt their digital practices according to congregants' needs and concerns, rather than presuming they have none at all.

Theoretical implications

The results show that the CPM theory applies to digital religious settings and throws light on the necessity of efficient privacy management in settings where private and sensitive data is often exchanged. It extends the application of CPM beyond traditional interpersonal and organizational contexts, affirming CPM's postulations about people's desire for control over their personal information linked to serious worries about privacy and security. The concept of 'boundary turbulence' is particularly pertinent, as the lack of clear policies and guidelines for digital interactions within the church leads to uncertainty and discomfort among congregants. This turbulence is further complicated by differing views within the church's media team, where some members prioritize spiritual messaging over privacy concerns.

The study also highlights the complexities of joint ownership of information on digital platforms. Congregants' expectations of privacy often clash with the reality of widespread information access, suggesting a critical need for churches to develop and communicate privacy norms that align with congregants' expectations and the digital landscape's challenges.

Ethical concerns about data misuse and targeted advertising reflect broader societal issues related to digital privacy, emphasizing the necessity to incorporate ethical considerations alongside legal frameworks in managing congregants' private information. Overall, the research underscores the importance of CPM theory in understanding privacy management in digital religious environments and the need for comprehensive privacy policies to manage potential boundary turbulence effectively.

Conclusions and recommendations

The findings of this study have shed light on the motivations driving congregants' engagement in virtual church services and underscore the pivotal role of digital platforms in facilitating the mandate of the church. Convenience and the relevance of content emerged as primary factors motivating congregants to join online church services, while there were safety and privacy concerns. The findings point to an imperative for religious organizations to prioritize digital safety in their online engagement strategies. In doing that, it will be imperative to involve church members to share their concerns and factor them into the guidelines/policies. It would also be useful to have a dedicated team in the Media Department that ensures compliance.

For its members to implement safety and security measures that go beyond what the church can provide, churches must also make sure that they provide digital safety education. These awareness campaigns could address issues like social media etiquette and possible hazards, as well as recommended practices for safeguarding their data. Sensitization efforts can be strengthened by holding regular workshops, training sessions, and reminders.

Limitations and future research

The study gleans its data and results from two sources: survey data and in-depth interviews. Although the qualitative investigation yielded few interviewees (8), we believe that the balancing of these two methods provides depth to the study – the qualitative findings added depth to the descriptive information yielded by the survey.

However, although the results provide valuable insights into the privacy and security concerns of congregants of a church, it is crucial to keep in mind that because results may vary not all churches in Ghana will necessarily benefit from the conclusions drawn from this study. The response rate could also not be said to be representative of the entire church population as the sample was drawn from only the first service church of TKHCI. Therefore, a larger study may be required to ensure the generalization of results.

Another constraint faced in the course of the study was the unavailability of certain key individuals within the pastoral and administrative team whose input could have enriched the study. Thus, future research of a similar nature might think about including the administrative and pastoral teams' points of view. Also, another study investigating how virtual engagement affects religious beliefs, practices, and spiritual growth can provide valuable insights into the evolving landscape of religious experiences. Such a study could also help identify effective strategies for leveraging digital platforms to enhance congregants' spiritual journeys.

Disclosure statement

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