Topic 2 Discussion 2

An anonymous group of software developers creates a tool that scans websites on the internet and identifies hackable unpatched vulnerabilities associated with those websites. The company then catalogs its findings and makes its findings public. The developers hope that the tool will force website administrators to fix those vulnerabilities. However, bad actors might exploit the disclosed vulnerabilities first. The tool's creators are aware of this risk. The creators point out that scanners that find web vulnerabilities have always existed. This one just makes the results public. After all, if the website's users and their investors can see the publicly disclosed vulnerability, they'll fix it pretty fast.

Before replying to the discussion question, please review the Markkula Center for Applied Ethics' *Framework for Ethical Decision-Making*, which details ethical lenses. Through a Christian worldview, address the following:

* What ethical issues do you spot in this scenario?
* What aspects of the ethical landscape do the ethical lenses of rights, justice, utilitarianism, virtue, and the common good highlight?

<https://www.scu.edu/ethics/ethics-resources/a-framework-for-ethical-decision-making/>

Hello Class,

The scenario of a group of software developers creating a tool that publicly discloses hackable vulnerabilities on websites raises several ethical issues, particularly when viewed through the lens of the Markkula Center for Applied Ethics' Framework for Ethical Decision-Making, alongside a Christian worldview.

Ethical Issues Identified

Potential for Harm - The primary ethical concern is the risk of harm to users and organizations due to the disclosure of vulnerabilities. If bad actors exploit these vulnerabilities before website administrators can address them, this could lead to data breaches, financial loss, and a loss of trust.

Responsibility and Accountability - The developers’ decision to make vulnerabilities public raises questions about their responsibility for potential negative consequences. While their intention is to prompt action, they must consider the implications of their method.

Informed Consent - Users of the websites affected by these vulnerabilities may not have given informed consent regarding the potential risks posed by such public disclosures. This raises ethical questions about transparency and the rights of individuals and organizations to manage their own security.

Ethical Lenses Analysis

Rights - From a rights perspective, the developers' actions could infringe upon the rights of website owners to manage their vulnerabilities privately. The right to information must be balanced with the right to privacy and security. In a Christian worldview, respecting others' rights and dignity is paramount, suggesting that the developers should consider the implications of their actions on others’ rights.

Justice - The principle of justice highlights fairness in the treatment of all parties involved. While the tool aims to promote fairness by exposing vulnerabilities, it may disproportionately harm smaller organizations that lack the resources to address these issues quickly. In Christianity, the call for justice emphasizes protecting the vulnerable and ensuring that actions do not lead to exploitation or harm.

Utilitarianism - Utilitarianism focuses on the greatest good for the greatest number. The developers argue that making vulnerabilities public serves the common good by prompting swift action to secure websites. However, if the outcome leads to widespread harm, such as data breaches, the initial good may be overshadowed by the negative consequences. A Christian perspective encourages actions that promote well-being without sacrificing the safety of individuals.

Virtue - The virtue lens emphasizes the character and intentions behind actions(Markkula Center, 2021). While the developers may have noble intentions in wanting to improve internet security, the method they choose reflects their ethical character. In Christianity, virtues such as compassion, humility, and responsibility should guide decision-making, suggesting a need for a more thoughtful approach that considers the broader impact of their tool.

Common Good - The common good lens stresses the importance of actions that benefit society as a whole(Markkula Center, 2021). The developers aim to improve cybersecurity, which aligns with the common good. However, they must reconcile this with the immediate risks posed to individuals and organizations. A Christian worldview emphasizes stewardship and the responsibility to protect the community, suggesting that the developers should seek ways to harness their tool that does not endanger others.

The developers face a complex ethical landscape where the intention to improve security must be balanced against the potential for harm and the rights of others. Through a Christian worldview and the ethical lenses discussed, it becomes clear that a more responsible and cautious approach may be warranted. Seeking collaboration with website administrators and ensuring that vulnerabilities are addressed privately before public disclosure could serve the common good while respecting individual rights and promoting justice. “Righteousness and justice *are* the foundation of Your throne; Mercy and truth go before Your face.”(Psalm 89:14, NKJ Bible)

References:

Markkula Center for Applied Ethics. (2021, November 8). *A Framework for Ethical Decision Making*. Santa Clara University. https://www.scu.edu/ethics/ethics-resources/a-framework-for-ethical-decision-making/

The Holy Bible, New King James Version. 1982