

ABSTRACT

The development of information technology and the internet has significantly influenced the way people seek and access information, including in education. In Indonesia, this development has led to an increase in widespread internet access, facilitating distance learning and increasing the use of Learning Management System (LMS). However, the use of this LMS also holds risks that interfere with academic management and student development, one of which is the risk of data loss, as seen in the case of lost history data at SMK Negeri 1 Bandung.

This research proposes an evaluation of information security risks in the Learning Management System of SMK Negeri 1 Bandung using a qualitative method. This approach involves data collection through observation, interviews, and document review. By utilizing the ISO 27005 and NIST 800-30 frameworks, the objective of this research is to identify potential threats and risk vulnerabilities and assess the probability and impact of those threats. Triangulation techniques were applied to obtain more valid and reliable research data.

Through the assessment of 10 assets, consisting of 3 main assets and 7 supporting assets, this research successfully identified 14 possible risk threats. The results of the analysis showed that of the 22 risk scenarios, of which 3 risks were of high value, 7 risks were of medium value and 12 risks were of low value. For high and medium value risks, mitigation is necessary.

Mitigation recommendations include routine system maintenance, increased supervision and control of assets at risk, and the importance of regular data backups. This research is expected to provide useful guidelines for SMK Negeri 1 Bandung to improve the security and efficiency of their LMS operations.

Keywords: Risk Assessment, IT Management, LMS, ISO/IEC 27005, NIST 800-30r1