

A Strategic Innovation Framework for the Provincial Electricity Authority, Area 1 (North), Chiang Mai

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Abstract

Knowledge flow enables innovations to be created and adopted, yet in large organizations knowledge often remains fragmented, limiting cross-unit collaboration and causing duplicated work. This study develops a strategic innovation framework for the Provincial Electricity Authority (PEA) Area 1 (North), Chiang Mai, by combining the SECI knowledge-creation model with Social Network Analysis (SNA) to capture both knowledge conversion practices and the underlying human network. A mixed-methods design is applied. Whole-network data are collected from 75 district-level innovation teams, complemented by in depth interviews with 13 innovation committee members and 10 Talent Pool staff; the framework is then refined through expert validation. SNA indicators (density, degree, and betweenness centrality) are used to identify knowledge brokers, isolates, and bottlenecks. Results are translated into People-Process-Digital Technology measures, including broker development and communities of practice, streamlined innovation governance, and a cross-functional knowledge platform. The proposed framework is expected to improve collaboration, reduce duplication, and increase operational deployment of innovations.