

Analyzing Generational Cyber Security Awareness

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Introduction

With the rapid advancement of technology and the increasing dependence on the digital world, cybersecurity has emerged as a critical area of concern for individuals, organizations, and governments worldwide. The proliferation of cyber threats, such as cyber-attacks, data breaches, ransomware attacks, and identity thefts, has resulted in severe consequences, including financial losses, reputational damage, and the compromise of sensitive information. In today's interconnected world, where data is constantly being transmitted, stored, and shared online, robust cybersecurity measures have become paramount to safeguard against malicious activities and protect the confidentiality, integrity, and availability of digital assets.

Objective: The aim of this study is to determine whether there is a gap in the skill level in cyber security between the generations most adapted to the internet.

Methodology

The data for this study was collected through two surveys that were sent out from late March to early April. Each survey was crafted for a specific generation (either X or Z) and consisted of seven questions split into three sections to access their cyber awareness. The respondents were asked two ransomware questions, two questions asking to identify phishing, and two questions asking if they used anti-cybercrime prevention measures (Password Randomizer and Virtual Private Network.) Finally, the survey included a free response question asking how the respondents felt about their internet safety as a whole. Throughout the process, thirty responses were collected for the Generation X survey and twenty-five responses were collected for the Generation Z survey.

Results

Which other these is the biggest indicator of a phishing scam?



Figure 1.1



Figure 1.2

Figure 1.1 and Figure 2.1 - Generation X

Figure 1.2 and Figure 2.2 - Generation Z

Which of the following do you use?



Figure 2.1



Figure 2.2

Conclusion

The data of this study showed a clear indication of a gap in cybersecurity awareness between Generation X and Z. This is shown as the study proves that Generation X has a higher level of cybersecurity awareness as more of them use cybercrime preventive measures such as Virtual Private Networks and Two Factor Authentication compared to Generation Z to protect their information (shown in figures 2.1 and 2.2). This is also shown using the data in identifying the biggest indicator of a phishing scam as more of Generation X selected the correct answer compared to Generation Z (shown in figures 1.1 and 1.2), showing that Generation X has a greater aptitude for cyber fraud detection than Generation Z.

Discussion

While this study did pull in over fifty respondents across two surveys, the overall scale of the study is too small to bring forth any data that would account for the majority of each generation, therefore this study should not be used to generalize to the public. However, this study did show that there is a gap in cybersecurity awareness between generations, this could be due to the fact that as Generation X is old enough to have a full-time career, their jobs may require them to enroll in cybersecurity courses, which could have skewed the data, although no data was taken on their profession in this experiment. Hopefully, this gap is brought to the attention of the public so this experiment can be conducted on a larger scale to allow for more conclusive results.