## Cybersecurity Awareness and Education: An Exploratory Study of Business Students

## Łukasz Wiechetek

Faculty of Economics, Maria Curie-Skłodowska University, Poland lukasz.wiechetek@umcs.pl

## Marek Medrek

Faculty of Economics, Maria Curie-Skłodowska University, Poland marek.medrek@umcs.pl

## **Abstract**

The rapid development of internet interactions and growing number of the information technology users caused by digital society development and accelerated by COVID-19 pandemic yields in significant growth of cyber-attacks and cybersecurity incidents. Although cybersecurity became a significant public concern, it still receives an insufficient awareness. Building the digital competences and the cybersecurity awareness become a very important issue, both for individuals, organizations (public, private), and finally for local and central governments.

Young people, members of generation Z born after 2000, use information technology as a main tool for broadening their knowledge and skills as well as for communication and entertainment. For such digital natives proficiency in ICT technologies appears as an indispensable element of life. This is even more apparent during COVID-19 pandemic, when they are forced to use IT tools more often, both for the entertainment, education, and work. Such acceleration generates new possibilities, but also new threats and therefore, it is worth to constantly check if the IT users are familiar with and aware of cybersecurity issues and risks generated by modern information technologies.

In this paper we explore data collected from business students (n=182) at Polish universities. The statistical analysis is used to check if Z generation members are aware of cybersecurity issues and if they know basic threats and methods/tools that can improve the safety. Finally, the authors analyze student's behavior in event of cyber incident and examine whether the analyzed group is willing to improve their cyber knowledge, skills, and attitudes.

The performed analysis indicates that Polish business students have rather poor knowledge in cyber security. The results demonstrate the need for targeted educational campaigns and trainings that address the specific cyber weaknesses of generation Z. The new trainings should be addressed mainly not only to IT students (technical skills), but also to broad group of non-technical studies to the develop their awareness and behavior - components necessary to build secure ecosystem, combining both technical, organizational, and behavioral aspects.

**Keywords:** computer security, cybersecurity, cybersecurity awareness, information security, security education, cybersecurity education, business students