Risk Management Challenges

How can we accurately represent and account for uncertainties in a way that properly justifies confidence in the risk results? (Aven, 2016)

After identifying the risk during the risk assessment process, providing properly justifies confidence to represent and account for uncertainties is recommended.

Having security review by the information security team and third-party vendor, for compliance with the business association security standards and regulations. Afterwards, it could provide evidence in risk assessment to represent the risk and mitigation solution. In cybersecurity, it could use cyber-attack case reference to account for the threat, as well as run security tests on the target system or similar system to account for the uncertainties. The test could be included network penetration and vulnerability tests, operational test, social engineering test and physical security tests (eSecurity Solutions, N.D.).

The results of each control experiment should demonstrate the effectiveness of the relevant essential control's design and operation. Procedures for gaining a better awareness of the rules and procedures that govern the internal control system. The linked test controls should be based on the characteristics of the processes done; the data gathered could be in the type of any combinations of documented, electronic, mathematical, oral, or physical proof. The degree of certainty grows when many sources of evidence support a judgment more about the effectiveness of a control. Nevertheless, when they come to different conclusions, the level of certainty drops.

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References:

Aven, T. (2016) Risk assessment and risk management: Review of recent advances on their foundation. *European Journal of Operational Research*. Available from: https://doi.org/10.1016/j.ejor.2015.12.023 [Accessed 9 April 2022]

eSecurity Solutions. (N.D.) Security Risk Assessment Components. Security Risk Assessments. Available from: https://www.esecuritysolutions.com/security-risk-assessments/ [Accessed 9 April 2022]