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THE TECHNOLOGICAL REVOLUTION AS A CHALLENGE
FOR THE CATHOLIC CHURCH
IN THE UNITED STATES OF AMERICA IN THE 21ST CENTURY

Abstract. The aim of this article is to examine how the technological revolution has become a defining feature in contemporary American society, influencing the religious life of the faithful. It explores the challenges the Catholic Church faces in fulfilling its mission within this technologically immersed context. The study addresses the following questions: What impact does the technological revolution have on the religious life of the faithful in the United States? What challenges does it pose to the Catholic Church in the 21st century? How can the Church fulfill its mission in American society? Answers to these questions are derived from an analysis of Church documents, especially teachings of the Church in the United States, and publications by American theologians and sociologists. The article starts with a brief introduction, followed by an analysis of the historical context of the technological revolution. It then examines the use of technology in improving human existence, as well as the humanizing and dehumanizing effects of technology. The dangers of misusing digital technology and its impact on religious life are also discussed. The final section offers an analysis of proposals for the pastoral activities of the Church in the USA in response to the challenges of the technological revolution.

Keywords: technological revolution; Catholic Church; human existence; humanization; dehumanization; misuse of digital technology

INTRODUCTION

In the recent decade, technological revolutions have led to a transformation of American society as these technologies have altered the ways that people connect, learn, and build communities. While the Church has been focused and grounded in its ancient mission of human and spiritual enrichment, it faces

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multiple challenges linked to navigating the vast technological shift. Pope Francis mentioned that humanity in this era is undergoing epochal change and emphasized the need for the Church to discern and engage with the changing technology in ways that respect human dignity and promote authentic community¹. The rapid advancements in digital technology have raised many questions about how the Church could uphold its values within an increasingly digital society. While technology offers tools for community building and evangelization, it also risks fostering isolation, moral relativism, and consumerism, all of which could detract from the Church's mission².

Manuel Castells, a sociologist, describes modern society as a network society where digital connections define social identities, which poses new challenges for faith communities that often rely on face-to-face interactions as well as communal worship³. Another sociologist argues that even though there is potential for technology to bring people together, technology often creates a situation where they feel they are alone together, which is when individuals are reliant on digital interactions but feel neglected and isolated as these don't fulfill their need for social connection⁴. The church has echoed the same concerns and highlighted the need for ensuring responsible digital engagement is undertaken to ensure that it upholds human dignity and fosters authentic relationships⁵. Recently, the Pope asked world religions to push for the ethical development of AI, which is required to ensure that it serves humanity positively⁶.

The growing tension between digital convenience and genuine community reflects the broader ethical concerns that have been highlighted by Church leaders like Pope Benedict XVI, advocating for the use of technology in a positive and holistic way and warning that the overreliance on digital tools could

¹ Pope Francis, "Laudato Si'" (Vatican, 2015). 44–47, https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html.

² Hugues Puel, "Caritas in Veritate," *Revue d'éthique et de Théologie Morale* 258/1 (2010): 68–71, <https://doi.org/10.3917/retm.258.0079>.

³ Manuel Castells, "The Rise of the Network Society by Manuel Castells: The Rise of the Network Society," *American Journal of Sociology* 1997, 1–26.

⁴ Sherry Trukle, *Alone Together: Why We Expect More from Technology and Less from Each Other* (Basic Books, 2012), 280–289.

⁵ John P. Foley, "Ethics in Internet," Pontifical Council for Social Communications, 2022, https://www.vatican.va/roman_curia/pontifical_councils/pccs/documents/rc_pc_pccs_doc_20020228_ethics-internet_en.html.

⁶ Justin McLellan, "Pope Asks World's Religions to Push for Ethical AI Development," United States Conference of Catholic Bishops (USCCB), 2024, <https://www.usccb.org/news/2024/pope-asks-worlds-religions-push-ethical-ai-development>.

dehumanize interactions and weaken the personal bonds that are essential to the mission of Church⁷. Pope John Paul II was also concerned about the rapid technological development and encouraged responsible media use and noted that while technology helps foster communion and dialogue, it also holds the ability to divide and isolate people⁸. With Americans increasingly turning to online platforms for spiritual engagement, the Church faces new opportunities as well as challenges in reaching its believers while maintaining the integrity of communal worship and interpersonal connection.

The Church has embraced technology with a balanced approach, utilizing modern tools for evangelization while ensuring its core values remain intact. The rise of television, radio, and social media demonstrates the Church's adaptability, but also raises concerns about preserving the authenticity of spiritual life amidst evolving communication methods.

HISTORICAL CONTEXT OF THE TECHNOLOGICAL REVOLUTION IN THE USA

Over the years, the Catholic Church has navigated its relationship with technology, which has been crucial in shaping US society by driving innovation. Technology has both supported and challenged the Church's pastoral missions. Examining the stages of technological growth in the US and the Church's responses sheds light on the complexities of fulfilling its mission.

The first wave of technological development, from the 1950s to the 1970s, saw the introduction of computing and communication systems. Early companies like IBM, with models such as the IBM 701, entered businesses and academic institutions, expanding communication networks and revolutionizing information processing and sharing. During this period, the Church recognized the potential of technology and electronic media to reach wider audiences.⁹ The televised broadcast of masses and radio sermons became common, and Pope Pius XII, in his encyclical *Miranda Prorsus*, emphasized the need to use media for evangelization.¹⁰

⁷ Puel, "Caritas in Veritate," 68–71.

⁸ John Paul II, "The rapid development," Vatican, 2005, 5–8, https://www.vatican.va/content/john-paul-ii/en/apost_letters/2005/documents/hf_jp-ii_apl_20050124_il-rapido-sviluppo.html.

⁹ Paul Ceruzzi, *A History of Modern Computing*, (MIT Press 2003), 68–75, <https://doi.org/10.5860/choice.41-1596>.

¹⁰ Pius XII, "Miranda Prorsus," Vatican, 1957, para. 12, https://www.vatican.va/content/pius-xii/en/encyclicals/documents/hf_p-xii_enc_08091957_miranda-prorsus.html; Freeborn Kibombwe,

With advances in computing technology, the Church adopted broadcasting technology to extend its reach, marking a significant shift in its approach to media and highlighting the need for balance between tradition and innovation. The Church effectively leveraged this opportunity, and scholars have noted that early media engagement demonstrated the Church's acceptance of technology, provided it supported its spiritual mission.¹¹

The internet era, spanning from the 1980s to the 2000s, witnessed exponential technological growth, presenting unprecedented opportunities and challenges. Real-time global communication and information sharing reshaped societal interactions, creating digital communities and transforming relationships and institutional engagement. The Church acknowledged the internet's potential for evangelization but also warned of ethical risks, including moral relativism.¹²

In his Apostolic Letter, *The Rapid Development*, Pope John Paul II emphasized the need for Churchgoers to embrace the internet for spiritual growth while being wary of its misuse.¹³ In the US, the Church leveraged technology by developing websites, email, and digital video platforms to share homilies, news, and catechetical resources. This digital engagement was significant but also posed challenges in addressing emerging ethical questions related to internet use¹⁴.

A major concern was the potential erosion of the sacramental and communal nature of worship, as digital interactions often lack the depth and embodied experience of traditional settings.¹⁵ Scholars like Sherry Turkle have high-

"Miranda Prorus: An Encyclical Letter of Pope Pius XII on Motion Pictures, TV and Radio – Its Impact on the Catholic Church Media in Zambia Today," *Annales Missiologici Posnanienses*, 25 (2020), <https://doi.org/10.14746/amp.2020.25.7>.

¹¹ Lucian Dinca and Florin Ursa, "Evangelization through the Media. The Holy Trinity in the Shack 2017," *DIALOG TEOLOGIC XXV*, 49 (2022), <https://doi.org/10.53438/oyvh6052>; Jane Anderson, "Innovations in Communications Technology and the Restructuring of the Roman Catholic Church," *Journal for the Academic Study of Religion* 28, 3 (2015), <https://doi.org/10.1558/jasr.v28i3.28460>.

¹² Castells, "The Rise of the Network Society by Manuel Castells: The Rise of the Network Society," 85–102.

¹³ John Paul II, "The rapid development," 18–20.

¹⁴ Andrew P. Lynch, "Digital Catholicism: The Internet and the Vatican," in *Global Catholicism in the Twenty-First Century*, 2018, https://doi.org/10.1007/978-981-10-7802-6_3; Andrew P. Lynch, "Digital Catholicism: Internet, the Church, and the Vatican Website," *Annual Review of the Sociology of Religion* 6 (2015), https://doi.org/10.1163/9789004302549_008.

¹⁵ Turkle, *Alone Together: Why We Expect More from Technology and Less from Each Other*, 280–289.

lighted the phenomenon of being “alone together,” where individuals are connected yet experience diluted communal aspects essential for Catholic practice.

The advent of the internet posed challenges, but the rise of social media platforms like Facebook and Twitter revolutionized communication, allowing individuals to form digital communities across geographic boundaries. The Church faced new opportunities and challenges with this technology. Social media enabled rapid dissemination of teachings but raised concerns about superficial online relationships. The modern Church emphasizes relationships, and even superficial connections provide churchgoers with access to encouragement and support.¹⁶

There is a growing demand for theological answers, and online resources and platforms allow people to seek God beyond the physical Church. Scholars have shown that digital media enables ordinary people to actualize and implement Catholic faith in the digital world. Studies suggest that teachings and interactions should be less patronizing and focus on building relationships with other Catholics and people of different faiths.¹⁷

Social media provides a space for dialectics, beneficial to the Church. Research indicates that social media marketing influences Church growth and offers a forum for members to speak out, fostering a learning environment that supports Church objectives.¹⁸

US Conference of Catholic Bishops has published guidelines on the ethical use of social media, focusing on the need for content that fosters genuine community and spiritual depth¹⁹. This encouraged the parishes to use social media mindfully while acknowledging the benefits and possible challenges. Pope Francis’s message on World Communication Day emphasized that social media platforms need to be used to foster real-world communities and not replace them²⁰. His Holiness also mentioned that the speed at which the information

¹⁶ John Olu Adetoyese, “The Church and Social Media,” *Light in a Once-Dark World* 4 (2022): 289.

¹⁷ Yohanes Widodo, “The Use of the Internet and Digital Media by Indonesian Catholic Church: The Cases of Hierarchies Social Media Account and Lay Catholics Social Media Account,” *Proceedings Of International Conference On Communication Science 2/1* (2022), <https://doi.org/10.29303/iccspceeding.v2i1.125>.

¹⁸ Laura Kokkonen, “Established Churches on Social Media: The Case of the Finnish Churches,” *Religions* 13/7 (2022), <https://doi.org/10.3390/rel13070587>; Atish Sircar and Jennifer Rowley, “How Are U.K. Churches Using Social Media to Engage with Their Congregations?,” *Journal of Public Affairs* 20, 1 (2020), <https://doi.org/10.1002/pa.2029>.

¹⁹ USCCB, “Social Media Guidelines,” United States Conference of Catholic Bishops (USCCB), 2024, <https://www.usccb.org/committees/communications/social-media-guidelines>.

²⁰ Pope Francis, “Message of his holiness pope Francis for the 58th World Day of Social Communications,” Vatican, 2014, 1–4.

is being communicated exceeds our capacity for reflection and judgment, which means there is a need for more balance and proper forms of self-expression. While using these platforms might feel like an open platform to express your views and ideas, they also push people to barricade themselves behind sources of information that only meet their ideas or interests, increasing the divide among the people²¹.

From all this, we can see that the Church has not been against the growth and adoption of new technology but has benefited from it, too. It is reported that nearly 21% of US adults use apps or websites in order to help with reading scripture²². In the survey undertaken by Pew Research, it was mentioned that 30% of adults search online for information about religion, 15% listen to podcasts linked to religion, and 14% make use of apps that help remind them to pray²³. Many US adults who stream religious services report being extremely or very satisfied. However, they also find that attending services in person is more valuable and enriching compared to the online experience.

In a survey of 322 churches, average online attendance ranged from 2 to 18,895 viewers, with a combined average of 199,307, equating to 619 viewers per church. Online representation was 45% of total attendance, indicating growth in online engagement but uneven distribution, highlighting opportunities to reach more people²⁴. Churches are focusing on AI and data analytics with cautious optimism, recognizing their potential for pastoral care while warning against undermining human dignity. Pope Francis has emphasized the need for integral ecology, balancing benefits and moral implications of technology, including AI. Technology can enhance interactivity, community engagement, and pastoral care with intelligent chatbots offering 24/7 service²⁵.

The Catholic Church consistently emphasizes ethics in technology, opposing scientists who claim current ethics are sufficient. The Church advocates for increased dialogue between religion and science to identify ethical issues and develop a new framework²⁶.

²¹ Ibid., 2–3.

²² Pew Research Center, “Online Religious Services Appeal to Many Americans, but Going in Person Remains More Popular,” 2023, <https://www.pewresearch.org/religion/2023/06/02/online-religious-services-appeal-to-many-americans-but-going-in-person-remains-more-popular/>.

²³ Ibid.

²⁴ Kent E. Fillinger, “Behind the Screen: Insights into Online Church,” *Christian Standard*, 2022, <https://christianstandard.com/2022/07/behind-the-screen-insights-into-online-church/>.

²⁵ Pope Francis, “Laudato Si’,” 102.

²⁶ Leila Ouchchy, Allen Coin, and Veljko Dubljević, “AI in the Headlines: The Portrayal of the Ethical Issues of Artificial Intelligence in the Media,” *AI and Society* 35/4 (2020), <https://doi.org/10.1007/s00146-020-00965-5>; Veronika Čunderlík Čerbová, “Artificial Intelligence, Ethics, and

THE USE OF TECHNOLOGY
IN THE IMPROVEMENT OF HUMAN EXISTENCE

Innovation has always been vital for human evolution, helping societies overcome obstacles, improve living standards, and advance knowledge. From basic tools to digital technologies, history shows a relentless pursuit of improvement. Each major technological change has reshaped social structures, communication, and access to information, connecting people, accelerating knowledge exchange, and enhancing quality of life.

In the US, the growth of digital and social media has addressed numerous challenges, while AI promises solutions across various sectors and fosters social cohesion. Technological advancements democratize knowledge, enhance learning opportunities, and help bridge social and economic divides.

The transformation has meant that technology has become a necessity in our day-to-day lives and has shaped the modern era. In homes, computers are now being used as entertainment systems, while smart home systems have transformed the living space to make it easy to use and control, which improves the quality of life of individuals. Businesses' use of smart systems, big data, and computers allows for streamlining, analysis, and forecasting, which helps with improved decision-making, which was not possible previously²⁷. Everything has changed, including social life, where social media has been rapidly growing, and this would not have been possible without smartphones and improved access to the internet. Businesses have been capitalizing on social media for social networking and marketing, allowing them to hire sponsors and social media influencers to promote their products by improving flexibility²⁸. In short, every innovation and advancement has had a positive impact on the quality of our daily lives and also became a critical lifeline for social and emotional well-being during tough times like the pandemic.

From this, it could be claimed that technology does play a critical role in supporting mental, emotional, and spiritual well-being, and the Church has recognized the need for intervention and technology that would help reach and promote well-being through resources that would help foster mental and spir-

the Catholic Church," in *Human Rights - From Reality to the Virtual World*, 2021, <https://doi.org/10.13166/wsge/mtko9151>.

²⁷ Abdeldjalil Khelassi et al., "Health 4.0: Applications, Management, Technologies and Review," *Medical Technologies Journal* 2/4 (2019), <https://doi.org/10.26415/2572-004x-vol2iss4p262-276>.

²⁸ Jinnapat Chuencharoen, "How Technology Has Changed Our Daily Life and Traditional Businesses and Education?," *SSRN Electronic Journal*, 2021, <https://doi.org/10.2139/ssrn.3850486>.

itual health. In the initial years, the Church had been against science and questioned the validity of finding the biblical passages that are said to show that technology and media are part of God's creation, which also means that they are also can be subjected to corruption of the creation as a result of sin or futility²⁹. This also means that these factors are not excluded from the impact of humanity's dive into sin.

Genesis 1:27-28 emphasizes that humankind was created in God's image and given dominion over the earth and its creatures. The Catholic Church teaches that this dominion should be exercised with responsibility and care, reflecting God's stewardship and love.

This leads to the inference that humankind was blessed by creativity, which is one of the factors from which technology emanates, and the second is natural resources³⁰. The church, based on this, has been welcoming of the changes but also has been conscious of highlighting the challenges and negatives that might come with adopting these technologies that people should be aware of. Online platforms like the National Catholic Partnership on Disability (NCPD) have made use of these technologies to help people using mental health resources that are easily available, which include webinars and digital support groups in addition to providing traditional pastoral care or online support to people who need it³¹. This is just one of the many initiatives undertaken by the Church using technology to address modern challenges, and Pope Francis has stressed the importance of addressing loneliness and promoting digital platforms that encourage genuine connection rather than superficial interaction³². Using technology helps to deliver mental health support, and the use of technology demonstrates the commitment of the church to take a holistic approach to well-being, and these are not the only ways in which the Church has capitalized on the opportunities provided by technology.

Digital evangelism, which allows the Church to reach people across geographical and social barriers, is critical in fostering a sense of connection and community among Catholics worldwide, and the Vatican has embraced the

²⁹ Ernest Nyarko, "The Church, Digital Technology and Media: A Biblical Reflection on Romans 8:19-23," *Journal of Education and Learning Technology* (2023), 1, <https://doi.org/10.38159/jelt.2023411>.

³⁰ Nyarko, "The Church, Digital Technology and Media: A Biblical Reflection on Romans 8:19-23."

³¹ NCPD, "Mental Illness," National Catholic Partnership on Disability (NCPD), 2024, <https://www.ncpd.org/disability-ministry/mental-illness>.

³² Pope Francis, "Message of his holiness pope Francis for the 53rd World Communications Day," Vatican, (2019), 3, https://www.vatican.va/content/francesco/en/messages/communications/documents/papa-francesco_20190124_messaggio-comunicazioni-sociali.html.

digital communication platform, which shows their acceptance and shift. Interestingly, the Vatican even has official accounts and YouTube channels for Pope Francis, which reach millions globally, making the religious message more accessible to a diverse range of audiences³³. Social media has allowed the Church to communicate and express its views in real-time and address relevant social and spiritual issues while also providing support to followers and helping foster a sense of global solidarity. In addition, the use of the live stream of Masses also offers the Church a critical way to maintain religious practices during times when attending Church was a challenge, like during the pandemic when the physical gatherings were limited. At this time, the Archdiocese of New York reported that there was a shift in online attendance, with masses reaching people who previously had limited access to local parishes or limited access³⁴. Livestreamed Masses and virtual prayer groups offer a way to participate in the sacramental life of the Church, which maintains communal worship and spiritual connection³⁵.

Technology has also helped the Church with its education mission as platforms like FORMED.org provide online courses, videos, and catechetical materials that are critical in supporting faith formation and understanding of Catholic teaching. With the resources available on-demand, the website was able to serve parishioners of all ages, especially benefiting those in remote regions who do not have access to in-person classes³⁶. Similarly, Catholic Universities have also started to offer online theology courses that allow students to engage with faith studies regardless of location, and this reflects the commitment of the Church to promoting knowledge and spiritual growth using technology to make theological education accessible at a global scale³⁷.

Churches have also used online digital presences like social media to help strengthen community bonds, and the guidelines published by USCCB urge parishes to use platforms like these to engage with parishioners, share updates,

³³ Rudolf Gehrig, "Pope Francis' Impact on the Digital Landscape," EWTN Vatican, 2023, <https://www.ewtnvatican.com/articles/pope-francis-impact-on-the-digital-landscape-699>.

³⁴ Episcopal Charities, "2021 Annual Report" (New York, 2021), <https://www.episcopalcharities-newyork.org/2021-annual-report>.

³⁵ Ibid.

³⁶ Formed, "Catholic Streaming Service," Formed, 2024, <https://formed.org>.

³⁷ Ioanna Komninou, "A Case Study of the Implementation of Social Models of Teaching in E-Learning: 'The Social Networks in Education', Online Course of the Inter-Orthodox Centre of the Church of Greece," *TechTrends* 62/2 (2018), <https://doi.org/10.1007/s11528-017-0247-4>; Tomson Saut Parulian Lumbantobing and Priyantoro Widodo, "Online Bible Study During a Pandemic: Challenges, Solutions, and Opportunities," *GRAFTA: Journal of Christian Religion Education and Biblical Studies* 1/1 (2021).

and encourage participation in local events³⁸. The use of technology fosters a sense of belonging among people and helps connect with others who might otherwise feel isolated. Pope Francis also recognizes the potential of social media to help foster meaningful connections and dialogue, and he speaks of a culture of encounter and urges Catholics to use the platforms to build genuine relationships that reflect the value of love, solidarity, and inclusivity³⁹. Embracing social media, the Church has improved its access and outreach, which has helped foster unity among Catholics globally. The use of technology has also helped to include people who might not be included due to their disabilities or other challenges. Most dioceses are found to offer accessible masses with features like closed captioning and translation to ensure they reach a wider audience and integrate them to participate in worship. The Washington Office of Disability Ministry showcases that the church can use technology to improve access to resources and fellowship for disabled people to ensure inclusivity⁴⁰.

While technology has broadened the Church's reach, it has also introduced challenges. In the US, digital platforms have been criticized for fostering superficial engagement rather than deep, transformative relationships. Online interactions can reduce faith to consumer-like transactions, where users consume content without integrating lessons into their lives. This reflects concerns about consumerism's influence on religious experiences, where digital spaces may commodify faith instead of promoting authentic spiritual growth⁴¹.

Additionally, data privacy concerns pose significant challenges. The Church collects information from digital users, online donations, and email lists, allowing for personalized outreach but also posing risks if privacy policies and security measures are insufficient. The Church must navigate these ethical challenges to align with Catholic values and maintain trust with its members. Balancing the benefits of technology with these risks requires a thoughtful approach, ensuring that digital engagement supports, rather than undermines, the Church's mission of fostering genuine spiritual connections and ethical practices.

³⁸ USCCB, "Social Media Guidelines."

³⁹ Pope Francis, "Fratelli Tutti," Vatican, 2020, 48, https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20201003_enciclica-fratelli-tutti.html.

⁴⁰ ADW, "Office of Deaf and Disabilities Ministry," Archdiocese of Washington, 2024, <https://adw.org/archdiocesan-offices/office-deaf-disabilities-ministry/>.

⁴¹ William T. Cavanaugh, *Being Consumed: Economics and Christian Desire* (William B Eerdmans Publishing Co, 2008), 28–33.

HUMANIZATION AND DEHUMANIZATION OF TECHNOLOGY

Technology has transformed human interaction in the United States, offering new ways to foster empathy and connect communities. However, this also brings potential downsides, such as superficial relationships and reduced in-person contact. The Catholic Church in the US approaches these changes with both caution and openness, recognizing technology's potential while emphasizing the importance of human-centered values to guide its use. The Church strives to balance the benefits of technological advancements with the need to maintain genuine, meaningful connections.

Church has accommodated technology due to the understanding that it is critical to improving the quality of life along with improving health and fostering solidarity. Pope Francis praises technology and its potential to create beauty and facilitate encounters based on the technological advances observed in transport and communication, which improved the ability of individuals to connect and support each other in unprecedented ways⁴². This is certainly very important because, without improvements in transportation and communication, people would not have the same level of access to resources and opportunities, such as healthcare. Without proper connectivity, the accessibility to quality healthcare could be very limited, and digital communication improvement has allowed improvement in technology available for treatment and allowed for improved monitoring, all of which have helped in improving the quality of care and life⁴³. Telemedicine would be a good example as it has allowed healthcare providers to reach isolated or rural populations, and this supports the mission of the church to care for the vulnerable and sick⁴⁴. In the US, the spread of technology in healthcare has been considered a boon and helps people with limited access gain the required help, and there are several

⁴² Pope Francis, "Laudato Si'," 102–104.

⁴³ Eiichi Taniguchi, Russell G. Thompson, and Tadashi Yamada, "Recent Trends and Innovations in Modelling City Logistics," *Procedia - Social and Behavioral Sciences* 125 (2014): 4–14, <https://doi.org/10.1016/j.sbspro.2014.01.1451>; Iqbal H. Sarker et al., "Mobile Data Science and Intelligent Apps: Concepts, AI-Based Modeling and Research Directions," *Mobile Networks and Applications* 26/1 (2021), <https://doi.org/10.1007/s11036-020-01650-z>.

⁴⁴ Gabriele Palozzi, Irene Schettini, and Antonio Chirico, "Enhancing the Sustainable Goal of Access to Healthcare: Findings from a Literature Review on Telemedicine Employment in Rural Areas," *Sustainability (Switzerland)* 12/8 (2020), <https://doi.org/10.3390/SU12083318>; Sarah Ireland, Suzanne Belton, and Frances Doran, "'I Didn't Feel Judged': Exploring Women's Access to Telemedicine Abortion in Rural Australia," *Journal of Primary Health Care* 12/1 (2020), <https://doi.org/10.1071/HC19050>.

examples that show how the Church has played a role. There have been instances where participants of the church have gone on to start a tele-class, which helps reach out and connect to homebound members and improves their sense of belonging and other health outcomes⁴⁵. In studies, it has also been mentioned that some Churches are seen to be important in promoting healthcare, and the use of telehealth helps further democratize healthcare⁴⁶. The availability and support provided by the Church could help ensure that people have more access and that the overall system is responsible for individual needs. These types of technologies are aligned with Catholic social teachings as they emphasize human dignity and access to equitable care.

Technology also has democratized learning as it makes education resources widely accessible, especially for marginalized communities. Platforms like Coursera provide free or low-cost courses on a wide range of subjects, while foundations like the Bill and Melinda Gates Foundation help in narrowing education gaps that exist, especially in low-income regions where education access is limited⁴⁷. The use of these platforms is also helpful for those who are disabled, which means these platforms could help improve inclusivity for all people⁴⁸. Technology has also helped enhance the ability of humanitarian organizations to better respond to crises by providing rapid support to communities that are affected by natural disasters, conflict, or public health emergencies. Mobile apps, drones, and satellite imagery have allowed for improved ability to assess the damage, locate affected individuals, and distribute the resources more efficiently⁴⁹.

The above examples show the humanizing factors of technology as it improves the quality of life and inclusivity, which is critical in the real world,

⁴⁵ Kimberly Hayman, "Teleclasses: Improve Belonging, Vitality, and Health in Church Homebound.," *Journal of Christian Nursing : A Quarterly Publication of Nurses Christian Fellowship* 29/4 (2012), <https://doi.org/10.1097/CNJ.0b013e31826708bd>.

⁴⁶ Meighan Parker, "Come As You Are?: Democratizing Healthcare Through Black Church-Telehealth Initiatives," *Science and Technology Law Review* 25/1 (2024), <https://doi.org/10.52214/str.v25i1.12383>.

⁴⁷ Miller Abel, "The Mojaloop Moment: Expanding Financial Inclusion," Gates Foundation, 2024, <https://www.gatesfoundation.org/ideas/articles/digital-payments-financial-inclusion-mojaloop>.

⁴⁸ Ms Satnam Kaur and Assistant Prof, "Assistive Technology for Learning Disabled-Making Room for Diverse Learning Needs," *International Journal of Research Publication and Reviews Journal Homepage: Www.Ijrpr.Com*, 2 (2021); Jennifer York et al., "Use of Assistive Technology in Inclusive Education : Making Room for Diverse Learning Needs," *Transcience* 34/2 (1992).

⁴⁹ Abhijeet Ghadge, "ICT-Enabled Approach for Humanitarian Disaster Management: A Systems Perspective," *International Journal of Logistics Management* 34/6 (2023), <https://doi.org/10.1108/IJLM-11-2021-0532>; Benedikte Bjerger et al., "Technology and Information Sharing in Disaster Relief," *PLoS ONE* 11/9 (2016), <https://doi.org/10.1371/journal.pone.0161783>.

and the facilitation of these aspects also aligns with the teachings of the Church.

While technology has been a boon, it has also had a negative impact on human society, and one of the primary concerns with technology has been the tendency to commodify human relationships, especially in a capitalist country like the US, where consumerism has driven its growth⁵⁰. Theologians and researchers argue that technology converts all relationships to being just transactions, which transform interaction into consumable goods instead of meaningful connections. It is reported by Albert Borgmann that liberal democracy offers an ideal social ethos that stimulates technology as it plays a role in delivering the liberal democratic promise. Overall, democracy is said to be a convergence of liberty, equality, and self-realization, all of which are said to be linked and in line with the instrumental notion or concepts of technology. The notion of equality and freedom allows each individual to pursue a good life, and this type of concept is said to be one with the promise of technology that is said to be a tool that would help the individual to work towards their goal and allows them to go beyond their rules⁵¹.

Wendell Berry has said that the concept and use of technology is more critical to the American Dream and argues that Borgmann was a Catholic who was open to the possibility of grace within the technology growth, but Berry believes that it is more absolute and tends to often engage with an either/or attitude⁵². Berry believes Americans are very susceptible and attracted to technology and detached from their true connection with the natural order. Berry highlights that Americans early on were motivated by gold and not the homeland, and this was also the reason they built roads that allowed them to move easily, and they had no relationship with the locale⁵³. There was also a view among Americans that unless they made it, they would not be true Americans, and this new world culture had also shifted to become more one expansion, revolution, and victor, which became the foundation of the country and its history and fueled a society that was exploitative in nature and by capitalism.

⁵⁰ Cavanaugh, *Being Consumed: Economics and Christian Desire*, 25–30.

⁵¹ Albert Borgmann, *Technology and the Character of Contemporary Life, A Philosophical Inquiry*, New Editio (Chicago: University of Chicago Press, 1987), 38.86.

⁵² Charles Falzon, “Technology: Master Or Servant Of A Spiritual Life? Contributions By Albert Borgmann And Wendell Berry” (Regis College and the University of Toronto, 2012), 17, https://central.bac-lac.gc.ca/item?id=TC-OTU-34907&op=pdf&app=Library&is_thesis=1&oclc_number=1033014304.

⁵³ Berry Wendell, *The Art of the Commonplace: The Agrarian Essays*, ed. Norman Wirzba (Counterpoint, 2002), 11.

Technological development was not found to be a new tool that could be utilized and monitored to ensure a bit of distance was maintained, but instead, it became a mania in which it transformed into a symbol of success more than anything⁵⁴.

Being successful meant achieving a lot of wealth and being happy in a consumerist society where money could buy new technology and products that are required to make their life ideal and further increase their riches, which was the opposite of the Church's teaching, which opposed the reduction of relationship and people to be consumers. Pope Francis, in their encyclical *Laudato Si'* mentions that consumer culture is not ideal for society as it creates a culture or mentality of use and throw, which dehumanizes individuals by treating them and their relationships as commodities in a society where social interactions are important⁵⁵. This consumerism-based outlook has been a major issue, has led to increased inequality in society, and has been the driving force behind most conflicts across the globe and within the US.

Another issue that has been raised is the erosion of genuine community and the rise of virtual communities, which is where technology and its ability to create pseudo-communities come into the picture, which creates a sense of being connected but lacks the depth of face-to-face interactions. The reports show that loneliness was a serious issue in the US, with 56.7% of bisexual respondents mentioning feeling lonely, while 56.4% to 64% of transfers felt the same⁵⁶. In 2023, a University of Michigan report stated that nearly 37 percent of adults between the ages of 50 and 80 found themselves alone and without any companionship, and it is reported that most people are bound to experience loneliness at some point in their lives due to the existing protocols or relationship structures⁵⁷. As per a study undertaken, it is reported that prior to and during the pandemic, Internet addiction has decreased, and this, in turn, had led to an increase in loneliness, even though the findings vary based on demographics and frequency and type of internet use⁵⁸. This shows that while

⁵⁴ Falzon, "Technology: Master Or Servant Of A Spiritual Life? Contributions By Albert Borgmann And Wendell Berry," 18.

⁵⁵ Pope Francis, "*Laudato Si'*," 49.

⁵⁶ Katherine V. Bruss, Puja Seth, and Guixiang Zhao, "Loneliness, Lack of Social and Emotional Support, and Mental Health Issues — United States, 2022" (Washington D.C., 2023), <https://www.cdc.gov/mmwr/volumes/73/wr/mm7324a1.htm>.

⁵⁷ Allie Volpe, "The Surprising Truth about Loneliness in America," *Vox*, 2024, <https://www.vox.com/even-better/366620/loneliness-epidemic-coping-demographics-america-social-connection-mental-health>.

⁵⁸ Andrew P. Smith and Hasah Alheneidi, "The Internet and Loneliness," *AMA Journal of Ethics* 25/11 (2023), <https://doi.org/10.1001/amajethics.2023.833>.

technology does provide ease of access and the ability to chat and greet people far away from you, it does not provide the emotional support that is required by an individual to feel a part of society.

Borgmann makes the claim that virtual communities do not have the warmth and fullness of traditional in-person relationships and argues that while digital connections are able to supplement real-world relationships, they often are at the risk of replacing them with superficial interaction, which would fail to satisfy the deeper social and spiritual needs⁵⁹. The Church warned about this, and the USCCB deployed guidelines to protect people from the negative impacts of the internet. Technology has also meant an increase in data collection, like Google and Facebook, which then use the data for targeted advertising, which is a breach of privacy while looking to profit from this breach. A Jesuit scholar, in his work on moral theology, notes that privacy is a component of human dignity and respect, which is essential in protecting the inner life and autonomy of an individual⁶⁰. Due to all these changes, society is going through a crisis that seems to shatter the existing support systems and increases issues in personal and communal lives. Due to these issues, often, we as individuals are known to dislocate the anxiety caused and develop differing temporary worldviews that are often self-serving and would help to make lives somewhat tolerable, which is a very poor existence⁶¹. Borgmann, on the other hand, believes that this escape mentality is attributed to the distorted worldview of our lives, which is further influenced and distorted by the way we view our technology-dominated lives. Machines are transient, and this nature would encourage a sense of restlessness as laws of science do not justify the choices that we make and often leave us with a view of the world that is not sufficient enough to create a personal identity and also not helpful in understanding whether our actions are for the good or the bad⁶². Even basic social interactions, which used to be simpler as of now, have become increasingly difficult to predict.

Borgmann asserts that technological advancement has resulted in the fragmentation of the value system and has alienated individuals from their environment and sense of belonging. The absence of connectivity originated with Copernicus's discovery, leading to a transformation or decline in the frames

⁵⁹ Borgmann, *Technology and the Character of Contemporary Life, A Philosophical Inquiry*, 60–65.

⁶⁰ James T. Bretzke, *A Morally Complex World: Engaging Contemporary Moral Theology* (Liturgical Press, 2004).

⁶¹ James H. Olthuis, "On Worldviews," in *Stained Glass World Views and Social Science*, ed. Paul Marshall, Sander Griffioen, and Richard Mouw (New York: University Press of America, 1989).

⁶² Borgmann, *Technology and the Character of Contemporary Life, A Philosophical Inquiry*, 70.

of reference and the perception of indisputable norms⁶³. This perception has led to the consumerist outlook on things, and while we believe that technology is important in bringing values to life, the reach has not been as expected, and most of what has been achieved has been based on our selfish interests⁶⁴. Education, for example, is no longer the same, and it's more focused on functional literacy. This is the situation that technology creates where there is a need for tough decisions to be made, such as whether greater affluence is required or more free time⁶⁵. The concept of free time improving is also a myth as we spend more time in traffic and work multiple jobs in some cases, and even in single jobs, the workload could cause significant stress and time consumption, which means even with advances, the time available is less, and this increases stress on city and individual⁶⁶.

Theologians and Church leaders have often highlighted the psychological risks involved with the overuse of technology and how it could distract people from their spiritual lives and mental well-being. American psychologist Sherry Turkle addresses that technology creates a sense of loneliness and isolation, and this is a result of fragmented attention developed due to the overuse of digital technologies and prevents the individual from engaging in deeper reflection or prayer⁶⁷. The increased consumption of medicine also makes people more numb to the suffering of others and leads to them viewing tragedies as entertainment instead of relatives, which requires compassion⁶⁸. This desensitization, which is prevalent in the US, risks eroding empathy that is central to Catholic social teaching on compassion and solidarity.

DANGERS ARISING FROM THE MISUSE OF DIGITAL TECHNOLOGY

Over-dependence on technology is a major concern, and it would alter how individuals engage with the world, which would impact mental health, attention spans, and social interactions. In the book *Alone Together* Sherry Turkle explains that the constant connectivity using digital technologies creates a social disconnection and replaces real human interaction with digital interaction

⁶³ Ibid., 40.

⁶⁴ Falzon, "Technology: Master Or Servant Of A Spiritual Life? Contributions By Albert Borgmann And Wendell Berry," 32.

⁶⁵ Ibid., 35.

⁶⁶ Ibid.

⁶⁷ Sherry Turkle, "Reclaiming Conversation.," *Camping Magazine* 89/2 (2016).

⁶⁸ Cavanaugh, *Being Consumed: Economics and Christian Desire*, 35–40.

and argues that people, especially the younger generation, would have weaker social skills due to this. The reliance on technology creates a paradox where individuals feel connected but are more isolated, and this leads to them often finding themselves without a support system to tackle mental health problems like depression and anxiety. This loneliness, lack of skills, and poor communication are influencing factors that would eventually lead to suicide, and hence, it's claimed that loneliness is correlated with suicide⁶⁹. Families and carers are critically involved in mental healthcare as families help reduce the chances of patients' access to many self-harm while also providing a supportive environment to sort out the issues⁷⁰.

The breakdown of family and increased independence and reliance on digital channels can thus be blamed for the rise in suicide, as there are no systems in place to replicate the support requirements. Just 11% of the kids in a survey were found to be from intact families, while 89% had some kind of disruption, and it is reported that two-thirds of the children have been exposed to trauma, and 71% reported that either a parent or sibling has a psychiatric disorder⁷¹. This shows the breakdown of family structure has caused increased stress and mental disorders, and people often use technology or online media to escape their reality, as claimed by Berry and Borgmann. Studies have shown that childhood trauma has a direct impact on internet addiction as they tend to use the internet to find a sense of normalcy, as explained, and leads to being influenced by misinformation and views that might be prominent in a society like moral relativism⁷². Even adults, most of them, would know more about the children of their close friends or of influences online than their own children or relatives, which shows the deterioration and increased dependence on the internet and media and lack of focus on reality, which further deteriorates and worsens the situation⁷³. Thus, overreliance on technology has changed

⁶⁹ Sheikh Shoib et al., "Association Between Loneliness and Suicidal Behaviour: A Scoping Review," *Turk Psikiyatri Dergisi*, 2023, <https://doi.org/10.5080/u27080>.

⁷⁰ Louise S. Gorman et al., "Family Involvement, Patient Safety and Suicide Prevention in Mental Healthcare: Ethnographic Study," *BJPsych Open* 9/2 (2023), <https://doi.org/10.1192/bjo.2023.26>.

⁷¹ Aniruddh Prakash Behere, Pravesh Basnet, and Pamela Campbell, "Effects of Family Structure on Mental Health of Children: A Preliminary Study," *Indian Journal of Psychological Medicine* 39/4 (2017), <https://doi.org/10.4103/0253-7176.211767>.

⁷² Xuanlian Sheng et al., "The Relationship between Internet Addiction and Childhood Trauma in Adolescents: The Mediating Role of Social Support," *Frontiers in Psychology* 13 (2022), <https://doi.org/10.3389/fpsyg.2022.996086>.

⁷³ Emine Saner, "The 'sharent' Trap – Should You Ever Put Your Children on Social Media?," *The Guardian*, 2018, <https://www.theguardian.com/lifeandstyle/2018/may/24/sharent-trap-should-parents-put-their-children-on-social-media-instagram>.

society, caused more harm to individuals, and created a situation where there are more mental health issues and behaviors that would not generally be acceptable and preference for morally relativistic ideas.

Technology has also provided new avenues for bullying and harassment, which are often under the protection of anonymity, and studies have shown that this has become an issue, with almost half of US teens having experienced cyberbullying at some point⁷⁴. In *Being Consumed* William Cavanaugh makes the claim that the internet is creating a distancing effect that allows the individual to dissociate their actions from their consequences, which leads to a breakdown in empathy and moral accountability⁷⁵. Technology has also led to an increase in other moral issues like an increase in the viewing of pornography as the accessibility to the internet increases, with reports in the US showing that 69% of men and 40% of women in the US have viewed them⁷⁶. This shows that technology has aided the spread of sins one after the other, and the moral relativistic outlook of American Society has further worsened the situation with increased exposure and acceptance of the changes and misuse of technology, which needs to be managed to revive society.

CONCLUSION

Technology has revolutionized our world, improving quality of life but also posing significant societal challenges. The Catholic Church in the USA has embraced new technologies while emphasizing the importance of ensuring they benefit society and promote equality without dehumanizing individuals. The American Church has utilized technology to further its mission of evangelization, inclusivity, and community building, recognizing its potential to enhance human dignity and moral clarity.

However, the American Church also acknowledges the negative impacts of technology, such as loneliness, privacy concerns, and moral pitfalls. To navigate these challenges, the Church must play a proactive role in educating and guiding individuals, fostering ethical and balanced engagement with the digital world. The shift towards embracing technology aims to lead individuals

⁷⁴ Emily A. Vogels, "Teens and Cyberbullying 2022," 2022, <https://www.pewresearch.org/inter-net/2022/12/15/teens-and-cyberbullying-2022/>.

⁷⁵ Cavanaugh, *Being Consumed: Economics and Christian Desire*, 35–37.

⁷⁶ Samantha Smith and Jamie LeSueur, "Pornography Use Among Young Adults in the United States," Ballard Brief, 2023, <https://ballardbrief.byu.edu/issue-briefs/pornography-use-among-young-adults-in-the-united-states>.

towards salvation and develop a deeper relationship with God, integrating spiritual, moral, and practical guidance.

Technological advances have reshaped US society, transforming communication, learning, and social interaction. The American Church leverages these developments for evangelization and community outreach but also highlights the risks of dehumanization and superficial digital relationships. Church leaders emphasize the need to maintain genuine human connections and address the complexities of modern technology through education and support systems.

In conclusion, the Catholic Church in the USA has significant opportunities to further its mission through technology, but must carefully navigate the associated challenges. By fostering digital literacy, promoting ethical use, and providing faith-based platforms, the Church can harness the potential of technology to strengthen society and uphold human dignity.

Based on the findings of the study and the dehumanizing impact of technology, several steps can be proposed for the Church in the US to ensure societal safety and protection. The USCCB has been instrumental in advocating for the integration of technology within pastoral ministry, emphasizing the importance of skillfully and ethically using digital spaces. This highlights the need for improved digital literacy to effectively evangelize and minister to a digitally connected generation.

The USCCB has provided training and resources for digital literacy, but there's a need to enhance digital communication capabilities and content creation skills. Ensuring that information is relevant, factually correct, and verifiable increases trust in the Church's messages. Given the prevalence of moral relativism in US society, it is crucial to ensure the accuracy of the Church's communications.

Utilizing social and digital media effectively by creating memorable and compelling content is essential. The Church in the US could also introduce a dedicated digital platform for faith-based engagement and broader support, demonstrating care beyond religious contexts. Ensuring regular physical gatherings alongside interactive digital engagement helps foster genuine relationships and community bonds, addressing societal deterioration.

Telemedicine services and mental health camps could support emotional well-being, and digital evangelization should promote clear moral and ethical teachings online. Strengthening Catholic education provides individuals with tools to understand beliefs and engage constructively in online discussions about faith and ethics. The Church must position itself as a source of solace

and support, addressing misinformation and guiding individuals towards salvation. Establishing ethical standards for digital technologies can influence government and corporate practices, ensuring ethical usage aligned with Catholic values.

BIBLIOGRAPHY

- Abel, Miller. "The Mojaloop Moment: Expanding Financial Inclusion." Gates Foundation, 2024. <https://www.gatesfoundation.org/ideas/articles/digital-payments-financial-inclusion-mojaloop>.
- Adetoyese, John Olu. "The Church and Social Media." *Light in a Once-Dark World* 4 (2022): 288–98.
- ADW. "Office of Deaf and Disabilities Ministry." Archdiocese of Washington, 2024. <https://adw.org/archdiocesan-offices/office-deaf-disabilities-ministry/>.
- Behere, Aniruddh Prakash, Pravesh Basnet, and Pamela Campbell. "Effects of Family Structure on Mental Health of Children: A Preliminary Study." *Indian Journal of Psychological Medicine* 39/4 (2017). <https://doi.org/10.4103/0253-7176.211767>.
- Borgmann, Albert. *Technology and the Character of Contemporary Life. A Philosophical Inquiry*. New Edition. Chicago: University of Chicago Press, 1987.
- Bruss, Katherine V., Puja Seth, and Guixiang Zhao. "Loneliness, Lack of Social and Emotional Support, and Mental Health Issues — United States, 2022." Washington D.C., 2023. <https://www.cdc.gov/mmwr/volumes/73/wr/mm7324a1.htm>.
- Castells, Manuel. "The Rise of the Network Society by Manuel Castells: The Rise of the Network Society." *American Journal of Sociology*, 1997.
- Cavanaugh, William T. *Being Consumed: Economics and Christian Desire*. William B Eerdmans Publishing Co, 2008.
- Ceruzzi, Paul. *A History of Modern Computing*. MIT Press, 2003. <https://doi.org/10.5860/choice.41-1596>.
- Chuencharoen, Jinnapat. "How Technology Has Changed Our Daily Life and Traditional Businesses and Education?" *SSRN Electronic Journal*, 2021. <https://doi.org/10.2139/ssrn.3850486>.
- Dinca, Lucian, and Florin Ursa. "Evangelization through the Media. The Holy Trinity in the Shack 2017." *DIALOG TEOLOGIC XXV* 49 (2022). <https://doi.org/10.53438/oyvh6052>.
- Episcopal Charities. "2021 Annual Report." New York, 2021. <https://www.episcopalcharities-newyork.org/2021-annual-report>.
- Everett, Rogers. *Diffusion of Innovations*. 5th ed. Simon & Schuster, 2003.
- Falzon, Charles. "Technology: Master Or Servant Of A Spiritual Life? Contributions By Albert Borgmann And Wendell Berry." Regis College and the University of Toronto, 2012. https://central.bac-lac.gc.ca/.item?id=TC-OTU-34907&op=pdf&app=Library&is_thesis=1&oclc_number=1033014304.
- Fillinger, Kent E. "Behind the Screen: Insights into Online Church." Christian Standard, 2022. <https://christianstandard.com/2022/07/behind-the-screen-insights-into-online-church/>.
- Foley, John P. "ETHICS IN INTERNET." Pontifical Council for Social Communications, 2022. https://www.vatican.va/roman_curia/pontifical_councils/pccs/documents/rc_pc_pccs_doc_20020228_ethics-internet_en.html.

- Formed. "Catholic Streaming Service." Formed, 2024. <https://formed.org>.
- Gehrig, Rudolf. "Pope Francis' Impact on the Digital Landscape." EWTN Vatican, 2023. <https://www.ewtnvatican.com/articles/pope-francis-impact-on-the-digital-landscape-699>.
- Ghadge, Abhijeet. "ICT-Enabled Approach for Humanitarian Disaster Management: A Systems Perspective." *International Journal of Logistics Management* 34/6 (2023). <https://doi.org/10.1108/IJLM-11-2021-0532>.
- Gorman, Louise S., Donna L. Littlewood, Leah Quinlivan, Elizabeth Monaghan, Jonathan Smith, Stephen Barlow, Roger T. Webb, and Navneet Kapur. "Family Involvement, Patient Safety and Suicide Prevention in Mental Healthcare: Ethnographic Study." *BJPsych Open* 9/2 (2023). <https://doi.org/10.1192/bjo.2023.26>.
- Hayman, Kimberly. "Teleclasses: Improve Belonging, Vitality, and Health in Church Homebound." *Journal of Christian Nursing : A Quarterly Publication of Nurses Christian Fellowship* 29/4 (2012). <https://doi.org/10.1097/CNJ.0b013e31826708bd>.
- Ireland, Sarah, Suzanne Belton, and Frances Doran. "'I Didn't Feel Judged': Exploring Women's Access to Telemedicine Abortion in Rural Australia." *Journal of Primary Health Care* 12/1 (2020). <https://doi.org/10.1071/HC19050>.
- John Paul II. "THE RAPID DEVELOPMENT." Vatican, 2005. https://www.vatican.va/content/john-paul-ii/en/apost_letters/2005/documents/hf_jp-ii_apl_20050124_il-rapido-sviluppo.html.
- Kaur, Ms Satnam, and Assistant Prof. "Assistive Technology for Learning Disabled-Making Room for Diverse Learning Needs." *International Journal of Research Publication and Reviews Journal Homepage: Www.Ijrpr.Com*. Vol. 2, 2021.
- Khelassi, Abdeldjalil, Vania Vieira Estrela, Ana Carolina Borges Monteiro, Reinaldo Padilha França, Yuzo Iano, and Navid Razmjoo. "Health 4.0: Applications, Management, Technologies and Review." *Medical Technologies Journal* 2/4 (2019). <https://doi.org/10.26415/2572-004x-vol2iss4p262-276>.
- Kokkonen, Laura. "Established Churches on Social Media: The Case of the Finnish Churches." *Religions* 13/7 (2022). <https://doi.org/10.3390/rel13070587>.
- Komninou, Ioanna. "A Case Study of the Implementation of Social Models of Teaching in E-Learning: 'The Social Networks in Education', Online Course of the Inter-Orthodox Centre of the Church of Greece." *TechTrends* 62/2 (2018). <https://doi.org/10.1007/s11528-017-0247-4>.
- Lynch, Andrew P. "Digital Catholicism: Internet, the Church, and the Vatican Website." *Annual Review of the Sociology of Religion* 6 (2015). https://doi.org/10.1163/9789004302549_008.
- Lynch, Andrew P. "Digital Catholicism: The Internet and the Vatican." In *Global Catholicism in the Twenty-First Century*, 2018. https://doi.org/10.1007/978-981-10-7802-6_3.
- McCall, Daniel F., and Jared Diamond. "Guns, Germs, and Steel: The Fates of Human Societies." *The International Journal of African Historical Studies* 32/2/3 (1999). <https://doi.org/10.2307/220367>.
- McLellan, Justin. "Pope Asks World's Religions to Push for Ethical AI Development." United States Conference of Catholic Bishops (USCCB), 2024. <https://www.usccb.org/news/2024/pope-asks-worlds-religions-push-ethical-ai-development>.
- NCPD. "Mental Illness." National Catholic Partnership on Disability (NCPD), 2024. <https://www.ncpd.org/disability-ministry/mental-illness>.
- Nyarko, Ernest. "The Church, Digital Technology and Media: A Biblical Reflection on Romans 8:19-23." *Journal of Education and Learning Technology*, 2023. <https://doi.org/10.38159/jelt.2023411>.

- Olthuis, James H. "On Worldviews." In *Stained Glass World Views and Social Science*, edited by Paul Marshall, Sander Griffioen, and Richard Mouw. New York: University Press of America, 1989.
- Ouchchy, Leila, Allen Coin, and Veljko Dubljević. "AI in the Headlines: The Portrayal of the Ethical Issues of Artificial Intelligence in the Media." *AI and Society* 35/4 (2020). <https://doi.org/10.1007/s00146-020-00965-5>.
- Palozzi, Gabriele, Irene Schettini, and Antonio Chirico. "Enhancing the Sustainable Goal of Access to Healthcare: Findings from a Literature Review on Telemedicine Employment in Rural Areas." *Sustainability (Switzerland)* 12/8 (2020). <https://doi.org/10.3390/SU12083318>.
- Parker, Meighan. "Come As You Are?: Democratizing Healthcare Through Black Church-Telehealth Initiatives." *Science and Technology Law Review* 25/1 (2024). <https://doi.org/10.52214/stlr.v25i1.12383>.
- Pew Research Center. "Online Religious Services Appeal to Many Americans, but Going in Person Remains More Popular," 2023. <https://www.pewresearch.org/religion/2023/06/02/online-religious-services-appeal-to-many-americans-but-going-in-person-remains-more-popular/>.
- Pius XII. "Miranda Prorsus." Vatican, 1957. https://www.vatican.va/content/pius-xii/en/encyclicals/documents/hf_p-xii_enc_08091957_miranda-prorsus.html.
- Pope Francis. "Fratelli Tutti." Vatican, 2020. https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20201003_enciclica-fratelli-tutti.html.
- Pope Francis. "Laudato Si'." Vatican, 2015. https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html.
- Pope Francis. "MESSAGE OF HIS HOLINESS POPE FRANCIS FOR THE 53rd WORLD COMMUNICATIONS DAY." Vatican, 2019. https://www.vatican.va/content/francesco/en/messages/communications/documents/papa-francesco_20190124_messaggio-comunicazioni-sociali.html.
- Pope Francis. "MESSAGE OF HIS HOLINESS POPE FRANCIS FOR THE 58th WORLD DAY OF SOCIAL COMMUNICATIONS." Vatican, 2014.
- Puel, Hugues. "Caritas in Veritate." *Revue d'éthique et de Théologie Morale* n°258/1 (2010). <https://doi.org/10.3917/retn.258.0079>.
- Saner, Emine. "The 'sharent' Trap – Should You Ever Put Your Children on Social Media?" *The Guardian*, 2018. <https://www.theguardian.com/lifeandstyle/2018/may/24/sharent-trap-should-parents-put-their-children-on-social-media-instagram>.
- Sheng, Xuanlian, Meng Yang, Menglin Ge, Ling Zhang, Cui Huang, Shu Cui, Qiuyu Yuan, et al. "The Relationship between Internet Addiction and Childhood Trauma in Adolescents: The Mediating Role of Social Support." *Frontiers in Psychology* 13 (2022). <https://doi.org/10.3389/fpsyg.2022.996086>.
- Shoib, Sheikh, Tan Weiling Amanda, Fahimeh Saeed, Ramadas Ransing, Samrat Singh Bhandari, Aishatu Yusha'u Armiya'u, Ahmet Gürcan, and Miyuru Chandradasa. "Association Between Loneliness and Suicidal Behaviour: A Scoping Review." *Turk Psikiyatri Dergisi*, 2023. <https://doi.org/10.5080/u27080>.
- Smith, Andrew P., and Hasah Alheneidi. "The Internet and Loneliness." *AMA Journal of Ethics* 25/11 (2023). <https://doi.org/10.1001/amajethics.2023.833>.
- Smith, Samantha, and Jamie LeSueur. "Pornography Use Among Young Adults in the United States." *Ballard Brief*, 2023. <https://ballardbrief.byu.edu/issue-briefs/pornography-use-among-young-adults-in-the-united-states>.

- Taniguchi, Eiichi, Russell G. Thompson, and Tadashi Yamada. "Recent Trends and Innovations in Modelling City Logistics." *Procedia - Social and Behavioral Sciences* 125 (2014): 4–14. <https://doi.org/10.1016/j.sbspro.2014.01.1451>.
- Trukle, Sherry. *Alone Together: Why We Expect More from Technology and Less from Each Other*. Basic Books, 2012.
- Turkle, Sherry. "Reclaiming Conversation." *Camping Magazine* 89/2 (2016).
- USCCB. "Social Media Guidelines." United States Conference of Catholic Bishops (USCCB), 2024. <https://www.usccb.org/committees/communications/social-media-guidelines>.
- Vogels, Emily A. "Teens and Cyberbullying 2022," 2022. <https://www.pewresearch.org/internet/2022/12/15/teens-and-cyberbullying-2022/>.
- Volpe, Allie. "The Surprising Truth about Loneliness in America." *Vox*, 2024. <https://www.vox.com/even-better/366620/loneliness-epidemic-coping-demographics-america-social-connection-mental-health>.
- Wendell, Berry. *The Art of the Commonplace: The Agrarian Essays*. Edited by Norman Wirzba. Counterpoint, 2002.
- Yohanes Widodo. "The Use of the Internet and Digital Media by Indonesian Catholic Church: The Cases of Hierarchies Social Media Account and Lay Catholics Social Media Account." *Proceedings Of International Conference On Communication Science* 2/1 (2022). <https://doi.org/10.29303/iccspceeding.v2i1.125>.

REWOLUCJA TECHNOLOGICZNA JAKO WYZWANIE DLA KOŚCIOŁA KATOLICKIEGO W STANACH ZJEDNOCZONYCH AMERYKI W XXI WIEKU

Streszczenie

Celem artykułu jest ukazanie, w jaki sposób rewolucja technologiczna stała się cechą definiującą współczesne społeczeństwo amerykańskie, która wpłynęła na życie religijne wiernych Kościoła katolickiego. Artykuł ma na celu ukazanie wyzwań stojących przed Kościołem w wypełnianiu swojej misji w społeczeństwie zanurzonym w rzeczywistości rewolucji technologicznej. Problem tego opracowania można streścić w następujących pytaniach: jaki wpływ ma rewolucja technologiczna na życie religijne wiernych w Stanach Zjednoczonych, jakie wyzwania stawia przed Kościołem katolickim w USA w XXI wieku i w jaki sposób Kościół ma spełniać swoją misję w społeczeństwie amerykańskim wobec wszechobecnej technologii? Odpowiedź na te pytania można uzyskać poprzez analizę dokumentów Kościoła powszechnego, nauczania Kościoła w Stanach Zjednoczonych oraz przegląd publikacji amerykańskich teologów i socjologów. Po krótkim wprowadzeniu przeanalizowany zostanie kontekst historyczny rewolucji technologicznej. Następnie przeanalizowane zostanie wykorzystanie technologii w poprawie bytu ludzkiego, a także humanizacja i dehumanizacja jako owoc rozwoju technologicznego, a następnie zagrożenia wynikające z niewłaściwego wykorzystania technologii cyfrowej i jej wpływu na życie religijne wiernych. Ostatnim elementem struktury artykułu jest analiza propozycji działalności duszpasterskiej Kościoła w USA w obliczu wyzwań, jakie niesie ze sobą rewolucja technologiczna.

Słowa kluczowe: rewolucja technologiczna; Kościół katolicki; ludzka egzystencja; humanizacja; dehumanizacja; niewłaściwe wykorzystanie technologii cyfrowej