FINDING—
Most pastors perceived that they lacked key technological skills and essential pieces of knowledge needed to make a smooth transition from traditional, offline church services to online and hybrid forms during the pandemic.

The few leaders in our study who did report having some experience with technology before the pandemic said such skills were vital for adapting to online forms of church. These pastors reported having less stressful experiences in making the online transition as they were able to adapt to required changes and make decisions about technology and equipment more quickly. The individuals in this study who did not have this background saw these leaders as having a significant advantage in their moving church online. This study found that the more familiarity pastors had with media technology in general prior to the pandemic, the easier such leaders perceived their transition online and technological decision making. Study respondents that had previous experience with audio or video equipment also reported that this knowledge positively impacted their ability to make confident decisions about technology and in learning to use new digital tools. In this first Tech Trends paper, we discuss three vital areas identified by leaders as directly influencing their church’s digital transition. These include: 1) previous experience in using media, 2) a core knowledge and understanding of how digital technology works, and 3) an understanding of how digital media impacts culture and audiences.

Vital Area #1 – Previous Experience with Media:
Even if they had never worked with digital media or livestreamed a church gathering before, many leaders reported that having a basic technology skillset to draw from gave them an important grounding to learn how to use newer, digital media. Whether this media experience equated to personal use or professional production training, it was viewed as giving those pastors and churches a significant advantage, especially by leaders who did not have it. While initial attempts at implementing digital tools and strategies were rarely perfect, leaders and volunteers who were able to collectively pull from a variety of past media experiences and/or skills reported greater flexibility and adaptability in their move online. Specifically, areas that pastors noted as being especially helpful and valuable in moving to online ministry included:

- **Having at least some previous experience with computers, audio, or video equipment made a difference.** Pastors noted that having even a very small amount of experience using audio equipment, computers, video equipment, and/or setting up these technologies was valuable. Such experiences allowed pastors to feel more confident in approaching digital media, because they were able to use some of their “old tricks” in this new media context. For example, one pastor who used to record music
in the 1990s as a musical artist, described using his old audio equipment to record sermons and create resources for his congregation, while learning how to do livestreaming.

- **Already owning basic audio or video equipment gave churches an upper hand.** Churches that owned recording or production equipment prior to the pandemic gave their leaders an advantage, especially in the first few months of the pandemic. Churches able to initially use cameras or equipment they already owned, even if they were older or not currently being used, helped pastors to feel less overwhelmed when trying to think through and prepare for moving services online. Also, having members or volunteers with experience using this equipment to call on helped them adapt more quickly to required technology changes. By contrast, churches without any audio equipment, beyond a microphone or recording technology, scrambled to improvise services. One pastor described using a personal camera she had at home to stream her first service online, because her church did not own one. Lack of access to even older audio or video resources was blamed by many churches for delays in transitioning online.

- **Previous experience with video or recording services enabled leaders to consider and adopt new digital platforms for their services more quickly.** Whether it be experience in recording their sermons as audio podcasts or televised broadcasts of sermons, pastors who were previously a part of media production processes in their church felt this helped them be more flexible and willing to embrace livestreaming their services. It also helped them in reimagining the best way to set-up, design, and structure livestreamed services for their church audience. One pastor described the new ability to livestream guest pastors in to speak on a Sunday service. He explained that there would be too many financial, travel, or scheduling obstacles in the typical, in-person church service. However, he found that guest pastors were far more willing to livestream into a Sunday service, allowing him to provide his congregation with many new voices during Sunday church.

**Vital Area #2 – General Digital Media Knowledge & Understanding:**
Most leaders in our study not only lacked basic technological skills; they also lacked a general understanding of how digital tools and social media platforms work. The absence of rudimentary digital media knowledge was a common stumbling block for leaders making decisions about what technologies to invest in and the logistics required to implement them. This lack of knowledge impacted churches in several ways.

- **Churches with staff or volunteers who had basic tech skills and an understanding about digital production processes made transitions to online platforms quicker.** Churches that could call on people who not only had digital media skills, but also understood how digital media works, seemed to be able to make the digital transition with greater speed and ease. Knowledge about how digital media works and how different forms of media interact was described as valuable, but often missing in leaders’ abilities, especially those in smaller churches. Areas of knowledge highlighted as crucial in moving services online included: understanding compatibility issues working with multiple platforms or technologies, troubleshooting issues of internet functionality, and knowing where and how digital processes could automate aspects of the services or production. One volunteer described the challenges her church encountered in selecting and learning how to best stream their Sunday service online. Recording the service itself was a new experience and additionally, they continuously to
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struggle with sound and visuals cutting out due to low internet capacity in online recordings. The volunteers along with others noticed the poor quality of the service’s online broadcast but did not know how to best remedy the problem. According to our respondents, an understanding of how to work and solve issues with cameras, direct cable lines, and both visual and audio quality were pressing issues.

- Knowing how to navigate the digital infrastructure of the internet and different online platforms proved to be a valuable resource, especially early on during the pandemic. Even just a basic understanding of how to select and set-up digital recording equipment and how one should adapt the structure of the service for digital broadcasting proved extremely valuable. When pastors found themselves unaware of how equipment worked, many church leaders were overwhelmed and confused. Often, pastors reported spending significant amounts of time researching and investigating digital media and video podcasting. However, trying to apply this new knowledge brought with it a slew of challenges, mistakes, and live glitches.

Vital Area #3 – Internet & Digital Literacy:
At the beginning of the COVID-19 pandemic, many pastors described themselves as “wildly unacquainted” with the internet and digital media. As the pandemic went on, many identified that their growing digital literacy and knowledge of the internet became a vital resource when church online.

- Pastors described how churches with a basic internet literacy tended to fair better with the initial move to online church. Pastors understood “internet literacy” as more than a set of technical competencies. Internet literacy was familiarity with how different digital media worked, what kind of communication or community practices they facilitate, and the kind of values or culture they encourage. Many older pastors remarked that they felt less prepared when compared to their younger colleagues regarding how they understand, make decisions about, and design social media or livestreaming church experiences. One tech volunteer commented on the difficulties that she was having with a congregation without access to computers or Wi-Fi. For pastors to best explain and help their members, they needed a basic sense of internet literacy themselves.

- Many pastors felt unprepared to make decisions about digital media because they felt they lacked an understanding of digital media’s impact on culture and the church. Most leaders in this study felt largely unprepared for the broader challenges that technological decision-making raised for them. Once churches transitioned online, leaders began to see both positive and negative implications of this move for how their churches understood and lived theological concepts such as community, mission, and liturgy. Many had not previously realized how the practical choice to move services online for health and safety purposes would have larger implications for the structure and traditions of their church on a broader level. Often pastors described asking the church down the street or pastors online how they were responding to the digital shift, what best practices did they see as emerging in their church practices, and how they were navigating critiques and concerns such as the argument that religious community can only exist offline.
Many pastors expressed concern (and fear) about their lack of understanding about the legal implications of doing church online. Questions related to internet laws associated with doing church online became apparent quickly, and most leaders felt unprepared for how to answer them. One consistent theme that emerged out of many of the church narratives regarded issues of understanding and purchasing copyright for their worship services. In the process of moving online, many church leaders were unaware of the copyright laws regarding live streaming music. One pastor described getting his sermon removed from Facebook mid-2020 because he had not realized he had violated copyright laws by the songs used at the beginning of the service. An understanding of the internet and its guidelines for livestreaming was a lacking, but important area of knowledge that pastors had to quickly learn in their move online.

Pastors Becoming Digital Creatives and Digital Strategists

Many of the skills and knowledge areas that pastors realized were valuable during the pandemic, as noted above, are those typically associated with that of “digital creatives.” Digital creatives, as discussed in-depth in Campbell’s book *Digital Creatives and the Rethinking of Religious Authority* (2020), are media professionals or digital experts who choose to devote their time to the creation of digital resources that promote their faith online or expand the influence of their religious community through the development of a digital presence. A digital creative can be website designer, social media expert, software creator, or an educator using digital media to offer creative learning opportunities. While there are a variety of religious digital creatives (RDCs), all have one thing in common: they use their digital skills in ways that concretely promote their faith and religious community.

Today, RDCs can be found serving in their chosen religious community in official ways, such as a person serving on the church technology team or unofficial ways, such as a person committed to doing evangelism online. The COVID-19 pandemic was a unique moment because it called, even required, pastors to step into this new role of leveraging digital media for religious purposes. Pastors had to step up and act as a specific kind of RDC called a “digital strategist.” Digital strategists are individuals who are employed by a religious institution or community but who hold roles that are not traditionally associated with work or skills within media, such as the director of religious education or an individual who holds a religious vocation such as a monk, nun, or a religious leader (i.e., pastor or priest).

Because the job of a pastor centers around crucial communicative tasks (i.e., preaching, counseling, etc.), developing strong communication skills is essential and requires them to draw on a variety of different tools and strategies to fulfill those tasks. It is not uncommon for pastors to be taught or encouraged to seek out new techniques and tools to help with their communicative tasks. In contemporary culture, this includes a consideration of how digital media resources may help them reach a larger public with their religious messages or how a digital platform might offer new opportunities for building stronger community among current members.

While it could easily be argued that exploring and incorporating new digital media tools into a pastor’s traditional ministry assignments can expand their sphere of influence and effectiveness, until the pandemic, many pastors had either avoided or ignored these possibilities. The pandemic forced pastors into the role of digital strategists by demanding that they engage with technology to perform their central
and required role of preacher and worship leader. By taking away the traditional means of how they engaged in these roles, they were forced to consider how digital media might help them do their work in a new way. It also created a unique opportunity for them to expand, redesign, and reimagine ministry to their congregation through digital experimentation.

However, as laid out in this paper, the transition online was certainly not an easy one for many pastors to make. Many pastors felt it was a task that they were underprepared for due to their lack of technological knowledge and experience using media in their job. Churches whose pastors did not have digital background but were able to call upon digital creatives in their congregations or recruit them as volunteers were able to navigate through technological decision-making with more ease and less anxiety on behalf of leaders. This shows that when leaders are not equipped to take on the role of digital strategist, it is essential for them to recruit or partner with religious digital creatives to make the transition to online ministry. As pastors’ step into the role of the “digital creative” or are compelled to partner with such individuals, we see three takeaway lessons emerging that point to areas that pastors should know about regarding digital media so they are better prepared to engage with technology in the future.

### Key Takeaways: What Do Pastors Need to Know about Digital Media?

1) **Pastors need to learn the basics about digital recording equipment (options, assembly, and best practice for use).** Pastors with an understanding of brands and types of digital equipment as well as the way to set them up found the transition online easier. For pastors to be able to make quick decisions regarding technology, a general awareness of how media equipment and assembly works is necessary.

2) **Pastors should have a general literacy or competence regarding the internet.** Pastors with an understanding of Wi-Fi connectivity, social media platforms, and the legal limitations of streaming online content fared better than those without this basic understanding. Developing technological competencies should include helping pastors becoming familiar with digital media infrastructure and understanding the practical implications about tech choices made.

3) **Livestreaming errors will come; pastors need to know how to fix or respond them.** As church shifted online, services were transformed into experimental situations requiring quick responses to unexpected changes. The well-established set of worship practices became active learning experiences, where live mishaps and technological errors often emerged. Pastors need to learn how to notice and diagnose a technology “fail” to know what to do about such problems, or how to effectively communicate with others overseeing technical aspects of their services.

### Summary of Research Project and Context

This tech trend paper examines specific findings about how churches engaged with technology that emerged from the *Tech in Churches during COVID-19* research project, funded by the Lilly Endowment. This project investigates the technological negotiations and decision-making patterns of congregations in the American Midwest during the COVID-19 pandemic. This report is put together by the *Network for New Media, Religion and Digital Culture Studies*, under the direction of Dr. Heidi A Campbell. It analyzes data provided by the
Center for Congregations in Indianapolis, Indiana through its “Connect Through Tech” grant program, which funded 2700 congregations in the state of Indiana to purchase technology resources in 2020 and 2021 to help facilitate the move from traditional to online services. Here, we highlight themes emerging from a series of “Tech Talk” sessions facilitated by the Center for congregational leaders. In the Tech Talks, those who received grants were given a space to discuss technology challenges and opportunities that emerged from the shift online.

- **Reported prepared by Heidi A Campbell (Dec 2021)**