

CHAPTER VIII

The Catholic Church and Digital Ethics: Building a Bridge Between Faith and Advanced Technology

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Abstract.

The Catholic Church responds to rapidly developing technology by providing digital ethics principles aligned with Catholic teachings to ensure human dignity is respected. This paper analyses the Church's implementation of digital ethics values, its approach to protecting the faithful's privacy, and opportunities for interfaith collaboration on data protection regulations consistent with Catholic ethics. Key findings are: the Church views technology wisely, aware of risks but open to potential benefits; the Church's digital ethics principles fulfill human dignity and the common good; digital literacy and data privacy protection are critical focus areas; implementing digital ethics values is vital to realizing the Church's digital era vision; global cooperation across religions is needed to formulate technological regulations aligning with Catholic ethics. Theoretical and practical implications regarding using the Church's digital ethics as a helpful guide, enriching academic discourse on the Church's technological modernization role, and testing policy options to translate principles into human dignity-protecting regulations. Further research should examine real-world implementation, effectiveness, and societal impact.

Keywords: Digital Ethics, Catholic Church, Faith and Technology, Artificial Intelligence, Digital Literacy

Introduction

The Catholic Church has a vital role in guiding its people to face the ethical challenges that arise with advanced technology. From the beginning, the Church has recognized the potential of technology and its responsibility to enhance communication and faith service through various media and technologies. For instance, the *Inter Mirifica* Decree of the Second Vatican Council (Paul VI, 1963) highlights the efforts of social communication to proclaim faith, education, and truth through the technological media of the day. The Church is aware of the possible risks associated with modern technologies. The consequences of the revolution in terms of psychology, social and individual morals, the structure and

functioning of society, and its effect on values and beliefs are revealed in the Pastoral Instruction *Aetatis Novae* (Pontificium et al., 1992) and *Ethics in the Internet* (Pontifical Council for Social Communication, 2002a), written by J.P. Foley, Chairman of the Pontifical Council for Social Communications. On the other hand, a new understanding emerges by using theological concepts about God and others applied to the functional and relational aspects of robots and artificial intelligence (Green, 2018).

Unprecedented ethical and theological issues have arisen due to the quick development of digital technologies like the Internet, social media, and artificial intelligence. This technology affects practical aspects of everyday life and can upset the foundations of moral and spiritual values in society. This phenomenon provides further in-depth impetus on how faith and the values of truth can synergize with the dynamics of modern technology.

In this context, the Catholic Church, as a spiritual leader, faces the critical task of formulating relevant ethical views and guiding its people in the face of this change. The Church's approach to digital ethics can be found in the popes' encyclicals and official statements. The encyclical *Laudato Si'* (Francis, 2015) represents a significant turning point due to its focus on moral duty. This duty encompasses not only ecological obligations but also the ethical responsibilities of mankind in overseeing the advancements of technology.

Therefore, the study aims to strengthen the bond between the Catholic Church and digital ethics by emphasizing initiatives to create a strong link between faith and technology. The Church seeks to assist its members in interacting with contemporary technology consistent with religious principles by using a methodology grounded in moral and ethical teachings. Examining the Church's doctrine and particular practices is expected to yield fresh perspectives and practical solutions, supporting the Catholic journey in resolving moral difficulties in the digital age.

Literature Review

Digital Ethics in a Global Context

In a global context, the concept of digital ethics has become crucial in understanding the impact of digital technology on moral values. According to Luciano Floridi, a philosopher and expert in information ethics, digital ethics involves deep thinking about the values relevant to information life (Floridi, 1999). Floridi explains that digital ethics is an integral part of modern life, where digital

technology is a central element in the interaction and exchange of information (Floridi, 2021). It is also said that digital ethics addresses values relevant to informative life. It recognizes that information has fundamental moral value (Floridi, 1999).

Digital ethics evolved in line with the need to deal with global issues such as privacy, digital security, and the social impact of digital technology. The development of digital ethics is not limited to geographical boundaries. On a global scale, society faces increasingly complex digital ethics challenges as technology advances. The international community is experiencing increasing concerns about its misuse. The social and cultural development of society is also increasingly dependent on the use of artificial intelligence.

This rapid advancement of information reduces the protection of spiritual, social, economic, and other values (Vinichenko et al., 2020). The challenges of digital ethics are increasingly evident in modern society. Digital technologies, including social interactions and moral decision-making, affect daily life. Floridi states that it is crucial to understand technology's impact on individuals and society thoroughly. One of the critical issues of digital ethics in modern society is thoroughly understanding how digital technologies affect the daily lives of people and society (Floridi, 1999).

Some individuals are unaware of this issue and see digital technology as positive (Scherz, 2021). However, there is no doubt that technology will exist and continue to evolve, even having human-like feelings and understanding. While this will have many advantages, it will also have negative consequences that humanity needs to anticipate (Bostrom, 2020). Therefore, digital ethics includes understanding informative values, i.e., the moral values attached to information. Floridi emphasized the importance of incorporating ethical principles into technology, linking information ethics to the basis of digital ethics, and recognizing that ethical principles should be incorporated into digital technologies (Floridi, 1999).

Understanding and addressing the ethical issues that arise as digital technologies develop is imperative. Everyone, including religious institutions such as the Church, should be involved. The Catholic Church has endeavored to create an appropriate perspective and pastoral stance in this digital era full of opportunities and challenges, among other things, by drawing on teachings from Scripture and the Church's tradition. The following section will discuss the role of

the Catholic Church in responding to the digitalization sweeping almost every aspect of human life.

The Catholic Church's Place in the Digital Era

Including the Catholic Church's viewpoint in creating digital ethics that align with universal human values is essential. The Catholic Church has provided sound ethical guidance to its people throughout history. With their philosophical underpinnings, the moral teachings of the Catholic Church—particularly as articulated by St. Thomas Aquinas in his writings *Summa Theologica* and *Summa Contra Gentiles*—offer a solid foundation for comprehending ethics within the framework of the church.

St. Thomas Aquinas linked ethics with natural law and the concept of virtue. For him, natural law is an expression of the divine will that creates the basis of morality (*Summa Theologica* I-II.Q.91). Aquinas argued that the moral principles in the natural law reflect how God directs human beings to achieve their ultimate goals. Next, St. Thomas Aquinas detailed the concept of virtue, which plays a central role in Catholic ethics. He identified four cardinal virtues, namely wisdom (prudential), courage (fortitude), justice (Justitia), and self-control (temperance). These virtues are considered guiding principles in achieving a good moral life (Thomas Aquinas, 1927).

Apart from imparting knowledge, the Catholic Church promotes moral consciousness among its adherents. The Catholic Church's role in offering moral guidance is growing significantly in a contemporary world of difficulties. Since the Second Vatican Council, the church has provided encyclicals and social teaching that offer a solid moral basis for addressing complex concerns in the digital age, including through apostolic letters, appeals, and messages from the Popes. The church demonstrates commitment and guidance for appropriate technological advancement.

Several church documents address moral and ethical matters, as was previously indicated. These include the encyclical *Rerum Novarum* (Leo XIII, 1891), whose principles are still applicable for addressing the issues of social and economic ethics in the contemporary period. *Rerum Novarum* addressed the social and economic concerns of the Industrial Revolution. Comparably, the encyclical *Caritas in Veritate* (Benedict XVI, 2009) on the growth of the whole person in love and truth offers crucial direction regarding international concerns like globalization and sustainable development. The guidelines above can be used for ethical practice

in online interactions, technology advancement, and digital information modification as data interconnection and transfer become more commonplace.

The Second Vatican Council's directive *Inter Mirifica* (Paul VI, 1963) is reiterated in the terminology of the Pontifical Council for Social Communication's papers *The Church and the Internet* (Pontifical Council for Social Communication, 2002b) and *The Rapid Development* (John Paul II, 2005). These documents are addressed to all those responsible for communication and reaffirm the opportunities, challenges, hopes, and concerns, as well as the mission of the people amid rapid technological development.

The church's involvement in formulating digital ethical perspectives and guidelines represents an attempt to integrate religious and moral values with the rapid development of technology. Although the challenges are complex, the church still adheres to the principle of not rejecting technology but directing it for salvation and full human development. The church's response and attitude towards technological advances, especially those that have the potential to change human life fundamentally, is an exciting study because it involves interpreting the teachings of the Christian faith in a digital context. The following section will discuss how the Catholic Church responds to the latest technological advances.

The Church's Response to Technological Advancement

The Catholic Church views modern technology as a means to improve the well-being of humanity. However, the Church also warns about the dangers if technology is misused and dominates humans (Francis, 2019b). As a spiritual leader, the Church seeks to provide ethical guidance so that technology is used responsibly for the common good by the values of the Christian faith. This is reflected in various appeals, encyclicals, and social doctrines of the Church that address issues of modern technology. In responding to advances in advanced technology, the Catholic Church seeks to combine technological developments such as artificial intelligence, big data, and cybersecurity with moral and human values so that technology truly serves human dignity and not vice versa.

In response to the question of artificial intelligence (AI), *Rome's Call for AI Ethics* (Pontifical Academy for Life, Microsoft, IBM, 2020) states that AI development must preserve human dignity and not transgress universal human values. The Church is concerned that AI can be used to manipulate personal data, and profiling without permission distorts the truth. As a result, the development and utilization of AI must be ethically grounded, with due regard for individual

privacy and freedom. The Church calls for enforcing fair and transparent data protection and cyber policies that protect digital privacy, human values, and the environment so that technology can truly benefit people (Pontifical Council for Social Communication, 2002a).

The Church's perspective on technology includes the understanding that technology can enhance communication and promote dialogue, evangelization, catechesis, and service of the Word of God, as the Pope stated on World Communications Day (Benedict XVI, 2010). Furthermore, Pope Francis exhorts everyone to actively participate in utilizing technology as a tool to disseminate the teachings of Christ, promote religious education, and fortify faith communities, particularly among youth, in his Post-Synod Apostolic Exhortation *Christus Vivit* (Francis, 2019c). Thus, the Catholic Church encourages its faithful to adopt technology for positive purposes, building a better and more moral digital world.

As technology advances, the Catholic Church also recognizes the importance of engaging in constant dialogue with experts in technology and science. This establishes a platform for discussing moral and ethical principles in light of how technology develops (Pontifical Council for Social Communication, 2002b). By having this conversation, the church learns from and adjusts to technological advancements, imparting doctrines and giving its people more timely and helpful assistance.

In this regard, the Encyclical *Laudato Si'* (Francis, 2015) shows how technology affects ecological sustainability and social life, so each individual's moral responsibility is needed in its utilization. Every action of people using advanced technology must represent moral values and Catholic teachings to preserve nature and humanity. As a result, the Church actively shapes digital ethics and provides moral guidance in addressing the intricate problems posed by technological advancement. Put another way, the Church aims to react sensibly to contemporary technology, acknowledging its risks while being receptive to its possible benefits.

Discussion

Implementation of Digital Ethics Values by Catholics

The role of the faithful is very central in implementing the digital ethical values developed by the Church to ensure that the use of digital technology has a positive impact and is based on human values. As moral agents, Catholics are mainly responsible for realizing digital virtue and upholding morality in the digital

era. Following the conclusion of the global training program *The 'Good' Algorithm? Artificial Intelligence, Ethics, Law, and Health*, which was coordinated by the Pontifical Academy for Life (PAL), participants from Microsoft, IBM, FAO, and the Italian Government signed the *Rome Call for AI Ethics* (Pontifical Academy for Life, Microsoft, IBM, 2020). The paperback AI methodologies call on businesses, governments, and other establishments to take accountability for future technological developments and discoveries that will enhance rather than replace human intellect and creativity. The six general principles agreed upon are transparency, inclusiveness, responsibility, impartiality, reliability, security, and privacy.

Digital technology, therefore, must avoid exploitation and respect the dignity of every member and all of the natural environment, as well as take care of the weakest people. This document encourages human rights to be prioritized. Moreover, the impact of transformation brings AI to society, work, and education (Vicini, 2022). The implementation of digital ethics in Catholics can be seen from the four concepts of virtue as proposed by St. Thomas Aquinas: wisdom (prudential), courage (fortitude), justice (iustitia), and self-control (temperance) (Thomas Aquinas, 1927). These four virtues become the principles of digital virtue: digital wisdom, digital justice, digital fortitude, and digital temperance.

The ability of an individual or organization to use technology and information for the advancement of truth and the public good while having a thorough awareness of the implications of their actions is known as digital wisdom (Prensky, 2012). Digital justice refers to providing equal access to technology and overcoming the digital divide. At the same time, digital courage refers to the ability and determination to face challenges or risks that arise to select and disseminate digital information ethically. Digital self-mastery relates to online behavior in a healthy and balanced way when consuming digital content and services.

The Church also states that in the era of contemporary technology, the right to privacy is a human right that ought to be protected. The Church also affirms that the right to privacy is a human right that must be safeguarded in the age of modern technology (Pontifical Council for Social Communication, 2002a).

Cooperation across disciplines and religions is also essential to support social movements that promote the responsible use of information technology. Practically, parishioners are encouraged to actively guide others in digital literacy and avoid negative traps in cyberspace (Dicastery for Communication, 2023).

Thus, people individually and collectively work together to realize the ideals of digital ethics and virtues emphasized in church doctrine.

Church Approach to Protect the Digital Privacy of the People

The Church believes that respecting one's privacy is essential to upholding one's dignity, particularly in light of the swift advancement of digital technology (Pontifical Council for Social Communication, 2002a). Privacy and protection concerns arise when personal information is utilized to identify associations and behavioral trends subsequently employed to sway individuals in their decision-making (Paterson & McDonagh, 2018). Several hurdles and concerns in security and privacy encompass the handling of secure data storage, unauthorized access and data theft, the dissemination of false information, the proliferation of animosity or instigation, and similar matters (Bharati, 2020).

Therefore, in light of the current globalization of personal data, the Church is adopting several actions to safeguard the faithful's digital privacy. The first strategy is educating people about the value of protecting personal information and online activity. Digital literacy initiatives in dioceses and parishes, clergy training in digital security, and youth and lay education in digital ethics are a few ways this is accomplished (Hutahaeon, 2023). Everything from the ethical ramifications of excessive data exposure in the digital age to the technical issues of data protection is covered in the curriculum.

In addition, the second approach is to actively cooperate with various groups to support personal data protection policies, for example, by participating in dialogue forums between managers (Gallagher, 2023). This is also achieved by issuing official statements and digital ethics manuals (Tim Komisi Komsos KWI, 2018). In addition, by requesting that government legislation include regulations that require technology companies to respect user privacy (Mulligan et al., 2019).

Another approach is to empower and support Catholic individuals and organizations working in digital security and privacy. For example, supporting initiatives that promote alternative technology business models that are secure for the public good (Molleví Bortoló et al., 2023). It is hoped that these approaches and initiatives can gradually establish fair standards of personal data protection that uphold human dignity amid global technological developments. Therefore, the church proactively develops and implements various plans to protect people's digital data.

The Role of the Church in Digital Literacy Education for the People

The Catholic Church emphasizes the need for digital ethics education. Catholics are encouraged to develop a deep understanding of ethics in the use of technology and to participate responsibly in the digital world (Francis, 2023a). Digital literacy is an urgent need for people in the current era of technological disruption. The Church considers it essential to take an active role in educating and assisting people in improving their digital literacy skills (Francis, 2023b). The goal is for people to be able to not only utilize various new technologies critically and effectively but also to be able to distinguish and sort out wisely and productively the use of technology that further reduces the gap between humans and robots while avoiding the negative impacts of excessive technology adoption (Dicastery for Communication, 2023).

The Church's role in the digital literacy of the people includes digital literacy training for clergy and parishioners, educational campaigns through social media, and the preparation of digital curricula for Catholic educational institutions. Digital skills, digital safety, digital culture, and digital ethics are all covered in the resources for digital literacy (Nurcahyadi, 2023). These four pillars cover technical competence to operate digital devices and applications, skills to search for and assess the validity of online information, and understanding the ethical implications of the latest technology.

On September 14, 2023, in Surabaya, Indonesia, the Indonesian Conference of Church Guardians and the Ministry of Communication and Information, among others, organized several digital literacy programs for the young (Nurcahyadi, 2023). The promotion of wisdom in the use of social media is also advocated through educational endeavors in various cities (Susanto, 2017). In terms of practical implementation, individuals within the parish are strongly encouraged to actively participate in guiding others in developing digital literacy skills and avoiding the potential pitfalls present in the virtual realm (Paroki St. Vincentius a Paulo Gunung Putri, 2023). Consequently, individuals and communities collaborate to actualize the principles of digital ethics and virtues accentuated in Church doctrine.

Furthermore, the Australian Bishops' Conference in *Genuine Human Encounter in our Digital World* encourages individuals to consider how technology has transformed interactions, jobs, education, and economic dealings. Every community is invited to promote digital literacy and care for those who do not have access to technology services (Australian Catholic Bishops Conference,

2019). Meanwhile, in the United States, the Bishop of Jefferson City laid the foundation for a faith formation program for young people, documented in *Digital, Online, and Social Media Communication with Youth* (Office of Youth Ministry and Religious Education and the Office of Child and Youth Protection, 2018).

Institutionally, the Vatican has issued a comprehensive Digital Communication Guide for the Church and its people, covering digital literacy strategies in artificial intelligence and big data. The documents *The Church and the Internet* (2002), *Ethics in the Internet* (2002), and *Rome Call for AI Ethics* (2020) are expected to become global guidelines for church stakeholders in developing contextualized digital literacy curricula and practices according to the conditions of the people in various regions. With the Church's active and planned efforts in digital literacy, it is hoped that Catholics will become more literate and wiser in utilizing digital technology for humanitarian purposes without losing the values of faith.

A Novel Approach to the Intersection of Faith and Technology in the Digital Era

The way the Catholic Church engages with the digital world has evolved due to the quick development of digital technologies. Whereas technology was often viewed ambivalently, the Church now proactively seeks to understand and integrate technology to evangelize and serve the people (Benedict XVI, 2010). This marks a new paradigm in the relationship between the church and technology in the digital age.

The Church now views digital technology as not merely a tool but an integral part of contemporary human culture. So, the Church seeks to enter and evangelize in the digital world so that the values of faith remain relevant to people already familiar with technology (Francis, 2019c). Concrete examples include synergizing online preaching and catechesis through social media, blessing communities in the virtual world (Meta), and considering ethics in the digital era in the teachings delivered.

Internally, digital modernization is also taking place within the church. Many dioceses and parishes are now actively utilizing big data and digital platforms for administration, finance, and inventory of assets such as land and buildings (Francis, 2022). Best practices in ecclesiastical management are also being shared through digital portals to increase transparency and accountability (Christanti et al., 2023).

Moreover, many Catholic activists and technopreneurs are now working to develop environmentally friendly and inclusive technologies for the disabled to reflect Christian love, such as mobile applications with text-to-speech features for the visually impaired (Mbugua et al., 2022). Thus, the spirit of faith is realized through technological innovations that benefit others. It is anticipated that the Church can continue to respond wisely to the challenges of the times in the digital world while staying true to its transcendental mission of spirituality and morals through a dialogical and collaborative approach with technological professionals. This new paradigm is the Church's effort to balance the values of faith and the progress of civilization in this digital era

Interreligious Collaboration for Ethics and Digital Regulation

The rapid development of digital technology today has a broad impact on all mankind, without exception on the followers of the world's major religions. Therefore, interreligious collaboration and dialogue have become essential in formulating ethical guidelines and technological regulations that protect universal human values (Team of the Indonesian Ministry of Religious Affairs, 2021).

The Catholic Church is actively engaged in cross-faith forums to discuss digital issues, such as the Church's participation in the International Interfaith Congress on *Child Dignity in the Digital World*, where one of its ethical guidelines is the principles of technology for the common good (Francis, 2019a). In this forum, Muslim and Christian figures agreed that technology regulations should respect users' privacy and religious freedom.

In Indonesia, inter-religious collaboration has also begun to be encouraged for digital literacy (Ibnu, 2023). For example, through cooperation with the Ministry of Religion, training, digital teaching, and healthy internet training for religious activists will further strengthen the congregation of religious people (Chomsah, 2023). It is hoped that the digital ethical awareness of religious believers will increase as technology advances. It is envisaged that by fostering a humanistic and conversational atmosphere, the ethical standards of technology, developed in collaboration with religious followers, will serve as the cornerstone for just governance and uphold human dignity.

Several religious organizations, including the Interfaith Center on Corporate Responsibility, have jointly signed a letter in which they put forward a set of guidelines delineating the appropriate utilization of artificial intelligence within governmental entities (Center for American Progress et al.. Inter-religious

collaboration in the digital sphere and the spirit strengthens the spirit of solidarity and mutual understanding for the common good.

The Catholic Church responds to rapidly developing technology by providing digital ethics principles aligned with Catholic teachings to ensure human dignity is respected. This paper analyses the Church's implementation of digital ethics values, its approach to protecting the faithful's privacy, and opportunities for interfaith collaboration on data protection regulations consistent with Catholic ethics. Key findings are: the Church views technology wisely, aware of risks but open to potential benefits; the Church's digital ethics principles fulfill human dignity and the common good; digital literacy and data privacy protection are critical focus areas; implementing digital ethics values is vital to realizing the Church's digital era vision; global cooperation across religions is needed to formulate technological regulations aligning with Catholic ethics.

Theoretical and practical implications regarding using the Church's digital ethics as a helpful guide, enriching academic discourse on the Church's technological modernization role, and testing policy options to translate principles into human dignity-protecting regulations. Further research should examine real-world implementation, effectiveness, and societal impact.

Conclusion

The Catholic Church responds to the challenges of rapidly developing technology by providing principles of digital ethics and perspectives that align with the teachings of the Catholic faith and morals so that the values of truth, justice, love, and human dignity are respected. People can interact with modern technology wisely and according to the Catholic faith. Analyses of the implementation of digital ethical values by the faithful, the Church's approach to protecting the privacy of the faithful, and opportunities for interfaith collaboration in formulating data protection regulations in line with Catholic ethics were discussed.

The main findings that can be concluded include the following: First, the Church views modern technology wisely, is aware of its risks, but is open to its positive potential. Second, the Church's digital ethics principles rest on fulfilling human dignity and the common good. Third, digital literacy education and data privacy protection are critical issues that receive the church's attention. Fourth, implementing digital ethics values by the people is the key to the success of the church's vision in the digital era. Fifth, there is a need for global synergy across

religions and stakeholders to dialogue, cooperate, and formulate technological regulations that align with Catholic ethics.

Church members and stakeholders can use the study's findings as a practical guide for putting the digital ethics the church has created into practice to address diverse issues in the age of technological disruption. Theoretically, this study has enriched the academic discourse on the Church's response and role in the pace of technological modernization and offers ethics as a guideline. Further research is needed regarding the practical implementation of this digital ethics pedagogy, its effectiveness, and its impact on society. Empirical studies are also essential to test the effectiveness of the policy options formulated so that they can be translated into concrete regulations that protect human dignity.

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