Technology Use in the Black Church: Perspectives of Black Church Leaders Preliminary Findings

Gabriella Thompson
The University of Texas at Austin
School of Information
Austin, Texas, USA

Nissi Otoo
Virginia Tech
The Bradley Department of Electrical and Computer Engineering
Blacksburg, Virginia, USA

Jaden Christopher Fisher
Virginia Tech
School of Neuroscience
Blacksburg, Virginia, USA

Irene Sibi
The University of Texas at Austin
School of Information
Austin, Texas, USA

Angela D. R. Smith
The University of Texas at Austin
School of Information
Austin, Texas, USA

Ihudiya Finda Ogbonnaya-Ogburu
Virginia Tech
Department of Computer Science
Blacksburg, Virginia, USA

ABSTRACT

Historically, the Black church has played a pivotal role in civic engagement and social justice, and continues to do so today. Yet, few researchers have explored how decisions around technology use are made in the church. To address this gap, we conducted semi-structured interviews with five Black church leaders to understand how church leaders interact with digital technologies, both in general and specifically with the communities that they serve. We found that while Black Church leaders are eager to engage with technology, most of the engagement with outside communities is through in-person contact; opportunities to give online have a financial penalty in comparison to traditional methods of tithing and donating; lastly, technology use within outreach and ministries is highly dependent by ministry leaders – many whom volunteer their time. We contribute to research that focuses on technology use in religious organizations and community engagement of community-based organizations.

CCS CONCEPTS

• **Human-centered computing → Empirical studies in HCI**; • **Social and professional topics → Religious orientation**.

KEYWORDS

religious settings, Christianity, Black culture, technology, Black church

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1 INTRODUCTION

The Black church is profoundly significant to the African American community and its allies, serving as a vital pillar of their culture and history. This importance traces back to its origins among enslaved African Americans, who established many of the historical Black churches. The Black church was instrumental during the Civil Rights movement, spearheading protests, boycotts, and various initiatives aimed at ending segregation and securing equal rights [12, 21]. Today, the Black church remains a central figure in Black communities, not only as a place of worship but also as a hub for community outreach. As society becomes increasingly digital, the Black church faces new challenges and opportunities in serving its congregations. However, as the church evolves, one aspect remains uncertain: the decision-making process of Black church leaders regarding the adoption and use of technology in serving their congregations. Understanding this process may help to better support technological efforts in Black churches by illuminating areas of opportunity and concern regarding technology use in practice.

To understand how Black church leaders make decisions about technology use in their churches, we conducted semi-structured interviews with five Black church leaders. In our study, we explored how Black church leaders interact with digital technologies, both in general and specifically for religious services and engagement with the communities that they serve. We found that while Black church leaders are eager to engage with technology, most of the engagement with outside communities is through in-person contact; opportunities to give online have a financial penalty in comparison to traditional methods of tithing and donating; lastly, technology use within outreach and ministries is highly dependent by ministry leaders – many of whom volunteer their time. This research contributes to understanding how Black church leaders engage with technology with the communities they serve. These findings have implications for designing with religious marginalized communities as it relates to outreach efforts, community development, and religious settings.

2 RELATED WORK

While many HCI researchers have explored technology use in religious settings [8, 9, 20, 32, 33], few have focused on the influence Black church leaders have on the use of technology in the church. In this section, we explore what we know about Black church leaders and techno-spirituality.

2.1 The Black Church and Community Leaders

The Black church plays a significant role in the lives of many Black Americans. According to a Pew research study on Black churches, two-thirds of Black Americans identify as Protestant Christians, followed by Catholics. Furthermore, Black Americans who are affiliated with a church are more likely to attend a Black church [22]. The prevalence of Black Americans with a religious affiliation situates the Black church as a fixture in their community life. Leaders in the Black church are considered to be distinguished community figures whose influence extends far beyond the teachings of the gospel. A whopping 42% of Black churchgoers intentionally consider a church's leadership in their decision to join [2]. While Black church leaders tend to perceive themselves as sociopolitical leaders in their community [10], the relevance of the church leader to Black community life may stem from the historical role of the Black church as a critical space for community initiatives, often sponsoring schools, businesses, politics, recreation, and more [16]. Furthermore, trust in Black church leaders may facilitate important communication from sources that Black American communities have historically distrusted to serve them, such as government institutions [23]. For example, a study that engaged Black churches in end-of-life care and planning information sessions found that church leaders played an essential role in facilitating interest in the sessions and promoting buy-in from their congregation [19]. Black churches have also used their community access to coordinate with external agencies and provide social services to their congregation [16]. This coordination with outside organizations is often facilitated by the Black church leader's role as a "trusted messenger" of information [27].

Despite the prevalence of community outreach research in Black churches, few studies focus on Black church leaders' use of technology in these initiatives. While several faith-based health initiatives in Black churches incorporate technology in their methodology [24, 26], the relationship between technology adoption and church leaders is not explored. Identifying Black church leaders' attitudes towards technology in their church and how they employ it for outreach is critical to understanding how technology can be incorporated into Black churches. Our research aims to address this gap by identifying how Black church leaders perceive and employ technology in their work.

2.2 Techno-spirituality

Techno-spirituality is the use of digital spaces as a mediator for spiritual practice [5]. Techno-spiritual spaces may be led by a religious organization to broadcast their teachings and make participation more accessible [7], or they may be independently constructed to offer alternate forms of immediate spiritual engagement [1]. Spiritual applications can also provide services that enable users to engage in their (practical) religious practices [6]. Buie and Blythe propose four additional themes to accommodate the rapid growth of spiritual applications: education, divination, social, and spiritual growth/inspiration [3]. Despite the popularity of techno-spirituality, public acceptance of such applications largely depends on the relevancy of spiritual content, the targeted community's culture, and the app interface's usability [1]. As a result, several HCI studies have directly engaged with spiritual users to understand how to address their needs and desires in a spiritual application [4, 20, 24].

2.2.1 Digital Church. A form of techno-spirtuality is the digital church. The digital church has been characterized as religious activities and communities, including worship, support, and other religious practices, facilitated through digital platforms. Rather than a mere tool for religious information dissemination, digital churches are dynamic spaces that are created by their users as an extension of their physical church, using technology to meet both individual and community needs [13, 15, 18]. Previous studies have uncovered an overarching shift from bounded communities to networked individualism that the digital church facilitates [18]. An ethnographic study on digital churches highlighted how, through digitization, individuals can participate in religious practices according to their schedules, needs, and preferences [18]. Another study in rural Germany noted how digital churches expand the reach of participation by exploring the co-creation of a church streaming system for elderly congregants who could not travel safely to their parish [31]. It reflected how effective digital technologies were in allowing sick and elderly populations to participate in communal religious activities from their home. The digital church allows for religion to be practiced in a way that does not limit the participant by location and even the potential restrictions of tradition [7].

2.2.2 Digital Black Churches. Digital Black churches are a form of digital churches that allows for freer self-expression, speech, and community, which can lead to a flattened hierarchy and empowerment of marginalized populations [14]. Researchers have found that Black churches broadcast religious services, use social media, create podcasts, and produce other digital content to engage with Black church members and new audiences. [17, 28, 30]. Understanding the capacity in which Black churches can optimize the digital church and other forms of techno-spirituality to benefit their community may provide insight into the future state of U.S. Black churches. However, there is a lack of information on the perspective of offline church leaders on the digital church, particularly the digital Black church. What kinds of challenges do they face? How does the community look different online from the traditional in-person church? What elements of technologies would best suit the needs of the digital Black church? Our research will delve into these questions, exploring the place of technology within digital Black churches.

3 STUDY DESIGN

This study focuses on Black Americans based in the United States. To recruit Black church leaders, we used snowball sampling as our methodological approach for recruitment because it leverages existing networks within the Black church community, making it easier to identify and engage knowledgeable leaders who can provide rich, in-depth insights on technology use [11]. We also established a community research advisory board to support the

development of our research questions, piloting the protocol, and assisting with recruiting participants.

Prior to the interview, participants were emailed a consent form and asked to confirm that they identify and are currently a leader of a Black church. Interviews lasted between 30 to 60 minutes. Black church leaders were asked about their thoughts about technology, engaging with communities they serve, their church's online presence, experiences on different platforms, developing community, and aspirational changes for their church. Lastly, participants were provided a short demographic survey at the end of the interview.

All interviews were audio recorded and transcribed. All files were stored on our institution's Microsoft cloud storage, evaluated for security and approved by our Institutional Review Board to hold sensitive data. Data was anonymized, and participant names were replaced with pseudonyms (e.g., P1, P2, P3,...P7). Two members of the research team analyzed the interviews using thematic analysis. The authors created initial themes based on opening coding, research questions, and the study interview protocol. The final themes focused on technology use by Black church leaders, specifically on their engagement with their congregation and surrounding communities.

4 PRELIMINARY FINDINGS

Black church leaders who participated in our preliminary study were mostly pastors. Most who were interviewed came from Christian denominations that included United Methodist, Church of God in Christ (Pentecostal), and Baptist backgrounds. While we sought a diversity of perspectives, majority of the participants were men. Their congregations were mostly located in urban areas across the U.S. In this section, we provide an overview of our preliminary findings in this ongoing study.

4.1 Understanding the Complexities of Community Outreach

While church leaders acknowledged the importance of technology in church, ministry, and outreach, they most often used a combination of in-person and word-of-mouth interactions with communities. They found that developing in-person relationships were important. For example, P1 stated, "Engagement with church members is pretty much daily through phone or text or visitation. Some of my seniors that can't get out, well, we set up times during the month to visit with them and bring them communion." P1 highlights the copious reliance on technology for connection but also sheds light on the need for in-person modes of connection with harder-to-reach populations.

P2 further illustrated the constraints of their congregation as it related to technology,

> If I do anything on Facebook, that means somebody out there has to have the equipment and the Wi-Fi and everything to accept it. And that's the sad part of technology because everybody, you know...might [not] own a cell phone....

While the conversation regarding the digital divide and internet access is not novel, it surfaces the difficulties when church leaders need to decide between engaging social media for outreach.

4.2 Technology Training and Support

Black church leaders varied in how they went about obtaining technological training and support. Smaller churches often relied on pastors to lead technology efforts, while larger churches had the support of media ministries or paid staff. For example, P1, who manages a smaller church, stated, "I just winged it... You know, learning how to use Zoom and Facebook on my own." P1 discusses in the previous quote how they supported their congregation through technical challenges during the COVID-19 pandemic. P3, the pastor of a medium-sized church, said, "We offer training for the media ministry. Those involved in the media ministry have signed up for ongoing classes, and we've had professionals come in to have different sessions with them." Medium to larger churches often had dedicated ministries or paid staff to train and address technical challenges.

When reflecting on examples of when they needed support, most Black churches referenced challenges with their internet bandwidth. For example, P1 stated, "You know, there was one time that we did experience a problem. . . During the morning service [it] wasn't a Zoom problem, [but an]internet problem with our internet provider and stuff. So we, you know, eventually got that fixed that time." We wondered if the location of the church caused challenges with internet access as several of the churches we interviewed were located in middle-to-low-income communities.

4.3 Using Technology to Donate

Technology proved most integral as it related to tithes and offerings, a congregation's routine financial donation to the church. However, many church leaders contemplated its benefits. Churches that did collect tithes online often faced a fee of between 3% and 5%. While most expressed discontent about the fees, church leaders were able to reason that tithing increased with online options. P2 explained, "People just don't come in and put a dollar in the offering basket. You have Givelify...and you just [use] it right from your phone."'

When deciding which resources to use to encourage members to tithe, Black church leaders often take their congregation's preferences into consideration. For example, P2 stated, "Some people say, 'Well, why don't you just write the check and you save the 3%?' I'm not going to do that. Telling them how they want to pay their tithes and things of that nature. I think it's kind of being a little bit pushy, you know." While tithes and offerings play a huge role in keeping churches afloat, leaders must also manage their congregations with care as a church's livelihood and impact stem from its members.

5 DISCUSSION

In this study, we sought to understand how Black church leaders make decisions about using technology in the Black church. Our findings show that Black churches use different methods to engage with their members and communities. For example, technology is used less to support outreach efforts such as food pantry and homeless support. We also found that churches faced various technical challenges, with most encountering difficulties with internet bandwidth at some point. Lastly, our study revealed challenges faced by churches in using technology for tithing and the financial penalties they encounter when trying to make giving to the church more accessible.

We extend the research on the Black church within the realm of Human-Computer Interaction (HCI) by focusing on church leaders, their decision-making processes regarding the use of technology, and the use of technology for outreach purposes to engage with community members or non-members of the church [24, 25, 29]. Our findings align with previous research in highlighting the use of technology to engage congregants unable to attend in-person services, particularly those who are sick or elderly [18, 31].

We also confirm the importance of relationship-building, as indicated by O'Leary et al. [25] and Sackitey et. al [29]. However, we noted a reduced use of technology when engaging with non-members, as in-person relationships were more valued over those developed online. We suggest that the difference in technology use in these areas may be attributed to the fact that the church often conducts outreach with marginalized populations who may not have ready access to technology. Additionally, it is our view that maintaining relationships using technology may be easier than initiating new ones.

During our interviews we noticed that none of our participants mentioned music technology or outdated forms of technology used by the church (e.g., recording sermons on compact-disk or cassette). A future research area could explore this avenue and lessons learned from previous historical uses of technology by the church.

Another future direction is to explore how race and income impact how Black churches engage in their outreach efforts. Racial identity and cultural contexts play a big role in how technology is used, with historical experiences and cultural values influencing how it's adopted and implemented. By comparing Black churches in affluent areas to those in low-income neighborhoods, researchers can uncover differences in their outreach decision-making strategies and how effective they are.

Lastly, a limitation of this work is that we mostly recruited from churches or church leadership that had an online presence (i.e., a website or a social media account). We recognize that not all churches are in areas with good internet or actively use technology to engage with church members and outside communities.

6 CONCLUSION

In this study, we aimed to understand how Black church leaders engage with technology within the communities they serve. Through semi-structured interviews, we found that in addition to the pastor of a Black church, technology selection depends on the individual leading the ministry. Outreach efforts often use less technology for engagement, and the introduction of online tithing has presented opportunities to secure more funding, albeit with new financial implications. Our research also prompts further inquiries into how young Black churchgoers engage with their community, how online-only and hybrid attendees foster connections, and how technology can support this population.

REFERENCES

[1] Nahdatul Akma Ahmad and Fariza Hanis Abdul Razak. 2013. On the emergence of techno-spiritual: The concept and current issues. In *Computer and mathematical sciences graduates national colloquium*, Vol. 9.

[2] George Barna, R Harry Jr, et al. 2005. *High Impact African-American Churches*. Baker Books.

[3] Mark Blythe and Elizabeth Buie. 2014. Chatbots of the gods: imaginary abstracts for techno-spirituality research. In *Proceedings of the 8th Nordic Conference on Human-Computer Interaction: Fun, Fast, Foundational* (Helsinki, Finland) *(NordiCHI '14)*. Association for Computing Machinery, New York, NY, USA, 227–236. https://doi.org/10.1145/2639189.2641212

[4] Elizabeth Buie. 2016. Transcendhance: A Game to Facilitate Techno-Spiritual Design. In *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (San Jose, California, USA) *(CHI EA '16)*. Association for Computing Machinery, New York, NY, USA, 1367–1374. https://doi.org/10.1145/2851581.2892536

[5] Elizabeth Buie. 2019. Let Us Say What We Mean: Towards Operational Definitions for Techno-Spirituality Research. In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems* (Glasgow, Scotland Uk) *(CHI EA '19)*. Association for Computing Machinery, New York, NY, USA, 1–10. https://doi.org/10.1145/3290607.3310426

[6] Elizabeth Buie and Mark Blythe. 2013. Spirituality: there's an app for that! (but not a lot of research). In *CHI '13 Extended Abstracts on Human Factors in Computing Systems* (Paris, France) *(CHI EA '13)*. Association for Computing Machinery, New York, NY, USA, 2315–2324. https://doi.org/10.1145/2468356.2468754

[7] Philip Butler. 2022. Digital Spirituality as a Technology of Resistance. *The Black Scholar* 52, 3 (2022), 41–51.

[8] Pauline Hope Cheong, Shirlena Huang, and Jessie PH Poon. 2011. Cultivating online and offline pathways to enlightenment: Religious authority and strategic arbitration in wired Buddhist organization. *Information, Communication & Society* 14, 8 (2011), 1160–1180.

[9] Caroline Claisse and Abigail C Durrant. 2023. 'Keeping our Faith Alive': Investigating Buddhism Practice during COVID-19 to Inform Design for the Online Community Practice of Faith. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*. 1–19.

[10] Kirkpatrick G Cohall and Bruce S Cooper. 2010. Educating American Baptist pastors: A national survey of church leaders. *Journal of Research on Christian Education* 19, 1 (2010), 27–55.

[11] Robert Wall Emerson. 2015. Convenience Sampling, Random Sampling, and Snowball Sampling: How Does Sampling Affect the Validity of Research? *Journal of Visual Impairment & Blindness* 109, 2 (2015), 164–168. https://doi.org/10.1177/0145482X1510900215 arXiv:https://doi.org/10.1177/0145482X1510900215

[12] Henry Louis Gates Jr. 2022. *The Black church: This is our story, this is our song*. Penguin.

[13] Erika Gault. 2022. Digital Contours of the Black Church in North America and Community Online. (2022).

[14] Erika D Gault. 2020. My People Are Free! *Fire!!!* 6, 1 (2020), 1–16.

[15] Erika D Gault. 2022. Where are our tools? Or fugitive methods to the study of digital Black religion. *The Black Scholar* 52, 3 (2022), 6–16.

[16] Fredrick C Harris. 2001. Black churches and civic traditions: Outreach, activism, and the politics of public funding of faith-based ministries. *Can charitable choice work* (2001), 140–156.

[17] Luis Andres Henao. [n. d.]. *Black Protestant church still vital despite attendance drop*. https://apnews.com/article/black-protestant-church-attendance-youth-covid-pandemic-5d854b4db73e118cb22767220573455f

[18] Tim Hutchings. 2011. Contemporary religious community and the online church. *Information, Communication & Society* 14, 8 (2011), 1118–1135.

[19] Jerry Johnson, Tara Hayden, Lynne Allen Taylor, Arthur Gilbert, Cedric Hughes Jones Jr, Marshall Paul Hughes Mitchell, and Brenda Curtis. 2019. Engaging the African American church to improve communication about palliative care and hospice: lessons from a multilevel approach. *Journal of Palliative Care* 34, 3 (2019), 168–174.

[20] Inyeop Kim, Minsam Ko, Joonyoung Park, Sung Wook Moon, Gyuwon Jung, Youn-kyung Lim, and Uichin Lee. 2022. Social-Spiritual Face: Designing Social Reading Support for Spiritual Well-being. *Proc. ACM Hum.-Comput. Interact.* 6, CSCW2, Article 262 (nov 2022), 22 pages. https://doi.org/10.1145/3555162

[21] Martin Luther King Jr. 1992. Letter from Birmingham jail. *UC Davis L. Rev.* 26 (1992), 835.

[22] Besheer Mohamed, Kiana Cox, Jeff Diamant, and Claire Gecwicz. 2021. Religious affiliation and congregations. https://www.pewresearch.org/religion/2021/02/16/religious-affiliation-and-congregations/

[23] Donald Musa, Richard Schulz, Roderick Harris, Myrna Silverman, and Stephen B Thomas. 2009. Trust in the health care system and the use of preventive health services by older black and white adults. *American journal of public health* 99, 7 (2009), 1293–1299.

[24] Teresa K. O'Leary, Dhaval Parmar, Stefan Olafsson, Michael Paasche-Orlow, Timothy Bickmore, and Andrea G Parker. 2022. Community Dynamics in Technospiritual Interventions: Lessons Learned from a Church-based mHealth Pilot. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems* (<conf-loc>, <city>New Orleans</city>, <state>LA</state>, <country>USA</country>, </conf-loc>) *(CHI '22)*. Association for Computing Machinery, New York, NY, USA, Article 19, 23 pages. https://doi.org/10.1145/3491102.3517700

[25] Teresa K O'Leary, Elizabeth Stowell, Jessica A Hoffman, Michael Paasche-Orlow, Timothy Bickmore, and Andrea G Parker. 2021. Examining the intersections of race, religion & community technologies: A photovoice study. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. 1–19.

[26] Bridgette Peteet, Valerie Watts, Eunique Tucker, Paige Brown, Mariam Hanna, Amanda Saddlemire, Miriam Rizk, Juan Carlos Belliard, Jacinda C Abdul-Mutakabbir, Samuel Casey, et al. 2022. Faith, fear, and facts: A COVID-19 vaccination hesitancy intervention for black church congregations. *Vaccines* 10, 7 (2022), 1039.

[27] Lois Privor-Dumm and Terris King. 2020. Community-based strategies to engage pastors can help address vaccine hesitancy and health disparities in black communities. *Journal of health communication* 25, 10 (2020), 827–830.

[28] Allissa V. Richardson. 2020. The "Good News": How the Gospel of Anti-Respectability Is Shaping Black Millennial Christian Podcasting. *Fire!!!* 6, 1 (2020), 67–97. https://www.jstor.org/stable/10.5323/48581554

[29] Darley Sackitey, Teresa K O'Leary, Michael Paasche-Orlow, Timothy Bickmore, and Andrea G Parker. 2023. " Everyone is Covered": Exploring the Role of Online Interactions in Facilitating Connection and Social Support in Black Churches. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*. 1–17.

[30] Melva L. Sampson. 2020. Digital Hush Harbors: Black Preaching Women and Black Digital Religious Networks. *Fire!!!* 6, 1 (2020), 45–66. https://www.jstor.org/stable/10.5323/48581553

[31] David Struzek, Martin Dickel, Dave Randall, and Claudia Müller. 2019. How live streaming church services promotes social participation in rural areas. *Interactions* 27, 1 (2019), 64–69.

[32] Sara Wolf, Frauke Moerike, Simon Luthe, Ilona Nord, and Jörn Hurtienne. 2022. Spirituality at the breakfast table: Experiences of Christian online worship services. In *CHI Conference on Human Factors in Computing Systems Extended Abstracts*. 1–7.

[33] Sara Wolf, Benedikt Steinmüller, Frauke Mörike, Simon Luthe, and Jörn Hurtienne. 2023. The God-I-Box: Iteratively Provotyping Technology-Mediated Worship Services. In *Proceedings of the 2023 ACM Designing Interactive Systems Conference*. 1710–1723.