Evaluation of the Current Status and Application Scenarios of Digital Identity Verification at TDCC

Introduction

This study collects and organizes international digital identity verification mechanisms and regulatory frameworks, analyzes their applicability to Taiwan's financial industry, and summarizes the current status of identity verification in various application systems at the TDCC. The goal is to design a company-wide digital identity verification framework suitable for TDCC and assess the business scenarios in which multiple digital identity verification mechanisms can be applied.

International Standards and Regulations

Different management regulations and international standards have been established for the management and verification of digital identities, such as the EU's eIDAS, the US's NIST 800-63-3, and ISO/IEC 29115 by the International Organization for Standardization. This study analyzes the differences between these standards to develop a suitable identity verification framework for TDCC. Additionally, the study introduces the development of digital identity applications in Australia, Sweden, Singapore, and the FIDO Alliance, focusing on digital identity policies and trust frameworks.

Framework Development for TDCC

To develop a suitable digital identity verification framework for TDCC, this study references the ISO 29115 entity identity verification trust framework. It establishes differentiated risk trust levels and a graded supervision mechanism. Following the digital identity verification assessment process, the study consolidates basic information on user types, roles, and transaction types for TDCC's internal and external systems. It assesses the impact of identity verification errors on the system to determine the required business trust level, selects identity verification mechanisms based on trust level assessment, and confirms the adopted verification mechanisms. An assessment summary of the identity verification for application systems is produced and will be reviewed periodically.

Recommendations

Recommendation 1: Each business system at TDCC should conduct an inventory analysis and confirm the promotion order and schedule based on the framework of this study.

Design a digital identity verification framework according to TDCC's business characteristics, referencing the three stages of identity registration, credential management, and verification, and grade the risk levels and verification mechanisms.

Recommendation 2: Formulate TDCC ISO procedural documents based on the digital identity verification framework as a reference for various business application scenarios.

For new system development, jointly discuss and determine the system's identity verification level and mechanism. For digital services provided to individual customers, comply with the Financial Supervisory Commission's "Guidelines for Digital Identity Verification in Financial Services," incorporate them into the internal control system, and conduct periodic reviews.