



A Discussion on Theological Concerns about Virtual Reality Church and Digital Leadership in the 5G Era

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Abstract. Digital transfer will be greatly enhanced by the availability of 5G and the world will look very different with the increasing presence of immersive technology and data driven decision systems. The paper presents facts upon which prediction can be made on how 5G is likely going to impact the church and some theological concerns that may arise. A discussion of responses towards these concerns is given.

Keywords: 5G, digital decision-making, metaverse church, virtual reality

1 Introduction

With the launch of 5G (5th generation data communication technology) in 2019 in over 60 countries and its projected fuller global availability in 2025, industries, organizations, and whole societies are moving towards further application of data technologies. 5G offers an exponential increase in internet speed and bandwidth, but the greatest breakthrough offered is the “almost-zero” latency which will allow enhanced applications of:

- Autonomous cars, autonomous medical treatment
- Robotics in everyday life
- Immersive technology through the internet.

With a wider spread of the use of 5G across nations, it is plausible to imagine a world not so far in the distant future that will be radically different. Perhaps out of the above list, what could be a major concern for Christianity and the church is the prospect of a deeper dive into immersive technology (also known as virtual or augmented reality).

A crucial fact is that nearly 20% of the world economy is “fully running” on the internet, while the remaining 80% is “relying” on it. Based on these facts, there will be less noticeable, behind-the-curtain presence of radical advancements brought about by 5G, thanks to its capability of enormous data handling. Digital leaders will rise and data-driven decision systems will enable further manipulation of world economy, giving industries more power to reach their ambitious commercial goals. Jeffrey Ritter [1] from the University of Oxford defines Digital Leaders in the following way.

“Digital leaders are willing to explore how information technology (IT) can be used to help an organization become more responsive to customer needs and changing business requirements. Successful digital leaders understand the importance, and take responsibility for, inbound data and the processes ... that support it, as well as the outbound digital information ...” [1] Based on this, leaders with a well-grounded understanding of the digital world or “digital leaders” will have an advantage over those who are not yet thinking in the digital mindset.

This paper presents an analysis of the two problems identified in the introduction, while the aim of the discussion can be formulated in the following statements.

1. To evaluate how 5G’s impact on immersive technology can shift church behavior and discuss theological concerns that may arise and the responses to them
2. To evaluate how 5G may shift church leadership to a digital mindset and discuss theological concerns that may arise and the responses to them.

2 5G and The Future of Church Service Attendance

The pandemic of 2020-2021 was not something that could be avoided nor blamed. The incident has unintentionally pushed society to a life centered around the internet. In the pre-pandemic era, people had already seen how the internet presented a problem to humanity in that it causes dependence and/or addiction especially among the younger generation due to its intense presentation of visual-audio information and other desired information. Even back in the 80’s Hybels [2] reported that the church had become part of the visual information culture or the “television generation” whom have become so accustomed to “flickering images and visual stimulation.” Hybels explained that when people go to church, they subconsciously have an expectation of the same level of visual information stimuli. Thus, Hybels says, when people hear a sermon, they critically ask, “Am I interested in this?” In the present situation with the pandemic-affected social life that has circulated around the internet, and the rising intensity of people’s engagement in it, people’s expectation of visual stimuli has been normalized to a higher level.

Nortey [3] reported their finding of a survey carried out of the condition of church attendance in the post-pandemic era. The research found that people who went to church regularly in the prepandemic era have started to come back to church, with the percentage increasing from 42% in March 2021 to 64% in September 2021 (Figure 1), meaning that 36% of people who used to go to church regularly have not shown up physically for church services. However, the problem lies in the fact that between September 2021 and March 2022, there was only a 1% rise in the number of people attending onsite services.

Looking from another perspective, the survey results showed that between March and September 2021 the percentage of regular church goers who had been following church services digitally (online) during the pandemic have declined from 65% to 55% (Diagram B). Subsequently, however, the number of digital church service watchers rose 2% (to 57%) in March 2022. These results are based on a survey of Christians who were regular church goers in the prepandemic era.

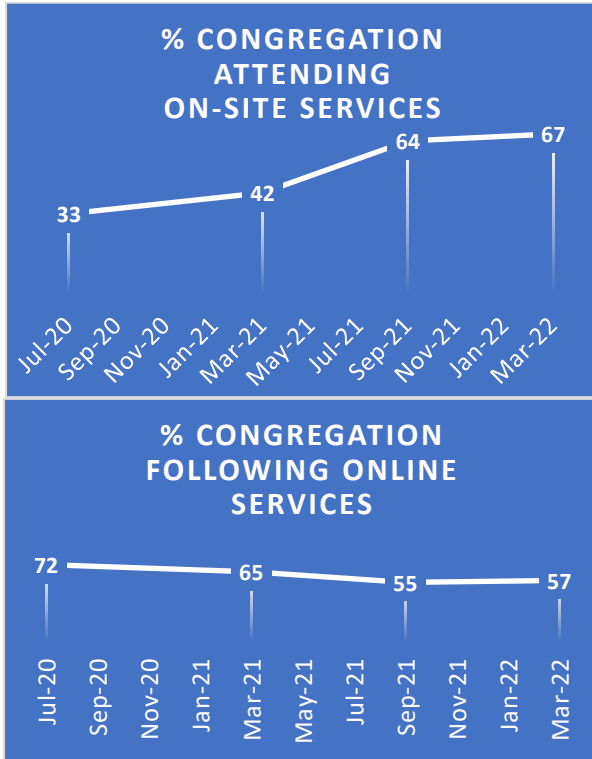


Fig. 1. Diagram A & B: Survey of congregation attending church service digitally in the US (Source: Pewresearch)

One possibility that can be inferred is that a portion of the people who returned to church for physical church attendance during the months of 2020 and 2021 may have went back online for digital attendance as they had been renormalized in terms of their expectations during the pandemic days of no onsite services. This has become a major concern for churches as they endeavor to determine whether digital attendance of church service is beneficial or detrimental to spiritual progress. The church also faces a challenge in attracting people back to onsite physical attendance as people’s minds seem to be operating in a different mode, causing the church to struggle to reconnect physically.

Could there be no turning back from digital attendance of churches? With 5G’s greater digital data transfer ability, the use of immersive technologies such virtual reality (VR) or metaverse will also rise because of its increasing effectiveness. According to the telecommunications company, Ericsson, 5G will make metaverse reach its full potential, stating that “to reach its (metaverse) full potential, the 5G metaverse relationship will be key [4].”

Even before the 2020-2021 pandemic, Virtual Reality (VR) technology was not unfamiliar to the world. VR as the name implies is a computer representation of digital reality in 360-degree images that allows the user to be engaged in an immersed visual

experience. With the launch of metaverse by Meta (previously Facebook), public awareness and interest in VR was heightened. Currently the number of VR users who connect online on a daily basis is nearing 200,000,000 people.



Fig. 2. VR centers in malls are available in cities across Indonesia

Subsequently churches began experimenting with Metaverse church services. Many at the time of the launch of metaverse church services expressed their dissatisfaction of the limited graphic quality. However, it is noteworthy that metaverse use is still at its development stage. 5G will bring a great enhancement in the quality metaverse experience and we can only expect that the number of VR users will explode as user satisfaction is increased.

3 5G AND DIGITAL CHURCH LEADERSHIP

As society takes a new shape, being transformed by data technologies enabled by 5G, a threat analysis for the church is that it could find itself out-performed in a world of sophisticated data-driven leadership. Harvard Business School gives describes Data-driven decision-making as “the process of using data to inform your decision-making process and validate a course of action before committing to it [5].” As more and more leaders take advantage of the 5G-enhanced digital technologies to implement data-driven decision systems, two key areas that need attention in the inescapable tide of digital leadership are: 1) future leaders need to be equipped with adequate digital data management and analysis skills and 2) the ecumenical church as the source of data.

Currently people within the church are likely to be dismissive of the notion of digital leadership in mission and church growth efforts. Educational institutions intended to equip human resource for the church have not shown any sign of taking steps and proper measures to prepare future Christian leaders (theological school students) with skills relevant to the digital, data-driven world.



Fig. 3. Actual immersive online church experience using VR goggles

4 Discussion

4.1 Response to Theological Concerns about The Virtual Reality (Metaverse) Church

Based on the notion that nothing that exist was created without Jesus in John 1:3 which states “All things were made through him, and without him was not anything made that was made” (ESV), Gatoto [6] proposes that as VR is something that exists, therefore it exists through God. An important evaluation by Murray and Sixsmith [7] is that during VR experience, the brain adapts to the environment that can be perceived through the VR display while the physical body remain in the real world. Tilley [8] argues that VR causes a disembodiment effect, where virtually people interact with an artificial environment without their physical body’s full involvement and thus what their minds are experiencing is essentially an illusion.

The arguments against VR mentioned above can be responded with the question: does VR actually bring the user further or closer to the experience of the church service compared to regular online services? If VR actually brings the user experience to an effect of being more distant to the church service compared with regular online services, then it can be rendered as useless for the spiritual growth of people. Conversely, if in fact it brings people to a more

focused experience of church service, with less distraction and higher involvement quality, then metaverse church service should be considered as useful.

Many questions surrounding the VR church may arise, for instance, will it produce a negative effect in the long run? Does it introduce an element of insincerity or fakeness due to its use of avatars representing the user's presence? These are typical questions for which satisfying answers may not be given at the present time. In addition, considering the current condition that VR is commonly used for unconstructive purpose, the church's immediate reaction would be to renounce and stay away from it. It is beneficial to revert to Kranzberg's First Law [9] which states: "Technology is neither good nor bad; nor is it neutral" from which a powerful principle can be derived and applied to VR. VR itself is morally unbiased and has the potential to be utilized intentionally towards positive outcomes depending on the user.

Supporters of VR church have put forward their opinions that the presence of God is not restricted by locations, space or time. Even in VR [10] God's Spirit can present Himself; the Holy Spirit's activity cannot be confined only to physical circumstances such as buildings but also in the virtual world.

4.2 Response to Theological Concerns about Digital Church Leadership

Towards digital-based decision systems, it is estimated that many people in the church will be dismissive of it with the attitude that it is not relevant to ecclesiastical ministry. The notion is that Christians are primarily Christ followers and Christ-centeredness means that all that is needed is to follow Him thoroughly and completely [11]. This Christ-centeredness principle teaches that what we need to do in order to reach fullness is to do what God wills for His people to do and that what humans can know is so limited compared to what God knows, especially in terms of what is the best solution for people's lives. The Biblical foundation of this notion is usually taken from Isaiah 55:8-9: "For my thoughts are not your thoughts, neither are your ways my ways, declares the Lord. 9 For as the heavens are higher than the earth, so are my ways higher than your ways and my thoughts than your thoughts (ESV)."

It is noteworthy that the notion of data-based decision-making system can be viewed as being consistent with the biblical wisdom: "the simple believes everything, but the prudent gives thought to his steps" (Proverbs 14:15 ESV). Thus, the argument is that the Bible itself teaches us to be prudent and thoughtful in making our decisions and that to be completely prudent and thoughtful especially in the church, leaders need to have all the necessary data and are able to process and interpret the data.

Data driven leadership must be considered as being based on science and the scientific attitude. It is profitable to recognize that God's people or the descendants of Abraham have become prominent figures in the fields of science and technology which demonstrates that as God's people earnestly and faithfully meditate upon His Word, they will produce works of superior quality that eventually can have massive beneficial impact on the society. Much of what is today's science comes from the work of believers; by mentioning the likes of Kepler we are reminded that the fundamentals of science are the thoughts that came out of the minds of devout Christ believers [12].

Not many Christians are aware that a key figure who discovered an underlying principle of data science was a church priest (i.e., a man people who devoted his life to the service of God). Reverend Thomas Bayes, an English Presbyterian priest, born in 1701, developed the principle named the Bayes Rule which is a statistical principle

that uncovers “hidden” realities in a data set [13]. This rule has been applied in wide range of areas from artificial intelligence to public health to discover hidden unintuitive probabilities. Further application of the Bayesian principle will continue to affect human life in a great way, such as in health and medicine, email security, gadget technology, and other areas.

Looking forward with optimism, the church may have already felt a need to act and prepare for very sophisticated world. More often than ever, the church seems to be mentioning groups such as Barna, Pewresearch, and the Indonesian-based Bilangan research in their discourse. Statistical data is being utilized to convince the Christian audience.

5 Conclusion

Preparing children to face the digital world. As the older generation usually become overwhelmed by the introduction of multiple new technologies, due to their being already accustomed with previous ones, the younger generation will not see these technologies as being “new,” rather to them, familiarity with these technologies is a necessity in order to be fully oriented in the world they live and grow up in. Instead of allowing children to discover Virtual Reality on their own, it is far more beneficial to guide them in the proper use of this technology and directing them to use it in a way beneficial to their mental and spiritual understanding and knowledge of God. For this reason, churches must get the media ready to be used by the younger generation.

Higher quality Virtual Reality media opens up the possibility of the creation of Bible learning media that is better than ever. On the one hand, it allows for a more realistic experience of learning, as immersive technology enables a person to be inside the media rather than being an outside viewer. Development in this ministry should be taken into serious consideration as the young generation must be guided to use the available technology for the purpose of increasing their faith.

Raise the involvement of IT tech people in the church. For the above two points expressed above, what ultimately needs to be prepared is human resource in the church that can get the job done. This is especially true with regards to the development of data gathering and data analysis team as part of church ministry. The church needs to look ahead in building a team of people who have a desire to dedicate their skill to the glory of God.

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