

Net neutrality and digital divide: A study for Forge America

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IT 525

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Executive Summary

This ethical needs analysis details how Forge America can address the issue of net neutrality and the digital divide as it applies to their target client. It is a proposal for Forge America by instructional designers Keiko Eda and Rebecca Walker for immediate consideration for implementation.

Goals

This ethical needs analysis aims to identify Forge America's target clients, assess their needs regarding net neutrality and the digital divide, and provide suggestions to Forge America for improvement in these areas.

Report Preparation

Instructional designers Keiko Eda and Rebecca Walker will evaluate the existing site and contents for Forge America and apply research to address issues discovered relating to net neutrality and the digital divide.

Client Needs Analysis

The target client for Forge America is Christian leaders at a national and international level. Their needs will be assessed in cyberethics, net neutrality, and the digital divide.

Ethical Analysis

In order to follow the professional ethics outlined by AECT, Forge America must consider that some clients may not have access to reliable internet or technology to access the internet. Other clients may lack the technical skills to access online materials.

Recommendations

Initial recommendations would be to consider the option of providing DVD's of the video content and printed versions of the written content from the site to rural clients.

Goals

This ethical needs analysis aims to identify target clients for Forge America, assess needs related to net neutrality and the digital divide, and provide suggestions to Forge America for improvement in these areas.

Identify Forge America's target clients and discuss ethical needs.

In order to identify the ethical issues associated with net neutrality and the digital divide in Forge America's service to our clients, we need to identify our target clients and understand their ethical needs. Based on class reading and discussion in Forge America's existing course assessments, we will reflect on cyberethics. This part aims to remind clients of the importance of cyberethics in online learning design.

Consider the needs associated with net neutrality and the digital divide in the field of cybertechnology.

We organize class discussions and overview the ethical needs associated with net neutrality and the digital divide, among other things, in cyberethics. In addition, it aims to provide Forge America with the information and resources needed to investigate issues related to net neutrality and the digital divide in detail.

Provide suggestions to Forge America to improve net neutrality and digital divide-related issues.

Our ultimate goal is to present issues related to net neutrality and the digital divide in Forge America's online learning design and provide specific recommendations. We identify and report on ethical needs based on questions and answers to clients. The purpose of our recommendations is to raise awareness of the introduction of ethical considerations into online learning design and to pass it on to target clients.

Report Preparation

Forge America provides instruction and coaching on missionary work within a community to Christian leadership at an international level. Instructional designers Keiko Eda and Rebecca Walker have applied both materials assigned in Instructional Technology 525 as well as individual research to determine who the target client is, what their needs are in relation to the materials and services provided by Forge America, and the ethical issues of the digital divide and net neutrality. In addition to academic articles, book excerpts, and class discussions, the Association for Educational Communications & Technology's (AECT) Code of Professional Ethics was considered in preparing this report.

Client Needs Analysis

Understanding Cyberethics

There is a term called Cyberethics. Cyber technology refers to a wide range of computing and communication devices, from stand-alone computers to connected or networked computing and communication technologies. These technologies include but are not limited to devices such as "smartphones," iPods, (electronic) tablets, personal computers (desktops and laptops), and large mainframe computers. Cyberethics investigates the impact of cyber technology on our social, legal, and moral systems. It evaluates social policies and laws built in response to the issues posed by its development and use. (Tavani, 2017) This statement includes many moral issues, from stand-alone computers to networked systems and the need to be connected to the Internet. In addition, Tavani states that cyberethics is not a new and unique need brought about by cyber technology. (Tavani, 2017) Therefore, when we understand the ethical needs of our clients, we can apply the ethics established from our human morals. On the other hand, it is pointed out that some cyberethics is unique ethical concepts because cyber technology has some unique technical characteristics.

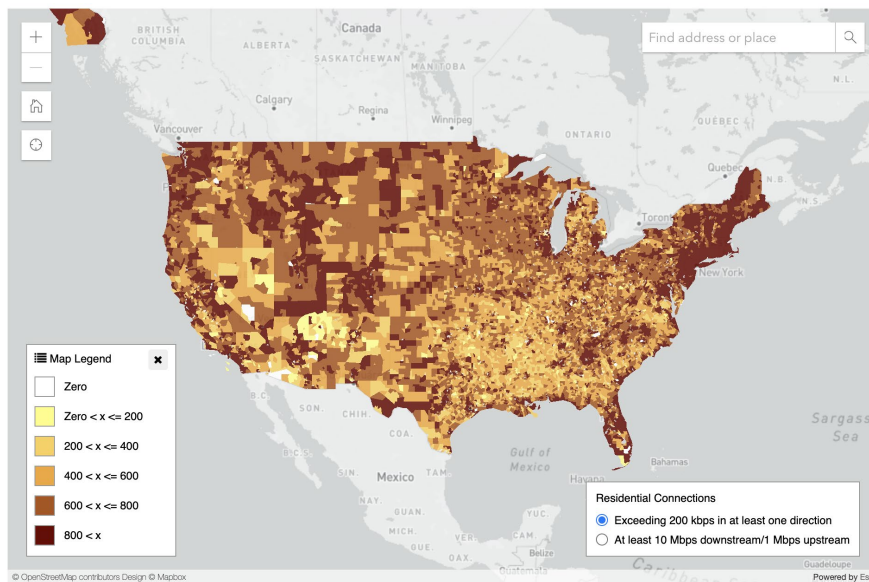
Understanding Forge America and Their Clients

Forge America is open to Forge America clients, including their church partners, those who have signed up for newsletters, those interested in their social media sites, and those who attend training and events. Forge America is building a service provision structure at the national, regional, and local levels to spread the reign of God revealed in everyday living spaces. This structural order can also be rephrased as leadership, organization, and individual everyday life, which can be seen as a divergent and efficient method. In addition, at each level, they aim for a paradigm piece of principle priests and a practice. They advocate DEI (diversity, equity, and inclusion) as a central ethic. Forge America provides training on the web consisting of resources, events, and courses to implement the system. Resources include multimedia such as books, videos, podcasts, and training courses deployed on the teachable platform. The training course focuses on watching video materials and includes a few minutes of video with no charge to complete 12 sessions over six months. This 6-month course costs \$ 800.

Understanding Client Needs for Net Neutrality

Yamagata-Lynch (2017) states that net neutrality is about maintaining fair access to the internet for all residents and avoiding discrimination in services based on paid priorities. Also, in many distance learning and online learning, learners cannot proceed without access to the internet because both learners and learners maintain relatively equal access to the internet. It also points out that it provides flexible opportunities. However, in reality, net neutrality regulations

give broadband companies the option of not investing in less profitable markets, creating a digital desert in the United States. (Yamagata-Lynch et al., 2017) Those who have signed up for the newsletter that Forge America is targeting their clients, and those interested in their social media sites, mean those who have successful access to the internet. In addition, most of the services currently offered by Forge America are designed on the premise of internet access. As a result, access to educational materials (mainly digital videos) provided on the web is restricted, suggesting that some learners miss learning opportunities. Online education, such as digital video playback, requires high-speed broadband. Therefore, it is also essential to see how the learner is connected to the internet.



Residential Fixed Internet Access Service Connections per 1000 Households by Census Tract As of December, 2017

Image Source: FCC

Understanding Client Needs to Combat Digital Divide

In the cyber technology field, disability, race, and gender inequality continue to exist, changing their face. This inequality is called the digital divide and asks whether people have cyber technologies, including internet access, or effectively benefiting from cyber technologies. (Tavani, 2017)

We mentioned above that the connectivity to high-speed broadband is insufficient. However, there is also a lack of widespread use of digital devices such as notebooks and smartphones that stream videos for service. (West & Allen, 2020) They can also consider whether the Forge America website will qualify and operate on a wide range of devices as an ethical need.

Inequality in access to devices and devices represents learners' income and racial disparities. (West & Allen, 2020) Income and racial disparities between targeted clients may impact access to materials provided by Forge America. They can see if they are pricing the online courses regarding the digital divide. Also, making sure that the accessibility of teaching materials is being considered is an ethical issue in the digital divide.

Ethical Analysis

This ethical analysis is based on class discussions and team research regarding the digital divide and net neutrality issues. The digital divide includes a lack of internet, communication devices such as computers, smartphones, or tablets, or the lack of knowledge and/or skills to use any or all of these. Net neutrality protects users from government agencies or internet service providers (ISPs) blocking or slowing down online content.

Net Neutrality

Unfortunately, net neutrality is difficult for one company, such as Forge America, to control or influence. The Federal Communications Commission (FCC) regulates and enforces the legislation on net neutrality, overseen by Congress (FCC, n.d.). Forge America may influence net neutrality regulations through the FCC website, or by completing paper forms, by identifying the Docket Number from the regulation. The most recent regulation regarding net neutrality from 2018 has been redacted. This has resulted in individual states enacting their own legislation because the previous FCC regulation overruled state legislation. Some states are trying to protect users during the gap in federal regulation. Forge America should be aware of these state regulations until the FCC reinstates federal regulations on net neutrality. States with no net neutrality regulations could impact the ability of clients in these areas to access the video content of the course or even access the Forge America website.

Digital Divide

While Forge America can influence the digital divide much easier than net neutrality, it is important to decide what that will entail concerning client needs and financial impact on Forge America. The digital divide affects racial, gender, economic, and accessibility factors. It is important to understand these issues to make an informed decision on how best Forge America can accommodate their clients' needs.

Racial Digital Divide

In the United States, the racial digital divide is becoming less evident. According to Tavani (2016), by 2011, African American internet usage was up to 80%, whereas usage by white Americans was 88%. Also, 68% of African Americans used the internet for entertainment, whereas only 26% of white Americans used the internet for this purpose.

However, it is important to be aware of this divide in other less-developed countries where this disparity is much greater.

Gender Digital Divide

While the gender digital divide gap is also closing in the United States, there is still concern about women's access to jobs in technology fields and a gender bias in software design (Tavani, 2016). With fewer women in technology careers, there is less opportunity for change through female influence. The gender bias in software either underrepresents or misrepresents women, which feeds negative stereotypes.

Economic Digital Divide

Whether you are in an underdeveloped region of Africa or a rural area of the United States, there is an economical digital divide where affluent individuals have better access, or access in general, to the internet and technology and education on using these tools. Denser populations bring the cost and ROI up of running cables for internet access. Internet Service Providers (ISPs) are reluctant to invest in extending their services to less dense or poorer communities. Governments are also reluctant to invest in building these infrastructures (Fox, n.d.). To add to this problem, households who earn smaller incomes may not have disposable income for technology devices to access the internet. While the United States government has invested in both of these issues, the divide still exists, and those who may not be in the poorest households often do not qualify for the services offered.

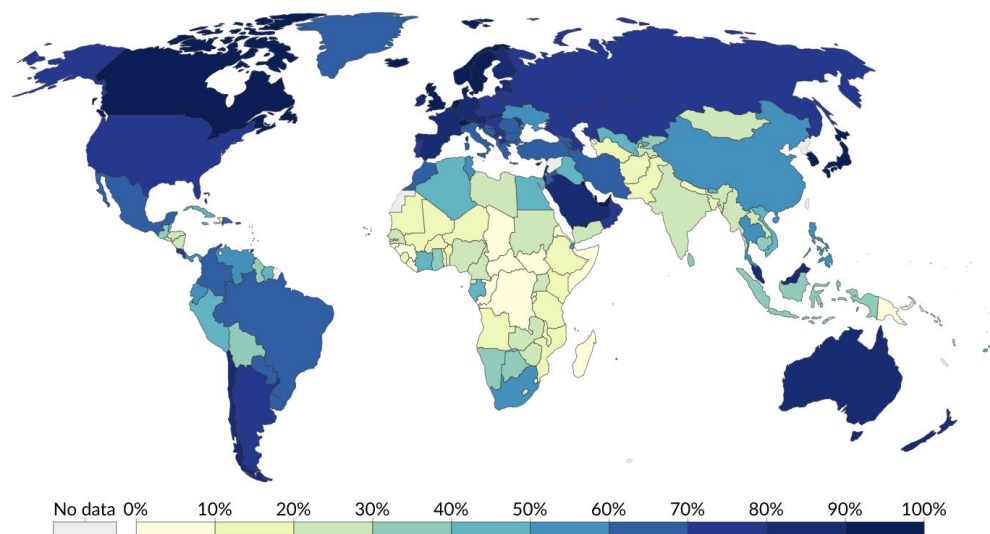


Chart source: [OurWorldInData.org](https://ourworldindata.org)

Percentage of Internet Users in 2016. *Image Source: Khan Academy*

Accessibility Digital Divide

The disabled population experiences an accessibility digital divide where hardware and software applications are not conducive to their needs. This limits educational and employment opportunities. The advantage of creating accessible materials and websites is that people who may not have a disability can still benefit from accessible design. English language learners, the elderly, and people with attention disorders can all gain from accessible design. Also, it is more cost-effective to address accessibility needs in the design process than to find accommodations after the materials and website have been created.

Recommendations

To improve net neutrality investment in digital infrastructure and digital access that eliminate unfair disparities based on race, income, and geography are required to improve net neutrality. The Federal Communications Commission needs to expand its current "Lifeline" program to promote phone connectivity for poor people to the internet. With Voice over Internet Protocols (VoIP), it is easy for underserved people to combine phone and internet connectivity. (West & Allen, 2020) The Department of Agriculture's Rural Utilities Service seeks to improve broadband service in rural areas, but its funding currently cannot be used to improve low-speed broadband. That limitation makes little sense when many lack sufficient speed to access online educational resources or video streaming. It must be altered so that rural dwellers can upgrade their internet service. (West & Allen, 2020)

Improving internet access requires investment in national planning and the public and private sectors. For Forge America, a non-profit organization, fundamentally improving the net neutrality problem will be challenging. However, Forge America shall know that the issue of net neutrality is also important in the United States today. We find it meaningful to discuss if their target clients have an internet connection or if non-digitization of materials is possible when designing their learning courses.

Within Forge America's service delivery structure, they can analyze the impact of the digital divide and incorporate countermeasures into their designs. Perhaps the local part has the most significant impact, so considering providing high-speed broadband connectivity in local churches is efficient. They can also investigate the spread of digital devices among targeted clients. Again, they can consider how to collect feedback from the end (local) in the existing service delivery structure and listen to it. Just as accessibility helps many people, not just people with disabilities, it is essential to discuss the possibility of expanding language and access

options. We also recommend considering pricing for online courses and resource materials to make them more accessible.

In addressing digital divide issues, it is vital to give people some leeway to provide broadband access to enable learners to use their laptops productively rather than having organizations distribute free laptops to poor learners. (West & Allen, 2020) For that reason, it will be helpful to link with the content without looking away from the problems of income and racial disparity when designing the course. The educational policy will eventually support the realization of DEI (diversity, equity, and inclusion) ethics, which is the ideal of forge America.

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