

The Church and techno-theology: a paradigm shift of theology and theological practice to overcome technological disruptions

The church
and techno-
theology

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Abstract

Purpose – First, this paper aims to identify and discuss the paradoxical relationship between theology and technology. Second, it also demonstrates the urgency of the digitalization of the Church ministry. Third, this paper offers an understanding of technology and theology through the missional perspective of the Church. Fourth, this paper asks the following questions: (1) Can the Church innovate ways of using technology while maintaining the social aspect of the organism? (2) Can organizations migrate to digital technology with adequate technology/human interface to engage innovations? (3) How can organizations renew their products via technological platforms? (4) From a socio-technical perspective on the digital era, can the Church keep abreast of its workforce in a way that provides adequate participative opportunities? and finally, this paper further interacts with views on the paradigm shift of practical theology and techno-theological practice and possible inclusion in the theology vocabularies of the Church.

Design/methodology/approach – A thorough search on the subject of techno-theology (TTheo) reveals that there are no scholarly works that offer a conceptual understanding of TTheo. However, TTheo derives an interdisciplinary definition from innovative leadership, socio-religious transformation, transformational leadership, anthropological studies, strategic leadership (and authentic leader AL), scenario thinking/planning, technological disruptions, digital transformation and Church sustainability. There are multiple inferences in the literature on the advantages and disadvantages of technology in human relations (Banks *et al.*, 2016; Dyer, 2011).

Findings – Innovation is open-ended. It can take place anywhere and anytime. All it requires are human entities who are creative enough to respond appropriately. The author agrees with Goldsmith that innovation is not limited to a single aspect of any system (Goldsmith *et al.*, 2010, p. xxiv). Innovation can occur anywhere, and there is no limit to it. The only hindrance to innovation is the lack of creative leaders, creative agents of change and an enabling environment to foster change (Teece, 2018, 2010; Bounfour, 2016; Hanna, 2016). While technological innovation is a good development, other factors drive innovation. Technological innovation is not an end by itself. It is a means to an end. And it cannot stand in isolation from other factors that support it. It competes with some external factors which can sustain it or obstruct it.

Research limitations/implications – This paper used the traditional (or narrative), meta-analysis and meta-synthesis methods of literature reviews to study scenario thinking, system thinking, planning and TTheo principles to find a suitable space to redefine and reconstruct the Church's ministry engagement in a technologically avowed age. This paper is not a technology text, nor does it pose to answer technology questions. Instead, it focuses on the role of technology in Christian ministry.



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Practical implications – This paper recommended that the Church redefines its digital transformation perspective by adopting a TTheo that embraces digital materials and hybrid technology in its ministry engagement across the board. This paper further interacts with views on the paradigm shift of practical theology and techno-theological practice and possible inclusion in the theology vocabularies of the Church.

Social implications – Technology shapes human interactions in a sociopolitical, socioreligious and sociocultural environment (Dyer, 2011; Postman, 2021; McLauhan, 1994, p. 7). As a community of faith, the Church is a segment of the broader cultural environment with a cross-section of people from various works of life and opinions. Language, customs and practice differ significantly from others in every environment. Hence, each setting is unique in multiple ways (Teece, 2018, 2010). The world continues to experience developments in many areas. Due to the symbiotic nature of humans and the environment, cross-breeding and cross-fertilization of ideas are inevitable. As one organization reacts to its unique existence, it indirectly or directly affects another. Hence, while growth may be relative, its impacts are overtly universal.

Originality/value – The term “Techno-theology” is a newcomer in the theological circle. Hence, there are practically little or minimal literature on this subject area. In this paper, the author has written the original concept of the subject matter (TTheo). This paper is part of the ground-breaking research the author is conducting on “Techno-theology.” The author’s PhD research proposal was approved in December 2022. The author’s research focuses on the subject matter of this paper (TTheo). The author also looks forward to leading a deeper conversation among scholars.

Keywords Technology, Techno-theology (TTheo), Disruptions, COVID-19 pandemic, Church, Scattered Church, Theology, Future

Paper type Conceptual paper

Introduction

It was difficult for organizations and the Church to run smoothly during the COVID-19 pandemic without technology. So, it will be impossible for organizations to run smoothly in the post-COVID-19 pandemic without a clear definition of the role of technology (Klein *et al.*, 2005, p. 625). The unprecedented global disruptions caused by the pandemic beginning in the spring of 2020 and lasting for two years only demonstrated what change means regardless of when and how it happens. The analog era, when many organizations (including the Church) operated without a proper understanding of the importance of technology, no longer exists. Instead, times and seasons changed with layers of disruptions, including disruptions of the COVID-19 pandemic (Crepaldi *et al.*, 2012, p. 63f., 70, 74, 77; Nicholls and Murdock, 2012, p. 5f). Civil society organizations, businesses, government institutions, schools etc., redefined their approach to technological disruptions. The Church cannot live in the past and expect a miracle of inclusion and sustainability to happen (Krlev *et al.*, 2014, p. 208; The Young Foundation, 2012, p. 6, 18; Crepaldi *et al.*, 2012, p. 63f., 70, 74, 77; Nicholls and Murdock, 2012, p. 5f).

First, this paper identifies and discusses the paradoxical relationship between theology and technology. Second, it also demonstrates the urgency of the digitalization of the Church ministry. Third, this paper offers an understanding of technology and theology through the missional perspective of the Church. Fourth, this paper asks the following questions:

- Q1. Can the Church innovate ways of using technology while maintaining the social aspect of the organism?
- Q2. How can the Church renew and sustain approaches to kingdom ministry via technological platforms?
- Q3. From a sociotechnical perspective on the digital era, can the Church keep abreast of its workforce in a way that provides adequate participative opportunities?

And finally, this paper further interacts with views on the paradigm shift of practical theology and techno-theological practice and possible inclusion in the theology vocabularies of the Church.

Methods

Literature search

A thorough search on the subject of techno-theology (TTheo) reveals that there are no scholarly works that offer a conceptual understanding of TTheo. However, TTheo derives an interdisciplinary definition from innovative leadership, socioreligious transformation, transformational leadership, anthropological studies, strategic leadership [and authentic leader (AL)], scenario thinking/planning, technological disruptions, digital transformation and Church sustainability. The literature has multiple inferences on the advantages and disadvantages of technology in human relations (Banks *et al.*, 2016; Dyer, 2011).

What is Church?

The biblical concept of the Church emanated and dates back to the time and ministry of Jesus Christ. Christ declared his mission to the 12 disciples when he said, “And I tell you, you are Peter, and on this rock, I will build my church, and the gates of hell shall not prevail against it” (Matthew 16:18, ESV). Etymologically and in the classical age, *ekklesia* was “an official assembly of citizens” (Britannica, 2019). In the Septuagint (third to second century BCE), *ekklesia* referred to the gathering of Jews for a religious purpose, such as listening to the reading of the laws (Deuteronomy 9:10, 18:16). In the new testament era, especially beginning from the time of Jesus Christ, the concept of *ekklesia* transitioned into specific-Christocentric interpretation “Church,” (Britannica, 2019).

It is general knowledge in the theological circle that the word *Church* comes from the Greek *ekklesia*, which means a “gathering or assembly of the elect” or chosen ones. In the concept of the messianic relationship, *ekklesia*, therefore, refers to the “gathering or assembly of believers in Christ.” The old testament and new testament described the Church in various ways:

- God’s people is “a holy nation” (Ex. 19:6).
- We are “called to be saints (holy ones)” (Romans 1:7; 1 Cor. 1:2).
- We are “set apart as holy” (2 Tim. 2:21).
- We are chosen to be holy (Eph. 1:4).
- We are “God’s chosen ones, holy and beloved” (Col. 3:2).
- We are “a holy priesthood” (1 Peter 2:5).
- We are “a holy nation” (1 Peter 2:9).
- We are “a holy temple” (1 Cor. 3:17)

Images of the Church as the body of Christ, people of God and bride of Christ saturated the new testament:

- The Church is the *body of Christ*, Christ is the head of the Church (Ephesians 1:10; 4:15), and Christians are the body.
- The Church as the “*People of God*” is another image of the Church. God says of the Church, “I will be their God, and they will be my people” (2 Corinthians 6:16; Hebrews 8:10 NIV).
- The Church is the *bride of Christ* (2 Corinthians 11:2; Ephesians 5:32; Revelation 19:7; 21:9).

The Church is the body of Christ, the people of God and the bride of Christ. Following the concept of *ekklesia*, this paper argues that the Church is global, transcending cultures, time and space. And as an organized assembly of believers of Jesus Christ in the world, the Church interfaces critical challenges such as technological disruptions. This paper equally acknowledges persecution as a significant factor that led to the “scattered Church” theology of Acts 8:1–3. The persecution of the early Church recorded in Acts 8:1–3 became a pivot for the colossal growth of the Church (Richards, 1991, S. 715; Keener, 1993, S. Ac 8:1;

Media ecology

Media ecology peers into how humans communicate via media avenues and how much interactions with technology influence different user behavior patterns. Postman (n.d) understands media ecology as “how media communications affect human perception, understanding, feeling, and value; and how interaction with media facilitates our chances of survival” (Postman, 2021). The changing nature of human communication fostered by technological innovations reveals the urgency associated with the trend. How is that connection happening, and what parameters must be checked to close possible gaps? McLuhan (1994) uses the phrase “The medium is the message” to argue that humans create the medium. Still, the medium modifies the message for human consumption (McLuhan, 1994, p. 7).

Technology shapes human interactions in a sociopolitical, socioreligious and sociocultural environment (Dyer, 2011; Postman, 2021; McLuhan, 1994, p. 7). As a faith community, the Church is a segment of the broader cultural environment with a cross-section of people from various works of life and opinions. Language, customs and practice differ significantly from others in every environment. Hence, each setting is unique in multiple ways (Teece, 2018, 2010). The world continues to experience developments in many areas. Due to the symbiotic nature of humans and the environment, cross-breeding and cross-fertilization of ideas are inevitable. As one organization reacts to its unique existence, it indirectly or directly affects another. Hence, while growth may be relative, its impacts are overtly universal. For example, the COVID-19 pandemic redefined global customs, language, practices and behavior by introducing new ways of doing things through technological disruption (Bounfour, 2016; Hanna, 2016).

Technological transformation

The evolution of digital technology and transformation began gradually across the centuries. Every aspect of the development served a new purpose and compounded what was prevalent before its arrival (Lamey, 2018). The technological transformation happened along with the changing cultural, political, social and religious patterns. However, nothing has ever been static in human experience (Teece, 2018, 2010; Bounfour, 2016; Hanna, 2016). Change remains constant irrespective of time and season. Therefore, it is ironic that scholars such as Levinson (1997), Einstein (1979), Hipps (2006) and other researchers concluded that the emergence of digital technology and transformation is a distraction and harmful interference with the biblical concept of Church fellowship. Unfortunately, they argue for a de-digitalization and de-technologizing of Church ministry to avoid deconstruction of the idea of the *ecclesia* (Levinson, 1997; Einstein, 1979; Hipps, 2006).

The quest for digitalization of the Church ministry in a technologically savvy world is vastly tenable. However, subjugating the *ecclesia* to a narrow method of interfacing exposes the entire body to the avoidable risk of extinction, identified as diffusion of Church in this paper (Kaminski, 2011; Gal’s Insight, 2015). The Church is a creative organism with the freedom of innovativeness.

Tracing the development of technological transformation is essential to understand the past as one looks into the future. In 1990, we witnessed the dawn of a new era of technological innovation (Lamey, 2018). Technological innovations began to grow and changed patterns of doing things globally. Identifying different technologies and their purposes is a master rubric essential for survival in the mixed age.

The danger of neglecting technological transformation would subjugate even multinational cooperation in regrets and subsequently liquidation for lack of relevance and scalability (O'Neil, 2016). Over record time, technology developed as the human need arose, demanding more complex solutions to complexities that saturate the system. It will be an overstatement to repeat that technology renegotiated patterns of human behaviors. It invented what is now popularly called the digital world. Technological disruption impacts all institutions, including the Church (Hillyer, 2020). The emergence of technology transformed society in significant ways.

Technological transformation in 20 years

One common denominator across various entities is their response to participative design (O'Neil, 2016). It is common knowledge that technological transformation is irresistible. Every second of the day, new information emerges and transforms previous knowledge creatively and unapologetically (Lamey, 2018). Consequently, humans cannot resist the power of technology and its control over human activities. Lamey opined, "Technology runs our lives these days. Smartphones, tablets, and computers – we really can't seem to function without them. In a concise amount of time, technology has exploded in the market, and now, many people cannot imagine a life without it" (Lamey, 2018). O'Neil's (2016) concept of "participative design" is a potential deterrent to the unacceptable intrusion of technology in human space (O'Neil, 2016). Therefore, every sector of society, institution and organization should come on board to design what technological formularies would work for their unique purposes. The emergence of various technological platforms happened within two decades. It continues to grow uninterrupted and unapologetically. The Church is part of the larger society. Therefore, it has equal opportunities like other institutions to drive its mission and vision irrespective of what happens within its context. During the persecution of the early Church, believers scattered across the regions. Yet, the Church did not go into extinction (Acts 8:1-3).

Explaining the scattered Church concept of acts 8:1-3

Literal translation of acts 8:1-3

Acts 8:1.

- 1 Σαῦλος δὲ ἦν συνευδοκῆν τῇ ἀναιρέσει αὐτοῦ. ἐγένετο δὲ ἦν ἡκεῖν ἐ τῇ ἡμέρᾳ διωγμὸς μέγας ἡπὶ τὴν ἡκκλησίαν τὴν ἠν Ἱεροσολύμοις, πάντες δὲ διεσπάρησαν κατὰ τὰς χώρας τῆς Ἰουδαίας καὶ Σαμαρείας πλὴν τὸν ἀποστόλων.
- 2 συνεκόμισαν δὲ τὸν Στέφανον ἄνδρες εὐλαβεῖς καὶ ἡποίησαν κοπετὸν μέγαν ἡπὶ αὐτῷ.
- 3 Σαῦλος δὲ ἠλυμαίνετο τὴν ἡκκλησίαν κατὰ τοὺς οἴκους εἰσπορευόμενος, σύρων τε ἄνδρας καὶ γυναῖκας παρεδίδου εἰς φυλακὴν.

Parsing of the passage word by word

Acts 8:1. Σαῦλος: Σαῦλος: Saul, the Jewish name of the apostle Paul, Int. Noun, masculine, singular, nominative.

ἦν: εἶμι: I exist, I am, Int. Verb, third person, singular, imperfect, active, indicative.

συνευδοκῆν: συνευδοκέω: to join in approving, Int. Verb, present, active, participle, masculine, singular, nominative.

ἀναιρέσει: ἀνείρεσις: a taking up, a destroying, slaying, Int. noun, feminine, singular, dative.

ἐγένετο: γίνομαι: to come into being, to happen, to become, Int. Verb, third person, singular, aorist, middle, indicative.

ἡμέρα: ἡμέρα: day, Int. Noun, feminine, singular, dative.

διωγμός: διωγμός: persecution, Int. Noun, masculine, singular, nominative.

ἠκκλησίαν: ἠκκλησία: an assembly, a (religious) congregation, Int. noun, feminine, singular, accusative.

Ἱεροσολύμοις: Ἱεροσόλυμα: Jerusalem, the capital of Isr. and Judah, Int. noun, neuter, plural, dative.

Διεσπάρησαν: διασπείρω: to sow throughout, i.e. fig. disperse (in foreign lands), Int. Verb, third person, plural, aorist, passive, indicative.

χώρας: χώρα: a space, place, land, Int. noun, feminine, plural, accusative.

Ἰουδαίας: Ἰουδαία: Jewish, a Jew, Judea, Int. noun, feminine, singular, genitive.

Σαμαρείας: Σαμάρεια: Samaria, the name of both a city . . . , Int. Noun, feminine, singular, genitive.

ἀποστόλων: ἀπόστολος: a messenger, one sent on a mission, an apostle, Int. noun, masculine, plural, genitive.

Acts 8:2. συνεκόμισαν: συγκομίζω: to bring together, spec. to take up . . . , Int. verb, third person, plural, aorist, active, indicative.

Στέφανον: Στέφανος: “crown,” Stephen, the first Chr. martyr, Int. Noun, masculine, singular, accusative.

ἄνδρες: ἄνῆρ: a man, Int. Noun, masculine, plural, nominative.

ἠποίησαν: ποιέω: to make, do, Int. Verb, third person, plural, aorist, active, indicative.

κοπετόν: κοπετός: a beating of the head and breast, Int. noun, masculine, singular, accusative.

Acts 8:3. Σαῦλος: Σαῦλος: Saul, the Jewish name of the apostle Paul, Int. Noun, masculine, singular, nominative.

ἠλυμάνετο: λυμάνομαι: to outrage, to corrupt, Int. Verb, third person, singular, imperfect, middle, indicative.

ἠκκλησίαν: ἠκκλησία: an assembly, a (religious) congregation, Int. Noun, feminine, singular, accusative.

οἶκος: οἶκος: a house, a dwelling, Int. Noun, masculine, plural, accusative.

εἰσπορευόμενος: εἰσπορεύομαι: lit. or fig. to enter, Int. Verb, present, middle, participle, masculine, singular, nominative.

σύρων: σύρω: to draw, drag, Int. Verb, present, active, participle, masculine, singular, nominative.

ἄνδρας: ἄνῆρ: a man, Int. Noun, masculine, plural, accusative.

γυναῖκας: γυνή: a woman, Int. Noun, feminine, plural, accusative.

παρεδίδου: παραδίωμι: to hand over, to give or deliver up, Int. Verb, third person, singular, imperfect, active, indicative.

φυλακῆν: φυλακή: a guarding, guard, watch, Int. Noun, feminine, singular, accusative (An Intermediate Greek-English Lexicon TDNT, 2023).

The persecution of the early Church (8:1 b-3). Chapter 8 of acts closely connects with Chapters 6 and 7, which include the persecution of the early Church amidst other experiences of the early Church. The persecution of the Church started at the time of the

early Church and continues till this day. The Church suffered various layers of persecution; interestingly, that situation remains the same. In the passage under study, persecution started in six and continued in eight. The persecution of the early Church scattered the “bicultural, foreign Jews. This experience moved the church to do what Jesus had commanded them back in Acts 1:8” (Keener, 1993, S. Ac 8:1). Persecution of the early Church, like the COVID-19 pandemic, was not wholly useless. Both experiences of the Church in different times and contexts turned out to be a creative tool in God’s hand to accomplish his plan and mission.

Those behind the persecution of the Church occupied significant positions in the public system. Saul, one of the leading characters in this episode, was a member of the Sanhedrin, a popular lawmaker, and a bold man. He appeared in the scene and played notable roles. Walvoord and Zuck noted, “The personality of Saul, introduced in 7, is also found in 8” (Walvoord and Zuck, 1983-c1985, S. 2:371). Saul became the chief persecutor of the early Christians (Church; McGee, 1997, c1981, S. 4:542). Saul influenced and inspired the Roman authorities by igniting the fire of persecution and supervising the process.

Philip (Chapter 8) and Stephen (Chapters 6–7) have a close connection. Both chapters belonged to the Seven (6:5). Order of their two names in 6:5 is followed in the narrative sequence in 6:8–8:40 (Walvoord and Zuck, 1983-c1985, S. 2:371). The culture of the Ancient Mediterranean world requires that families bury their dead as a sign of honor to the dead and the family. However, if someone dies after being condemned as a criminal, nobody wants to associate with the deceased for fear of the Jews because it will constitute pollution and impurity. Stephen’s friends refused to adhere to the legal requirements that forbade burying condemned criminals (Keener, 1993, S. Ac 8:1). COVID-19 pandemic shut down places of worship, churches and fellowships. It separated families from their dead ones and caused adverse hardship. Life during the pandemic was horrific and painful. Connecting with others was not visible following the restrictions associated with the pandemic, so people resorted to social media platforms. Churches and institutions struggled to stay afloat.

The persecution of the early Church started with the martyrdom of Stephen. 8:1 b. “*On that day*” indicates that the “*persecution of the church*” was signaled by Stephen’s martyrdom. According to Richards (1991), the stoning of Stephen intensified persecution and expedited the dispersion of the believers in Jerusalem (Richards, 1991, S. 715). It implies that Jewish leaders approved of Stephen’s execution. Israel was in the process of confirming its tragic choice to reject Jesus as her Messiah. Wiersbe (1997) opined that persecution was an “opportunity for service.” Under the stringent circumstances the early Christians faced, the believers redefined their approach to ministry, evangelism and soul-winning. Redefining their approach to ministry, refocusing, settling in the diaspora and doing the Kingdom work in such stringent situations resonated with scenario thinking and strategic planning principles (Christensen *et al.*, 2018, p. 1052 – 1060; Scearce and Fulton, 2004, p. 10, 12). New methods of ministry emerged. The believers learned new and used artifacts of cultures and created Gospel analogies.

The fact that “*all the Jerusalem believers except the apostles were scattered throughout Judea and Samaria*” “was God’s method of fulfilling the mandate of 1:8.” The word “scattered” (*diesparēsan*), “also used in 8:4, comes from the verb *speirō*, used to refer to sowing seed (Matt. 6:26; 13:3–4, 18; 25:24, 26; Luke 8:5; 12:24; etc.) This statement also prepares the way for the ministry of Philip in Samaria (Acts 8:4–25)” (Walvoord and Zuck, 1983-c1985, p. S. 2:371). Whereas persecution initiated by the Roman government scattered the early Church, the Covid-19 pandemic scattered the global Church with countless casualties. Churches closed their doors, and many congregations lost their members to the deadly virus. It was a horrific experience for the modern Church. The persecution of the early Church was unique as the COVID-19 pandemic was at the time.

The word “all” plays a significant role in this narrative. “Though Luke refers to “all,” he could not have included everyone, for the church continued in Jerusalem.” Hence, “From the context, one can conclude that the primary objects of persecution were the Greek-speaking Jews. They would have been easily identifiable and associated with Stephen” (Walvoord and Zuck, 1983-c1985, S. 2:371).

The text does not mention nor explain why the apostles did not leave the city. One would think they did not leave the city following their sense of obligation and commitment to the church in Jerusalem. “The Jerusalem church undoubtedly became more Jewish with the evacuation of people who would be more sympathetic to Stephen. At the same time, this persecution deepened the cleavage between the church and Judaism” (Walvoord and Zuck, 1983-c1985, S. 2:371).

8:2–3. Verses 2–3 “contrast sharply with each other.” *Godly men buried Stephen and mourned deeply for him.* On the other hand, “Saul began to destroy the church” (Walvoord and Zuck, 1983-c1985, S. 2:371). The word for “destroy” (*elymaineto*, used only here in the N.T.) appears in the Septuagint in Psalm 79:13 (80:13 in Eng. Texts) about wild boars that destroy (NIV, “ravage”) a vineyard. “Saul’s zeal was so great against Christians that it was so if he were wildly raging against them (cf. Acts 9:1, 13)” (Walvoord and Zuck, 1983-c1985, S. 2:371).

The section concludes by reiterating the role Paul played. In violence, “*he dragged off men and women*” (cf. 9:29; 22:4–5) and beat them (22:19; 26:11). The experience of the people received mass reactions from the people and “caused havoc in Jerusalem” (9:21). Saul reaped what he sowed. His subsequent “imprisonment as an apostle for Christ contrasted with his imprisoning the followers” of Jesus Christ (McGee, 1997, c1981, S. 4:542). Stephen’s martyrdom and the ensuing persecution of the church confirmed Israel’s unbelief and obstinate refusal to accept Jesus as her Redeemer. (Walvoord and Zuck, 1983-c1985, S. 2:371).

Understanding techno-theology and technology

There are no scholarly writings on TTheo (Ali *et al.*, 2014, pp. 129–138; Benek, 2018). The term TTheo is a newcomer in theological literature. TTheo is innovative theology. The Bible does not mention TTheo as a word but uses allegorical formularies in discussing innovative concepts. For instance, “I made the earth and created man on it; it was my hands that stretched out the heavens, and I commanded all their host” (Isaiah 45:12). Again, in (Jeremiah 10:12), the prophet noted, “It is he who made the earth by his power, who established the world by his wisdom, and by his understanding stretched out the heavens.” Also see (Exodus 35:31–32, 35). It is impossible to think of one’s hand stretching out the firmament, how much the heavens. God uses such allegorical descriptions to invite us to delineate his innovativeness and power. There are various examples in the Bible where humans participated in the creative process. In Genesis 4:17, Cain built a city, and Tubal-Cain made things out of bronze and iron (Genesis 4:22). In the time of Noah, he built an ark that never existed before his time (Genesis 6). In Genesis 11:1–9, the people built the Tower of Babel, and in 1 Kings 6, King Solomon built a magnificent temple. Thinking creatively or innovatively is not a sin. It would not attract any divine sanction unless one thinks like those who gathered to build the Tower of Babel in Genesis 11:1–9. Creative reasoning and innovative thinking will not take a downslope but an upscale measure as the world advances.

Studies reveal that the proliferation of technology will continue to enhance at an unprecedented speed and disrupt previous ways of doing things (Jain and Ranjan, 2020; Autor, 2015; PwC, 2016). Automation like robotics, machines and the unimaginable use of artificial intelligence (AI) will continue to redefine workplace practice and human engagement in the job market (McKinsey and Company, 2017). Given the findings from research and the role of technological innovation, every aspect of society experiences the

impacts of new technologies. Families and institutions, including the Church, are impacted by evolving technological inventions necessitating new ways of thinking and accomplishing tasks (Addis *et al.*, 2014; Durnell and Wetherick, 1976; Mednick, 1962).

TTheo is a bridge builder and not an independent opinion. It is a theological christening of the Church's use of technology as an avenue of Christian ministry. TTheo invites the use of cross-fertilization of ideas, design thinking, divergent thinking patterns, innovative leadership and strategic envisioning capabilities to redefine the Church's ministry participation in a technologically savvy world (Hiatt, 2006; Watkins *et al.*, 2011, p. 91; Kotter, 2014, p. 27, 28; Christensen, 2010). Systematic theology, pastoral theology, theology of mission, philosophical theology, biblical theology, etc., are different terminologies referring to various views of theology. TTheo proposes a group name that identifies the Church's use of technology for the Kingdom ministry. Where previous approaches to ministry delivery, like in-person worship, failed during the COVID-19 pandemic for the inadequacy of technology in the Church's skillset to ministry delivery, TTheo seeks to bridge that gap by introducing a new concept in the theological vocabularies of the Church (Kraus *et al.*, 2019). It is not enough to argue that churches have digital facilities like websites, zoom, WhatsApp handles, Facebook pages, Instagram accounts, Telegrams, YouTube accounts and Twitter. It may be necessary to evaluate the efficiency of these digital components. How are churches using their volumes of digital facilities and platforms to do ministry? How are the churches responding to society's demands for a more robust approach to ministry delivery? Can the Church efficiently use advanced technology to engage specifically those technologically savvy? It is vital to begin renegotiating the Church's ministry structures, leadership and strategies in response to the rapidly increasing rate of technological disruptions (Kaplan and Haenlein, 2019; Davenport and Kirby, 2015). The truth is that new technology is tackling new challenges, and the Church needs a theology that embraces technological concepts for Church's sustainability.

A significant paradigm shift across the board is the rate at which AI influences and intercepts human participation in the job market, increasing unemployment (Addis *et al.*, 2014). What seems uncertain is if robotics will completely take over every aspect of the job market, leaving a few individuals to manage the operational systems for sustainability (Autor *et al.*, 2003). A theology as big as the future is necessary for the Church to reposition itself strategically (Kaplan and Haenlein, 2019; Davenport and Kirby, 2015; Hackl, 2020). The Church can use advanced technology such as AI to sustain its ministry (Kaplan and Haenlein, 2019; Davenport and Kirby, 2015). The Apostle Paul instructed Timothy to study to show himself approved unto God, a workman that is not ashamed but boldly and rightly dividing the word of truth (2 Timothy 2:15). As Timothy moves from one context to another, he engages in ministry effectively without staggering. So, in the future, the Church will stagger in the ministry if it fails to become creative by embracing TTheo and redefining its ministry philosophy of engagement and methods of delivering its message (Acemoglu *et al.*, 2019; Diaz-Chao *et al.*, 2015; Pineiro-Chousa *et al.*, 2020).

Diffusion of Church and scenario thinking

Diffusion of the Church, like diffusion of innovation, sees a scenario in the future when the Church will struggle to remain in existence by using old, obsolete methods to engage new society (McKinsey and Company, 2017; Lacity and Willcocks, 2016). Kaminski (2011) uses the "Diffusion Process" to explain the upward movement over time as new technology emerges and thrives toward the "Saturation point" (Kaminski, 2011; Gal's Insight, 2015). The emergence of new technology affects every aspect of society, including the Church. New

technologies invalidate the old ones. The advent of new technology means that old ones will no longer function creatively in the new age.

Recycling old ideas, repeating ancient practices and insisting on old patterns for ministry in a technologically new world, will circumvent growth and creativity, leaving the Church at the margins of society (Kane *et al.*, 2017). The desire for sustainability and scalability in its Kingdom ministry should motivate leaders of the Church to adopt scenario thinking and planning principles while being innovative and creative in their approach. This approach will guide the Church to remain competitive and a relevant voice for social transformation and growth (Lima and Nelson, 2021; Dabirian *et al.*, 2019; Galer, 2004; Durndell and Wetherick, 1976; Mednick, 1962; Burnham, 1892). The Church must be capable of using scenario thinking, “divergent thinking,” or “productive imagination” in a creative manner to peer into the future responsibly and responsively (Galer, 2004; Durndell and Wetherick, 1976; Mednick, 1962; Burnham, 1892). Using the principles of “divergent thinking” (Addis *et al.*, 2014; Galer, 2004; Durndell and Wetherick, 1976; Mednick, 1962; Burnham, 1892), the Church asks questions such as, “How can we redesign worship delivery to serve the spiritual needs of those scattered because of persecution, health challenges, and jobs?” “How can we be all things to all people?” and “What can the Church learn from institutions such as the financial banks, insurance companies, etc., about customer care to foster a more robust culture of Church-member-care?”

Technology will create innovative jobs in the future that the Church will have no option but to embrace (Lima and Nelson, 2021). But how ready is the Church to embrace the height of technological advancement the world will be witnessing in the future? As the world sees innovations, social change, enhanced human experiences, new approaches to relationships and the quality-of-life, it leaves the Church with a huge assignment to reciprocate (Lima and Nelson, 2021; Ettore *et al.*, 2014). The Church’s ability to negotiate such a future begins with repositioning its ministry goals, philosophies and delivery strategies irrespective of the initial pitfalls (Hackl, 2020; Hargadon, 2003). Using the principles of scenario thinking, the Church’s concept of TTheo responds to future uncertainties capable of submerging the Kingdom. Creating worse-case scenarios helps an institution prepare against such ugly futures.

According to Hargadon (2003), the ugly experience of “Trial and error” should not deter anyone from strategizing for the best. If the COVID-19 pandemic shut the doors of the Church and other institutions, proving that old approaches and delivery methods are obsolete (Hackl, 2020; Autor *et al.*, 2003), every institution, including the Church, should re-strategize for the future (Lima and Nelson, 2021). It is impossible to think of a future Church with little or no technological power.

Church diffusion happens when the Church insists on old approaches to its ministry intervention in a dynamic and change-oriented culture (Susman, 1972). Ministry strategies that worked in the 1970s became obsolete in the 1990s. Similarly, methods that worked in the 1990s phased out in the 2000s. Ministry strategies that worked in 2000 before the advent of AI cannot work in the 2020s how much in the 2050s (Susman, 1972; Houston, 2020). Jorgenson *et al.* (2011) affirm that Western culture has witnessed unprecedented ICT growth and technological innovations that redefined human activities and “living standards” through the Great Recession. In their view, therefore, any attempt to recycle old methods without embracing new trends, such as technological innovations, would automatically kick institutions (including the Church) out of the global system (Jorgenson *et al.*, 2011). Thus, there is a diffusion of approaches that the Church cannot maneuver, no matter how smart and prayerful it claims to be. Divergent thinking that embraces new methods, approaches, skillsets, etc., is inevitable to mitigate Church diffusion. The following strategies constitute Church diffusion:

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- In-person worship is “the” only method of doing ministry.
 - One large physical gathering method.
 - Lack of technological innovation to provide services beyond the physical building.
 - Lack of decentralized Church activities.
 - Lack of digital transformation and the use of AI.
 - An embargo on the use of technology for ministry purposes and
 - Lack of expertise in handling and maintaining the Church’s information technology department.

For sustainability, the Church must wake up and reciprocate change in the larger society. The Church must respond effectively to the changing patterns and new forms of doing things orchestrated by the emergence and growth of new technologies (Acemoglu *et al.*, 2019; Diaz-Chao *et al.*, 2015; Pineiro-Chousa *et al.*, 2020). Ballestar *et al.* (2020) posited, “Gains from technological change will occur through indirect effects and externalities that are not easily shown in national statistics.” Interestingly, not many organizations know about such paradigm shifts orchestrated by the unprecedented technological realities (Ballestar, Camiña, Diaz-Chao and Torrent-Sellens, 2020). An excellent example of ‘unprecedented technological realities’ is the Covid-19 pandemic that ravaged the world and shut down churches and other institutions. As other institutions around the Church redefine their approach and adopt new terminologies to accommodate technological disruptions, the Church needs a new theology to accommodate the escalating technological development and disruptions.

Techno-theology as big as the future

The world is changing and will continue to change at the speed of technological advancement. The unprecedented growth and the impact of advanced technology on society will redefine general living patterns (Jain and Ranjan, 2020; Autor, 2015). These scholars are not arguing whether advanced technology will emerge in the future. Their primary concern is that advanced technology is already worldwide, intercepting old patterns of human activities. Organizations worldwide are now in various reconstructing episodes to navigate the unavoidable creativeness of advanced technology (Jain and Ranjan, 2020; Autor, 2015; Christensen, 2010; Addis, Musicaro and Schacter, 2014). Some organizations will successfully emerge from their innovative episodes to remain in business. Unfortunately, a good number of other institutions may not pull through. The turning point for the Church is a theological understanding of the times and seasons. The Lord graciously gave the Holy Spirit to the Church for guidance, teaching and instructions in all truth (John 14:26).

The invention and the swift spread of AI are a pointer to the future of the digitally oriented world. The creation of the future world started with the emergence of advanced technology and AI. And the world will remain in constant interactions with cutting-edge technology. Autor *et al.* (2003) opine that in the future, technology will take over “routine work,” leaving humans with “non-routine” work. The Church, as an entity, dwells among the people. Jesus’ incarnational ministry indicates that the Church succeeds by identifying with the people at the grassroots of its mission. The Church pays attention to the people’s physical and spiritual needs. The constant question is, what will the Church risk if it does not pay attention to the changing phenomenon of its society? Going into extinction may be the most dishonorable thing to add to such a blatant failure of ministry. Visionary leaders see into the future and create inroads to such ends.

A TTheo, as big as the future, is a theology of societal, economic, social, technological, political and ministerial realities. Such realities are what Soriano *et al.* (2018) identified as a “virtuous circle” where the synergy of ideas forms a bricolage of the good of all (Ballestar, Camiña, Díaz-Chao and Torrent-Sellens, 2020). The Church cannot turn a deaf ear to changes in society. It cannot exist as an island without interacting with its host culture (s). The symbiotic relationship between the Church and state, the Church and its environment or host culture (s), is inseparable. Therefore, every plan for change, transformation and innovation must consider the well-being of people (Isaksen and Tidd, 2006, p. 14).

Developing a theology that addresses the world’s emerging technological needs makes the Church creative and ministerially dynamic. Conversely, theories of innovation that remove the consumer’s well-being from its ethos only seek ways of adversely draining the recipients (Isaksen and Tidd, 2006, p. 14). When innovating, organizations must synergize the efforts of their core players in a deliberate process of inclusive innovation (Isaksen and Tidd, 2006, p. 17 – 18). In their views, Isaksen and Tidd (2006) argue that radical change requires committed innovators who are genuine change agents. Such innovators offer a credible choice of innovation theory.

While it is true that innovating is revolutionary, the revolution spectrum drives the change agent to redefine its approach in a conceptual manner focusing on either radical innovation or transformation (Isaksen and Tidd, 2006, p. 44 – 45, 281, 451). Creating a climate of innovation and natural change must follow a deliberate plan. Innovation policies must serve as transformation bridges for societal growth, renewal and development. The process begins with partnerships and innovative approaches (Reiter *et al.*, 2020). Every strategic leadership envisions creating a friendly environment for innovation and growth (Bakke, 1997, p. 89, 90).

The impact of the COVID-19 pandemic and theology of the future

Trying to make sense of a rapidly changing world comes with many challenges. The struggle to identify the true nature of a pandemic as dangerous as COVID-19 is exhausting. Can the pain of the death toll be alleviated in any way, even with the discovery of a vaccine? Mandryk argues that the world has completely changed forever (Mandryk, 2023, p. 7). It is almost irrational to fight an enemy you do not have the right weapon to fight and defend yourself. While the SARS-CoV-2 virus remains a mystery to the world, its associated COVID-19 disease escalates the terror (Mandryk, 2023, p. 7).

What was normal before now is no more obtainable. Navigating the global COVID-19 pandemic, even executives of many transnational corporations become exposed to imminent dangers (Williamson and Koller, 2020). COVID-19 exposed vulnerabilities and invited individuals, organizations and nations to new ways of engaging the world. Moreover, the pandemic exposed the world to new opportunities for innovation and creativity (Sneider and Singhal, 2020). Envisioning a future for the Church is a process that requires a clear understanding of the future. Not knowing what the future holds and not trying to understand the future leads to outright failure. Thinking of agility, skill and leanness in how COVID-19 invites the Global South to believe now may not make sense. The Global North offers the Global South some indisputable strategies with proven long-term records on agility and leanness. I agree with Mandryk that the Global South provides the Global North with some effective ministry strategies and approaches that are effective, innovative and proactive (Mandryk, 2023, p. 8).

Mandryk’s argument that there is an unabated increase in social discrimination, such as racism, xenophobia and toxic forms of nationalism, calls for reflective reasoning (Mandryk, 2023, p. 10). While the world continued to fight against the social menace, racism,

discrimination, xenophobia, etc., the COVID-19 pandemic reactivated the concept of “social distancing,” an object of division and individualism. Transitioning from a real-world epiphany with the target of revolutionizing without adequate plans to deal with specific barriers, as highlighted, is only a rational, abstract concept (Bhattacharya, 2020). God invites Christians to make sense of the global pandemic. As co-creative partners, God invites Christians to see the direction He wants the Church to walk. The divine mandate of the Church is to preach the good news of Christ to everyone. In Luke 4:18ff, Jesus proclaimed the purpose of his earthly ministry. The Spirit of God was upon Jesus Christ and empowered him to minister to the poor, set the captives free and declare the acceptable year of the Lord.

How is the present Church responding to the invitation to change? How is the Church renegotiating its mission and approach? No matter the barriers, Jesus expects the Church to rely on Him for guidance. But, like the frontline workers fighting against COVID-19 to save lives, can the Church fight to save the members’ lives? Can the Church assist the bereaved and those hurting? Even when doing that requires being creative, innovative and technologically skillful? Where there are movement restrictions, personal contacts and touch, what technological skills can the Church use to bridge such gaps?

Mandyrk’s assessment of the global economy helps project the effects of such a depressed economy on other institutions, including the Church. Combating the COVID-19 pandemic is like tackling the unfettered capitalism of reckless financial desires (Mandyrk, 2023, p. 15, 16). First, the Church must engage the political systems and interact with technological innovators. Second, the Church must reorient its staff, reevaluate its approach to ministry and identify additional areas for ministry. Third, some local places, villages and towns did not receive any help during the pandemic. The Church should network with its leaders and identify challenges and barriers. Finally, the Church should set up a creative, rapid-response team equipped to do its work.

The Church, creative culture and strategic planning

God is a creative being and the greatest creator of all time. In Genesis, we see Him call things into existence just by the spoken word of His mouth. After He formed Man in the Garden of Eden, he blessed him and commissioned him as a co-creative partner (Genesis 1:28). At creation, God gave man all the power to recreate, fill the earth and subdue it. Unfortunately, there is a whooping shortcoming, a terrible gap in Christian theology regarding creative culture. Christian theology is slow to visualize scenarios that will infringe on its mission mandate and develop a creative repellent or lunch back. The notion that God will “deliver us” from the hand of the wicked inundates innovativeness in Christian theology of mission.

In the past, some General Overseers of churches preached that God did not support televisions in the members’ homes. Some criticized the use of private jets by Pastors. Others preached against technological development and transformation. Such pastors and preachers condemned everything on the internet (like many have criticized AI). For such preachers, any form of technology in the Church is a sin. Unfortunately, after misleading their parishioners, some pastors recounted their preaching and apologized to the members for deceiving them.

The Church is the head of the creative culture, not the other way around. Scientists, technologists and others are instruments in the hands of God. God is the potter, and we are the clay. If God uses clay to innovate and create new things, how can the Church not have adequate TTheo to accommodate the present creative culture? (Isaiah 64:8; Jeremiah 18:1–4). Therefore, the Church should not see the proliferation of digital technology and AI as anti-Christian but as an opportunity to reach the world with the Gospel. Reciprocating technological innovations and O’Neil’s concept of “participative design,” the Church should

recreate its gospel message using prevalent technology for present and future spiritual and societal transformation (O'Neil, 2018). Furthermore, the Church can leverage the following for improved ministry delivery in the age of AI and technological/digital transformation:

- *Robotics* – robots can serve as security guards at the entrance of a Church building, especially in areas where the Church experiences persecution. Robots can dictate metal objects, repel users, launch attacks on crime suspects and help to reduce the weight of attacks on Churches and Christians during Church services. Robots are machines that accommodate, retain and disseminate information. The Church can use robots to preach the Gospel anywhere in the city and the world. Such robots can become street gospel preachers, and Gospel tracks distributors.
- *Drones* – Two scriptures reflect the importance of using natural elements to worship God. (1) ⁴⁷But ask the animals, and they will teach you, or the birds in the sky, and they will tell you; ⁸or speak to the earth, and it will teach you, or let the fish in the sea inform you. ⁹Which of all these does not know that the hand of the LORD has done this? ¹⁰In His hand is the life of every creature and the breath of all mankind” (Job 12:7-10 New King James Version). (2) ⁴¹Let the heavens rejoice, and let the earth be glad; Let the sea roar and all its fullness; ¹²Let the field be joyful, and all that is in it. Then all the trees of the woods will rejoice” (Psalm 96:11-12). Churches can employ the services of Drones to distribute Church materials such as flyers, tracks, gospel leaflets and invitations to church services. In addition, church planters can use drones to take pictures and video clips while doing visibility studies (Hadley, 2021).
- *Digital materials* – It will be good for churches to move from print to digital materials. While maintaining the old approach of using printed materials for church activities, churches should diversify as the world becomes more digitalized. Using digital materials will help the Church penetrate more places than the physical presence or printed materials.
- *Apps* – Going digital should include creating unique Apps for various Church ministry purposes. For example, the GPS App is on every smartphone. Every smartphone comes with a Google map. WhatsApp is a click away; it's downloaded and installed on the phone. In addition, the Church should develop more Apps like the Bible Apps already in circulation. The Church should not avoid the digital space but take advantage of such technological transformation to fulfill its mission mandate (Houston, 2020).
- *Hybrid facilities* – The Church is not where people worship every Sunday or Wednesday. The Saints are the Church. They can worship anywhere, irrespective of their geographical locations, but connect through technology in a process identified as a hybrid church (Matthew 16:18). Therefore, church leaders should encourage hybrid church facilities and ensure members have access to various worship materials. For example, members should have access to Bible Study materials, hymns, bulletins and other information to aid their worship services.

Conclusion

Persecution scattered the early Church as the COVID-19 pandemic shut down the doors of many churches. Innovation wrought by technology redefined the concept of gathering, fellowship and worship in a common, physical place. Innovation is open-ended. It can take place anywhere and anytime. All it requires are human entities who are creative enough to respond appropriately. I agree with Goldsmith that innovation is not limited to a single

aspect of any system (Goldsmith *et al.*, 2010, p. xxiv). Innovation can occur anywhere, and there is no limit to it. The only hindrance to innovation is the lack of creative leaders, creative agents of change and an enabling environment to foster change (Teece, 2018, 2010; Bounfour, 2016; Hanna, 2016). While technological innovation is a good development, other factors drive innovation. Technological innovation is not an end by itself. It is a means to an end. And it cannot stand in isolation from other factors that support it. It competes with some external factors which can sustain it or obstruct it.

Goldsmith admits that leaders in various organizations often become hindrances to innovation. Every organization needs a team of innovators to drive competitive innovation (Goldsmith *et al.*, 2010, p. xxiv). There is no individual champion of innovation. The teamwork and the team spirit of Gavriel Iddan, Eitan Scapa and a team of scientists from the United Kingdom led to GIVEN Imaging Gastrointestinal Video Endoscopy (Shilling, 2017). This result affirms Goldsmith's view that successful social innovation needs more than one investor or innovator (Goldsmith *et al.*, 2010, p. 7). It is teamwork. The Church needs team spirit, synergy and collaboration to respond to technological disruptions.

Identifying principles of innovation that accommodate teamwork and collaboration with innovative minds remains the best target in creative leadership. Working hard to overcome inadequacies in innovative approaches is essential, and organizations must overcome the fear of the unknown. Leaders should identify the right team and invest in it to achieve more. To make innovative impacts, organizations must think outside the box. It is vital to synergize with other change agents to drive grassroots innovation (Goldsmith *et al.*, 2010, p. 139).

In 1 Corinthians 9:22, the Bible says, "To the weak I became weak, to win the weak. I have become all things to all people so that by all possible means, I might save some." Younger generations of Christians embrace the rapid proliferation of technological and digital transformations. This situation exposes everyone to decontextualized, globalized information and culture. The world has indeed become a global village. The Church must take advantage of this global reality by developing a biblical theology to accommodate social transformation, technological and digital transformations and other scientific and technological innovations. Job captured this reality well when he said, "But ask the animals, and they will teach you, or the birds in the sky, and they will tell you; or speak to the earth, and it will teach you, or let the fish in the sea inform you. Which of all these does not know that the hand of the LORD has done this? In his hand is the life of every creature and the breath of all mankind" (Job 12:7–10 New King James Version).

The global Church must redefine its approach to ministry in the technologically savvy world.

However, ignoring the reality of technological and digital transformation means edging out of the worldwide communication space. And the Church's ministry mandate requires communication and the use of every medium available to achieve that purpose. In the original language, the word herald denotes the following, "κηρύσσω (kérussó) to be a herald, proclaim," and one can say, "I proclaim, herald, preach" (Strong's Concordance: 2784; 2021). Thayer and Smith (1999) further defined the word herald as follows:

- to be a herald, to officiate as a herald;
- to proclaim after the manner of a herald.
- always with the suggestion of formality, gravity and an authority that must be listened to and obeyed.
- to publish, proclaim openly: something which has been done; and
- use of the public proclamation of the Gospel and matters about it, made by John the Baptist, Jesus, the apostles and other Christian teachers (Thayer and Smith, 1999).

In every age and time, mediums are available to communicate the divine message. For example, John the Baptist improvised on communicating the divine message by going to the wilderness to herald (Matthew 11:10, Mark 1:2, Luke 7:27). Jesus Christ also used the best communication medium available. He climbed the mountain to deliver what we now know as “The Sermon on the Mount” (Matthew 5–7). Beyond the time of Jesus Christ, Christians have used different communication mediums to preach the Gospel.

To achieve this divine mandate of the Church, the theology of technology (TTheo) is paramount in the Church’s theological vocabularies. Christians must use every opportunity, medium of communication and transmission of information to preach (herald) the good news of Jesus Christ. Every local Church can identify what type of technology is available in its context and take advantage of it. The Great Commission’s mandate instructs the Church to go into all the nations (peoples) of the world (Houston, 2020). This instruction includes the civilized, uncivilized, technologically savvy and ignorant of technological transformations. The Gospel is for everyone, and the Church is responsible for heralding the good news. Now is the best time to seek a TTheo that centers on the synergy of ideas. The Church must identify common grounds with science and technology and synergize for future ministry and sustainability. Following contextual realities (where various innovative leadership principles come in) is essential. The future global Church will transcend the present routine where the Church focuses on the situation beyond the four walls of a building. The earlier the Church leaders get this conviction and begin to plan, the better for the Church (Dyikuk, 2017; Benek, 2018; Sweet, 2010, p. 55).

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