## **ABSTRACT**

With the rapid development of technology, the use of websites as a place for online sales is not always a safe and comfortable place, but there are also leaks of user data on websites that have online sales functions. In this case, there are many types or methods of attack used by hackers as one example of the Cyber Crime problem is hacking by exploiting vulnerable systems or websites, this has an impact on the PT XYZ e-commerce website where several experiments have occurred. hacking by external parties. Based on the following statement, the use of a Vulnerability Assessment Tool using the VAPT framework can help carry out the Vulnerability Assessment process in finding potential vulnerabilities in a website-based application in order to protect the infrastructure used by the company. The object of this research was tested using the Vulnerability Assessment tool, namely Owasp ZAP on the PT XYZ e-commerce website with a total result of having 8 vulnerabilities which in this study focused on 4 vulnerabilities in the medium category. The results of this study resulted in an identification of vulnerabilities by making a risk register table as an evaluation material for the company.

Keywords: Vulnerability Assessment, Risk Analysis, VAPT Framework, Malware, Cyber Crime.