

RISK ANALYSIS OF EMPLOYEE PERSONAL DATA SECURITY IN THE HUMAN RESOURCES DIVISION OF THE GOVERNMENT INSTITUTION IN TIMOR-LESTE USING OCTAVE ALLEGRO METHOD

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ABSTRAK

Informasi pribadi merupakan aset yang sangat berharga dan perlu dilindungi untuk menjaga kerahasiaan, integritas, dan ketersediaannya. Seiring dengan meningkatnya penggunaan sistem digital untuk menyimpan, mengelola, dan memproses data pribadi, ancaman seperti akses tidak sah, penyalahgunaan, dan kebocoran data juga semakin meningkat. Penelitian ini bertujuan untuk menganalisis risiko keamanan data pribadi karyawan pada Divisi Sumber Daya Manusia suatu lembaga pemerintah di Timor-Leste menggunakan metode OCTAVE Allegro. Penelitian ini menggunakan pendekatan kualitatif melalui pengumpulan data dengan wawancara, observasi, dan analisis dokumen. Hasil penelitian mengidentifikasi tiga area perhatian yang menghasilkan delapan skenario potensi ancaman terhadap keamanan data pribadi karyawan. Berdasarkan penilaian kemungkinan dan dampak, diperoleh lima risiko utama yang terdiri atas satu risiko berkategori tinggi dan empat risiko berkategori menengah. Risiko akses tidak sah terhadap data pribadi karyawan memperoleh skor risiko tertinggi, yaitu 15, sehingga menjadi prioritas utama. Temuan penelitian menunjukkan bahwa kelemahan pada mekanisme autentikasi, pengendalian hak akses, dan perlindungan sistem merupakan faktor utama yang meningkatkan risiko terhadap kerahasiaan, integritas, dan ketersediaan data pribadi karyawan. Berdasarkan temuan tersebut, penelitian ini merekomendasikan penerapan praktik terbaik keamanan informasi, seperti autentikasi multi-faktor, peninjauan hak akses secara berkala, penguatan pemantauan sistem, serta peningkatan kesadaran keamanan informasi. Penerapan rekomendasi tersebut diharapkan dapat mengurangi risiko keamanan informasi dan meningkatkan perlindungan terhadap data pribadi karyawan.

Kata Kunci: Analisis Risiko, Keamanan Data Pribadi Karyawan, OCTAVE Allegro, Praktik Terbaik Keamanan Informasi, Sumber Daya Manusia.

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ABSTRACT

Personal information is a valuable asset that must be protected to ensure its confidentiality, integrity, and availability. As the use of digital systems to store, manage, and process personal data continues to increase, threats such as unauthorized access, misuse, and data breaches have become increasingly prevalent. This study aims to analyze the security risks associated with employee personal data in the Human Resources Division of a government institution in Timor-Leste using the OCTAVE Allegro method. A qualitative research approach was employed, with data collected through interviews, observations, and document analysis. The findings identified three areas of concern that resulted in eight potential threat scenarios affecting the security of employee personal data. Based on the assessment of likelihood and impact, five major risks were identified, comprising one high-risk category and four moderate-risk categories. Unauthorized access to employee personal data received the highest risk score of 15 and was therefore identified as the highest-priority risk. The findings further indicate that weaknesses in authentication mechanisms, access control, and system protection are the primary factors contributing to risks affecting the confidentiality, integrity, and availability of employee personal data. Based on these findings, this study recommends the implementation of information security best practices, including multi-factor authentication, regular access rights reviews, enhanced system monitoring, and increased information security awareness. The implementation of these recommendations is expected to reduce information security risks and strengthen the protection of employee personal data.

Keywords: Risk Analysis, Employee Personal Data Security, OCTAVE Allegro, Information Security Best Practices, Human Resources.