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## A Method for Innovation Capability Evaluation in Banking

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Keywords: innovation, innovation management, innovation capability, evaluation, banking.

Under the strong impact of the fourth industrial revolution, innovation happens in all sectors of the economy and is expected to change the entire production, management systems all around the world. Not only the manufacturing sectors, but the banking sector has also been increasingly applying the advanced technologies such as big data, cloud computing, artificial intelligence, Blockchain to change their traditional financial services to bring about new experiences for their customers as well as to compete with the competitors on a global scale. Besides, the banks are also facing severe challenges such as changing existing processes, recruiting and training high-quality personnel and mobilizing other resources to adapt to the digital age. If a bank does not innovate effectively, it cannot survive and develop stably in the fierce competition. In order to innovate productively, the banks have to upgrade their innovation capability by managing well multiple innovation practices. Therefore, measuring innovation processes in banking with various practices becomes urgent and evokes much interest from both academics and bank managers. In literature, there have been many studies related to innovation measurement in the manufacturing and service sectors, but little attention was devoted to evaluating innovation capability in the banking sector.

This thesis focuses on developing a framework for assessing innovation capability in banking. Firstly, the evaluation indicators system was established in terms of critical innovation management practices. By conducting a comprehensive literature review on the best innovation practices and using Pareto analysis, 11 critical innovation management practices (strategic planning, resource management, organization, idea management, process

innovation, marketing, R&D, learning, portfolio management, knowledge management, and technological innovation) and their 44 sub-practices were extracted. A group of five experts in banking major was invited to score these sub-practices in a sample group of three major Vietnamese banks. Then, an innovation capability evaluation method was developed based on Analytic Hierarchy Process (AHP) for analyzing the importance of the 11 critical innovation management practices and their corresponding sub-practices. The result showed that strategic planning, resource management and technological innovation were the most important practices in banking innovation. Finally, an innovation capability index was computed for each bank and used for ranking. The findings of this research could be a basis for the banks to review their innovation activities, thereby have reasonable adjustments in their innovation management policies intending to improve their innovation capability, reinforcing their innovation outcomes and achieving superior business performance.

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