

Starting Where It Hurts: Identifying Critical Business Processes for Value-Driven Risk Management

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Abstract

Traditional risk management methods often rely on comprehensive asset inventories as a starting point; however, maintaining an up-to-date and complete asset register can be difficult. For many organizations, the continuous effort to track and classify assets creates a barrier to effective and practical risk analysis. This paper proposes a shift in perspective: by starting with critical business processes and identifying the assets that enable them, organizations can build a more practical and value-driven foundation for assessing risk. We introduce the Business Continuity Value over Time (BCV/t) model, a conceptual method developed through a design science approach. The model guides organizations to prioritize high-value processes, identify the enabling communication flows and systems through a genre-based method, and estimate the cost of process disruption over time. This process-first perspective creates the basis for more grounded cost-benefit analysis, as it links the monetary value of continuity directly to the assets that sustain it. BCV/t provides researchers and practitioners a structured way to connect information asset valuation with operational resilience, shifting focus from comprehensive inventories to what matters to keep the business running.

Keywords: Risk management, business continuity, cyber resilience, asset identification, asset valuation, cost benefit analysis