NONPROFITS AND SPECIFIC NEEDS: USING PERSONALIZED TECHNOLOGY TO IMPROVE OPERATIONS IN A NONPROFIT ENTITY

UNCOVERING THE ROOT CAUSES OF INADEQUATE CYBERSECURITY IN NONPROFIT HEALTHCARE ORGANIZATIONS

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SOCIOTECHNICAL SYNTHESIS

In a 2021 survey done by the Healthcare Information and Management Systems Society (HIMSS), nearly 35% of respondents did not have a dedicated percentage of the IT budget for cybersecurity and 73% still use legacy systems in their organization. Upgrading old systems can be an expensive task for many organizations, but the improved efficiency and effectiveness can make it worthwhile. For the technical topic, the project was to build a personalized technology for the Meals on Wheels organization that was designed to modernize their operations. Using outdated and legacy systems is not only inefficient, but also makes systems vulnerable to cyber attacks. The STS research analyzes the underlying reasons for inadequate cybersecurity in the nonprofit healthcare sector. Both topics deal with the systemic usage of older technologies and systems in nonprofit healthcare organizations. The technical topic focuses on the benefits of upgrading these systems, while the STS topic discusses the risks and consequences of failing to do so.

Many organizations have been operating in the same way for many years. While these operations may have been modern at the time and continue to work, as time goes on more potential improvements arise. A third party with the time and resources to redesign the system and optimize it. Especially in a large organization with many smaller local offices performing similar tasks, personalized technology and internal tools can go a long way in improving efficiency.

Zippy Meals was built on the premise that saving people even just a few hours every week can add up to immense amounts of time saved over many years. With optimized routes, drivers can save dozens of miles every week and thousands every year. With the single database, staff can track all clients and manage all volunteers in a single place. Zippy Meals is also

designed with a simple interface that can be learned in a few hours, making for a smooth transition to new offices. Clients have given feedback that Zippy Meals saves them hours every week. Overall, the technical topic was a clear example of how personalized technology can save time on daily repeated tasks for organizations.

The question my research aims to answer is: how can large nonprofit healthcare organizations protect themselves from cyber attacks without overspending or halting operations? I developed a thesis that the underlying issue is budget, seeing as many of these organizations have not implemented widely available, existing technology to solve the problem. I used Latour's Actor Network Theory as a framework to help prove my thesis and develop a potential solution. The actor network emphasizes the need for communication between the different actors in the sociotechnical system.

The technology to improve the security of these organizations exist, but they are not implementing them. This was what led to the thesis of the STS paper that budget is the key to fixing the entire problem. After looking further into the possible solutions to the budget problem, it became clear that increased communication and transparency between the different groups in the system is the best place to start. Nonprofit donors have a misconception of the true costs of running a nonprofit, which includes phone bills, rent, insurance, and many other smaller bills.

The increased efficiency and effectiveness that can come from upgrading old technologies should be used to convince donors that it is a wise investment. In doing so, the security of the organizations can improve along with these upgrades. Not only will these organizations save time and money by modernizing their technology, but they will also be less vulnerable to cyber attacks.

TABLE OF CONTENTS