

Phishing with Gifts as Bait: Measurement and Analysis of Phishing Attacks within a University Environment

Martin Boldt, Blekinge TH

"The increasing use of computers in today's society is, in addition to positive aspects, also associated with negative effects. One example being the escalated threat from computer-oriented fraud and criminal activity, such as phishing and credit card skimming. Such menaces often target the human in front of the computer instead of the actual computer itself by using various social engineering techniques.

In this paper we describe a study based on a highly advanced phishing attack that was launched on 354 carefully selected Bachelor degree students. The selection of these students was based on three groups; students with no technical education; students with firm technical, but no security education; and students with both firm technical and security education.

The results from the study show that 29 % in the first group were vulnerable to the attack, while this figure was 57 % and 61 % for the second and third group respectively. These results indicate that more technical and security education means greater vulnerability for social engineering and advanced phishing attacks. Our conclusion is that the security students had an overly confidence in their knowledge

and their ability to spotting attacks. This is especially alarming since the most common countermeasure against social engineering threats is education. In the end of this paper we give suggestions on how security education could be improved to address this problem."