**HTS Teologiese Studies/Theological Studies**
ISSN: (Online) 2072-8050, (Print) 0259-9422



# Disability and digital ecclesiology: Towards an accessible online church

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**Dates:**
Received: 04 Dec. 2023
Accepted: 26 Jan. 2024
Published: 26 Mar. 2024

**How to cite this article:**
Amenyedzi, S.B., 2024, 'Disability and digital ecclesiology: Towards an accessible online church', *HTS Teologiese Studies/ Theological Studies* 80(1), a9599. https://doi.org/10.4102/hts.v80i1.9599





Even though the digital church has been in existence for some time, it was mainly a transmission of onsite church services and programmes in the online space. The coronavirus disease 2019 (COVID-19) pandemic and its demands for a global shutdown to mitigate and contain the disease moved almost all social activities including church services to the online space. It is evident that persons with disability experience extreme exclusion from the church's theology, praxes, and ethos. Unfortunately, this phenomenon is replicated in the virtual space. Research proves that persons with disability were not considered in the migration of churches to the virtual space; hence, digital accessibility is minimal or non-existent during and after the COVID-19 era.

**Contribution:** This article explores the various transformational stages of both the church and media while further exploring possible ways by which the virtual church may grant accessibility to persons with disability.

**Keywords:** disability; online church; digital accessibility; new normal; assistive technology.

## Introduction

The church has gone through various transformations and eras with peculiar characteristics in each situation. The current digital era has seen a significant migration of churches to the digital space. Although online church services have been in existence for a while, it was basically a transmission of online services and programmes to the virtual space. The rapid spread of the coronavirus disease 2019 (COVID-19) pandemic caused states and nations to place restrictions on social gatherings to contain the disease. The online space became the *new normal* with almost all social activities migrating to the virtual space. The church was not left out; even though unprepared, churches harnessed the internet and electronic devices to make the church accessible through online platforms. Although the migration was not without challenges, the benefits such as the opportunity for Christians to practise fellowship and worship together despite a lockdown cannot be overlooked (Kinoti & James 2021; Osei-Tutu et al. 2021; Sulkowski & Ignatowski 2020).

As previous research proves that persons with disability are extremely excluded from churches (Amenyedzi 2016, 2021b), I was curious to explore how accessible the digital church is to persons with disability in the *new normal*. Employing an online research method, social media research method, and social media analysis, online church services, prayer meetings, and musical and worship services on YouTube were critically analysed. The focus was on churches within the African context. A detailed finding of the study was presented at the annual conference of the International Research Training Group (IRTG)-Transformative Religion. Undoubtedly, similar patterns emerged as in my previous study of the onsite church. Firstly, disability is an afterthought in the *new normal* as in the *old normal*. Secondly, the digital church is inaccessible to persons with disability. Thirdly, on a positive note, there are some accessibility efforts by some churches although this is very minimal (Amenyedzi 2023). The article explores various transformational eras of both church and media and possible disability accessibility avenues for the digital/online church.

## Transformational forms of being church

Change is generally not so easy to embrace; even though church has gone through various transitions, some denominations still hold on to some traditions, doctrines, and rituals that cannot be compromised. No one anticipated a pandemic such as COVID-19 which affected every social gathering, and the church was not excluded. The pandemic undoubtedly triggered reimagination

and different forms of being church. Church transformation did not start with the digital era but has been going on since its inception (Pillay 2020).

The first church started at Pentecost in Jerusalem as recorded in the *Book of the Acts of the Apostles* in the Bible. The church had community and house church models which are reflected through the reflected through the New Testament. Then came the Roman Empire, its fall and the Dark Ages. The church history records the next era of Eastern Orthodoxy and Western Roman Catholicism which was followed by the Great Reformation led by Martin Luther which brought new dimensions to praxes and theology reflecting the era of Protestantism (Pillay 2020). Christianity and its various phases have impacted on the very being of church.

Pentecostalism, Charismatic movements, and Prophetism also brought another new dimension to expressions and essence of being church (Nel 2020; Ojo 1988; Omenyo & Atiemo 2006; Resane 2017). In Africa, the emergence of African Indigenous Churches and/or African Initiated Churches gave opportunities for Africans to freely express themselves in meaningful and realist ways mostly digressing from Western forms of being church (Anderson 1995; Masuku 1996). The church has survived through many transitions, and we are yet at another juncture: the *new normal*. The way the church is conducted has taken a new turn, a virtual era hence the need to explore avenues of accessibility for persons with disability in this new form of being church.

## The digital church era

In the internet age, it is possible to access products and services globally in a split moment. The cyberspace is a common place for almost all activities and transactions to take place. Cloete (2020b) opines that in the digital age, digital media is not only good for sending across messages but there is also a digital culture that shapes the very nature of life, hence, calling for a theological reflection. To this end, the church has not been left out:

> [*T*]he digital church is church that is transmitted online via internet and accessed through computer and other electronic devices like phones and tablets. In other words, the internet is used to facilitate church activities such as prayers, worship, Bible study and other programmes. (Amenyedzi 2023:2–3)

Although the online church has been in existence for a while, it was more of a transmission of onsite services and programmes on virtual platforms like Facebook and YouTube, among others, rather than a place where actual church existed (Amenyedzi 2023).

Most significantly, the COVID-19 pandemic triggered a sudden migration of church to the digital space because of social distancing and lockdown restrictions. Consequently, this became the *new normal* during the pandemic (ed. Campbell 2020; Denteh 2024; Pillay 2020). Though many churches have returned to onsite services, some of them have maintained a hybrid form of being church by transmitting onsite services as previously, but also having some programmes such as prayer meetings and others purely online (Amenyedzi 2023). The virtual space was advantageous as it brought church to the people at their homes when they could not go out to intermingle with their fellows. However, this was not without some drawbacks; congregants had the liberty to choose sermons that they wanted to hear in a split moment, not necessarily what they needed (Cloete 2020a). The church also experienced crisis of faith and crisis of community during the pandemic. Furthermore, there remain controversies around which virtual liturgies or rituals are acceptable within different church traditions. Regardless of the challenges the digital church is confronted with, the benefits of an online community and fellowship during a difficult time such as the COVID-19 pandemic cannot be underestimated (Cho 2021; Darmawan et al. 2021; Isiko 2022; Osei-Tutu et al. 2021; Pillay 2020). Campbell (ed. 2020) identifies the emergence of digital theology and digital ecclesiology. It is without doubt that the online space has become a new mission field (Da Silva 2020; Denteh 2024), hence, persons with disability must be included in this mission as the *missio Dei* is all-inclusive (Amenyedzi 2016, 2021a, 2021b).

## The church and media

Regarding the church and media, there has been an observable metamorphosis from print media to digital media. I recall when I was young, at Sunday school, we were handed small tracts, booklets, and the New Testament. Evangelism, crusades, and outreaches were coupled with print media; new converts were given books that were helpful for understanding Christianity and enhanced spritiual growth. Then came the era of mass media where the church harnessed the presence of radio and television to air their programmes. This is not to say print media is not included in mass media, it was mostly the electronic aspect the church utilised more. Some churches were against watching television as they saw the programmes as not sacred; however, with time even those who were against watching television did not hesitate to embrace mass media and the benefits it brought to the church especially in terms of outreach.

Media itself has gone through transformation, hence, we are in the digital age where media seems to control every sphere of life (Cloete 2020b). For that matter, the church has done the best to follow the trend, adapting to the digital space which was even more necessary during the COVID-19 pandemic as there was no other way out. Social media has become the order of the day, and the church is utilising this opportunity. Though this migration to the digital arena has challenges for the church, the benefits are enormous. The church needs to reimagine new and relevant ways of conducting missions which are relevant to the times and seasons (Cloete 2020a; Pillay 2020). In essence, as the mission of God includes everyone, persons with disability cannot be left out in the digital migration of the church (Amenyedzi 2023).

## The digital church and accessibility

A digital church that is accessible ensures that all programmes, activities, and texts on their online platforms are accessible to a large extent to everyone, especially persons with disability; therefore, the focus is on digital accessibility. There is not a one-size-fits-all, but various forms of disability would need different kinds of accessible facilities to ensure equal participation (cf. Amenyedzi 2023).

A recent research of online church services and programmes during and after the pandemic proves that the digital church is inaccessible to persons with disability. Three main patterns emerged from the study: firstly, it was evident that disability is an afterthought in the *new normal* as the church has not considered persons with disability during the digital migration. Secondly, the digital church is inaccessible because most of the online services and programmes did not factor in accessible facilities on their virtual platforms to accommodate persons with disability. Thirdly, only very few churches and ministries are accessible with captions or sign language interpretation (cf. Amenyedzi 2023). Previous research proves that persons with disability experience inaccessibility to onsite church services and programmes in Africa, hence, leading to extreme exclusion and a lack of participation (cf. Amenyedzi 2016, 2021b; Kabue 2011). The story is no different in the online space. I have indicated elsewhere that unless the church grants full access to persons with disability, they cannot claim to be fully involved in the *missio Dei* [mission of God] (Amenyedzi 2016, 2021a, 2021b).

Accessibility in the digital space can be easy but at the same time a lot more complex than expected as there are various forms of disability with different forms of required technological infrastructure and assistive devices. Kretzschmar (2018) proposes for the church to have a disability ministry to be able to include and integrate persons with disability. This does not imply that persons with disability are segregated from mainstream activities, but it is to enable the church to make conscious efforts to deliberately enhance accessible ministry and full participation.

## The digital church and digital accessibility

According to Cyndi Rowland (2023), digital accessibility is a matter of social justice, ensuring that people with disability have equal opportunities in the online space. Digital accessibility for the church is to make sure that all their online platforms including websites and social media handles are user-friendly as much as possible to people with disability. It means that information and activities are accessible. Digital accessibility can be simple but at the same time very complex which may require experts and, in some cases, assistive technology. This is why it cannot be a trivial matter.

An accessible church must indicate they have accessible facilities so that persons with disabilities are aware of their possible welcomed participation. It is relevant to note that different forms of disability will require different forms of accessibility facilities; hence, consultations with disability experts and technology experts will be required for building or modifying existing websites and online platforms. The church must have short-, medium-, and long-term plans that are included in the church budget. The church would have to invest in technology to enhance the full participation of persons with disability in their praxis and digital ecclesiology.

### Assistive technology for the digital church

Assistive technology and devices enhance and facilitate the independence of persons with disability. Examples of assistive technologies and devices are wheelchairs, hearing aids, visual aids, prostheses, access technology, augmentative and alternative communication. It is important to note that there are specialised computer hardware and software that can increase mobility, hearing, vision, or communication capacities (Baxter et al. 2012; Jutai & Day 2002; Schmidtler et al. 2017; UNICEF & WHO 2015). It is equally significant to pinpoint that assistive technology is not only useful to persons with disability but also elderly people and sick people who may need them temporarily for recovery. As this article focuses on the digital aspects of assistive technology, the focus is mainly on specialised computer hardware and software. In the case of the church, it goes in both ways: the church must provide accessible facilities on their digital platforms, whereas, in certain cases, persons with disability would themselves require assistive devices in order to access church services and programmes. I propose that the church even goes beyond the available platforms to assist in providing such devices for persons with disability who may not be able to afford to ensure equal accessibility and participation.

United Nations Children's Fund (UNICEF) identifies the barriers to individuals in using assistive devices as follows: a lack of awareness; a lack of governance including legislation, policies, and national programmes; a lack of services; a lack of products; inaccessible environments; a lack of human resources; financial barriers; procurement and delivery challenges and fragmentation of the assistive technology sector. There is a further proposal for strategies to ensure the provision of assistive services such as 5 A's & Q principles. The 5 A's & Q being Availability, Accessibility, Affordability, Adaptability, Acceptability, and Quality (cf Assistive Devices – UINICEF cited by Physiopedia n.d.).

The 5 A's & Q are critical for the church to consider if there is a determination to fully include and integrate persons with disability in their ministries. There are various forms of digital assistive technology in this regard such as input and output devices, hardware, software, and operating systems. They can be categorised into the following aids: *hearing aids* which are electronic devices that assist people with hearing loss or impairment. These aids usually work through amplifiers that help to increase the strength of the digital signal. Furthermore, there are *low-vision aids* that are purposed to aid persons with low vision or visual impairment.

These devices enhance the little vision left to access digital content. Then, there are also *cognitive aids* that are tailored to assist persons with attention memory, thinking, or other comprehension skills challenges (IrisVision n.d.).

The following are some examples of assistive devices:

- Screen readers: Software used by blind or visually impaired people to read the content of the computer screen. Examples include JAWS for Windows, NVDA, or Voiceover for Mac, and ClaroRead for people who are dyslexic, and some people who are neurodiverse use this where reading and writing is a challenge.
- Screen magnification software: It allows users to control the size of text and/or graphics on the screen.
- Text readers: Software used by people with learning disabilities, eye fatigue, or other conditions that affect their ability to read text. This software reads text with a synthesised voice and may highlight the words being spoken. These applications do not read things such as menus or buttons – they only read the text.
- Screen reading voices: These are usually built into computers and tablets. They can read the text out loud and accurately if the text is in English. In South Africa, for instance, the Council for Scientific and Industrial Research (CSIR) has developed text-to-speech software for reading South African languages.
- Speech input software: It provides people with an alternate way to type text and control the computer. Users can give the system commands to perform mouse actions. They can instruct their computer to click a link or use a menu item. One example is Dragon Naturally Speaking.
- Alternative input devices/access technology: Some users may not be able to use a mouse or a keyboard to use computers. Instead, they may use:
    - Head pointers: A stick or object mounted directly on the user's head that can be used to push keys on the keyboard. This device is used by individuals who have no use of their hands.
    - Alternative mice: This technology is built into a headband or wristband or fits on the frame of glasses. It connects to the computer with an external USB dongle or some connect via Bluetooth. This gives the person with a disability control of the computer using mouse functions by moving their head. They can perform all functions of a hand-held mouse using on-screen keyboards and mouse software.
    - Joysticks: Devices like these are built to act like a mouse where the interface is different so that a person is not required to move a whole device like a mouse, but to move one part on the top. This function can look like a stick or like a ball requiring minimal hand movement. The click functions and mouse speed are also controllable based on the person's hand movement range in the form of separate buttons. This makes scrolling as well as typing easier using an on-screen keyboard.
    - Motion tracking or eye tracking: This can include devices that follow a target (example head movement) or even the eyes (cameras built into an eye tracker device positioned on a computer use mathematical algorithms to calculate where a person is looking on a screen measured by the reflection of lights on the pupil) of the user to interpret where the user wants to place the mouse pointer and moves it for the user. Specialised software makes it easier for the person with disability to use mouse functions to control the computer.
    - Single switch entry devices: These kinds of devices can be used with other alternative input devices or by themselves. These are typically used with on-screen keyboards. The on-screen keyboard uses a function known as scanning where a cursor is set to move automatically or manually across the keys, and when the key the user wants is in focus, the user will click the switch. This can also work on a webpage: the cursor can move or scan through the webpage, and if the user wants to click on a link or button when that link or button is in focus, the user can activate the switch.
    - Communication software: Some people with disability may struggle to understand the spoken language and are unable to learn to read. These people benefit from visual support aids which are known as augmentative and alternative communication solutions. These solutions are available in both paper-based options and computer-based options. Churches would need to designate a person to create the sermons and teachings in this picture-based format to ensure that people with disabilities also receive the message in a manner they can understand. (modified from UC Berkeley n.d. with inputs from Desirae Pillay [2023] an Assistive Technology Advisor; CSIR n.d.; Grossenbacher 2015; Inclusive Solutions South Africa n.d.).

As said earlier on, digital accessibility is a two-way thing; both the church and the person with disability are involved. If the person has an assistive device, and the content on the website or social media platforms are inaccessible, there will still be barriers, hence technical and disability expertise is necessary to be able to provide maximum accessibility. Having obtained some ideas on assistive devices, it is equally imperative to note some practical guidelines for creating church websites and social media platforms.

## An accessible church website

On developing an accessible church website, I draw from the Church of England's website because of the conscientious efforts being made to ensure digital accessibility for their congregations by offering step-by-step guidelines that are easy to follow. The Church of England invited Revd Bill Braviner, a Disability Adviser and Co-Founder of Disability & Jesus to The Diocese of Durham, to share on how to make their websites accessible, and suggestions were made for building or modifying church websites. As this article is

meant to provide some guidelines and not necessarily to build arguments, I have chosen to maintain direct quotations from the original source.

## Making a church website accessible

### Clear layout and design

Keep different parts of the web pages easy to locate and identify – for example menus with buttons that stay the same and in the same place, whichever page you are on. There should be consistent presentation and behaviour of web pages across a website.

Do not wrap text around images, as this makes the text harder to read. It is best not to place text alongside images either, but where this is unavoidable, images should be on the right-hand side of text in order to preserve a consistent left-hand margin for text, and there should be a good margin of space around the picture.

### Good colour contrast

Use strong colour contrast to distinguish easily between text and background. Try reading it using sunglasses that will help to show whether contrast is adequate. This includes text on icons, buttons, menus, etc, as well as any text placed over images (though this is to be avoided if at all possible).

### Text to speech compatibility

Some people use specialised screen-reader software to help navigate through headings, image alt-tags, and links, etc. Content needs to be properly formatted (as headings, links, etc) for such text-to-speech software to work fully as intended. Captioning for video content (AKA 'subtitles')

Captions are a textual form of the audio information in video items. This includes not only the words that are spoken, but also information about who is speaking, important sounds like music, laughter, and noises, and other contextual information. Please ensure that any video content is captioned.

### Customisable text

Some users need to be able to change the way text is displayed so that they can read the text. This includes changing the size, spacing, font, colour, and other text properties. When users change these properties, no information or functionality should be lost, and the text should re-flow, so users don't have to scroll horizontally to read sentences.

Text customisability does not replace the need for the default design to conform to clear print guidelines regarding text size, spacing, etc.

### Understandable content

Content should be easy to follow and understand for all users. For most content, this means simply avoiding overly complex sentences and jargon, and providing a clear layout and design. Always avoid abbreviations and acronyms or provide explanations when they need to be used.

Finally, remember to run your site through the basic accessibility validator tools to find how you can improve your website; for example, there is a free plug-in from Microsoft, which will highlight areas to improve on your web pages (Braviner 2019 cited on The Church of England Website).

## Accessible social media platforms for churches

Digital accessibility demands that social media platforms offer equal opportunities to persons with disability in accessing content. Below are recommendations by Linda Wairegi, Multimedia Project Manager of inABLE published on LinkedIn. inABLE is an organisation that seeks to empower persons with disability through assistive technology. These are useful tips the digital church may harness to its advantage to ensure accessibility.

## Best practices for enhancing accessibility on social media

The best practices are listed as follows:

- Use alternative text (Alt Text) or image descriptions to adequately describe all images you upload on social media, including GIFS. Use simple sentences and describe unique details that stand out for you. Apart from Twitter(X)'s word limit, you can also add the image description within the main post in case screen readers cannot easily access the alt text.
- For video content, please include an audio description before the main video starts for people with visual impairments. Also have subtitles, closed captions, and a sign language interpreter embedded in your videos to assist people with hearing impairments to follow the conversations. Also add a video transcript because screen readers can read it, and people with hearing impairments can read the text.
- Use inclusive design approaches for images (check contrast test) for social media posters and video subtitles so that people with low vision can easily read and engage with the video or image.
- Include trigger warnings if your social media content deals with sensitive topics with violent language and warn about flashing lights and moving colours etc. It allows people to decide if they want to engage with your content and prepares them adequately.
- Minimise the number of emojis you use on social media posts, so that screen readers do not tire out visually impaired learners by reading out repetitive emojis.
- On the different social media platforms, look for the accessibility page to get detailed information about accessibility features.
- Always ask for permission and get a second opinion from people with disabilities about their accessibility needs (images or video) before publishing the post online.

- Follow and engage with relevant disability organisations like inABLE, disability advocates, and disability allies to better understand what type of content is acceptable and to help you refrain from using ableist language (crazy, lame) that might easily offend people with disabilities (Wairegi n.d. posted on LinkedIn).

# Conclusion

This article aimed at exploring avenues for digital accessibility for the online church according to the *new normal*. In so doing, various forms of transformation both the church and media have gone through over the years and how that reflect on the current state of being church were explored. In the digital age, where every aspect of life has gone virtual, the church is no different. The church has gone digital as a result of social distance and lockdown restrictions during the COVID-19 pandemic. Research proves that the digital church is inaccessible to persons with disability and that disability is not considered as in the case of the physical church services. There is therefore the need for the church to ensure digital accessibility; hence, intentional efforts must be made in building or modifying church websites and helping social media platforms to be user-friendly for people with disabilities.

Assistive technology is required in this regard in the form of assistive devices for persons with disability themselves and on the part of the church software, hardware, operating systems, and other relevant digital resources. The chapter also captured some recommendations made by Braviner (2019) on The Church of England website on creating an accessible website; Linda Wairegi, Multimedia Project Manager of inABLE's post on LinkedIn on Best Practices For Enhancing Accessibility on Social Media; and Desirae Pillay, an Assistive Technology Advisor. If the church considers these recommendations by these experts, there will be a positive move towards an accessible digital ecclesia.

# Acknowledgements


## Competing interests

The author declare that they have no financial or personal relationship(s) that may have inappropriately influenced them in writing this article.

## Author's contributions

S.B.A. is the sole author of this research article.

## Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

## Funding information

This article has been produced in the context of the International Research Training Group 'Transformative Religion: Religion as Situated Knowledge in processes of Social Transformation', funded by the South African National Research Foundation (NRF) and the German Research Foundation (DFG).

## Data availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.


## Disclaimer

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