

CASE STUDY: CECL Modernization & Advisory Support for PCBB

Client: Pacific Coast Bankers' Bank (PCBB), United States

Industry: Banking & Financial Services

Engagement Overview

- PCBB partnered with us to modernize its CECL (Current Expected Credit Loss) calculation framework, ensuring compliance, regulator expectations, and evolving audit requirements. The objective was to streamline lifetime loss estimation across loan portfolios, improve transparency, strengthen governance, and deliver a scalable and intuitive CECL platform for community banks.

Business Challenges

- With increasing regulatory scrutiny and the mandatory CECL transition timelines, PCBB needed:
 - A **future-proof CECL platform** for both internal and correspondent banks
 - Support for **multiple CECL methodologies**: WARM, Avg. Charge-Off, DCF, Vintage
 - Handling of **Q-Factors, management overrides, and forward-looking adjustments**
 - Accurate processing of **C2P accounts**, including override logic and unfunded commitments
 - Full **audit trails**, versioning, and transparent calculation logic
 - Seamless import of loan data, segmentation, and historical loss information

Our Solution

- ◆ We delivered a robust, end-to-end CECL Calculation System built on modern, modular, and auditable architecture. Key capabilities include:
 - **Multi-Bank Support and CECL Advisory for 100+ Institutions**
 - ◆ The platform is designed to scale across **100+ community banks**, offering standardized CECL calculation, governance, and reporting for diverse portfolios. Along with the technology, PCBB also provides **strategic CECL advisory**, helping member banks interpret results, refine assumptions, and strengthen credit risk governance
 - **Multi-Methodology CECL Engine**
 - ◆ Supports multiple calculation methods such as WARM, Avg. Charge Off, DCF, Vintage, closed Pool etc.,
 - **Historical Loss & Segmentation Framework**
 - ◆ The system ingests historical loss data across multiple years and automatically segments loans. Historical loss patterns feed directly into CECL formulas, ensuring compliant lifetime loss estimation.
 - **Adjustable Q-Factor**
 - ◆ A fully configurable Q-Factor module allows management to adjust reserves for risks. Q-Factor has a **dedicated screen** where the user can enter adjustments, view system-calculated impacts
 - **Forward-Looking Overlay Engine**
 - ◆ A scenario-based forecasting tool captures **reasonable and supportable forward-looking**. Users configure both the forecast period (e.g., 12 months) and forward-look adjustment values. Expectations

- **Comprehensive Support for C2P Calculations**
 - ◆ The platform handles the full lifecycle of C2P loans, accurately applying CECL methodologies across both the construction and permanent phases. This ensures proper reserve estimation by reflecting the distinct risk profiles at each stage.
- **Automated, Accurate Reserve Calculation Engine**
 - ◆ The solution automates reserve computation by integrating historical losses, lifetime factors, Q-Factors, and forward-looking overlays. This delivers consistent, audit-ready CECL reserves essential for regulatory compliance and capital planning.
- **Comprehensive Reporting & Export Capabilities**
 - ◆ The platform provides a suite of CECL reports—including reserve summaries, Q-Factor adjustments, forward-look impacts, and audit logs—accessible through intuitive dashboards. All reports can be exported in **PDF and Excel** format

Business Outcomes

- ◆ **CECL-Ready Platform**

Enabled PCBB to meet CECL requirements ahead of schedule, ensuring that both internal teams and correspondent banks can generate compliant reserves.
- ◆ **Enhanced Governance & Regulatory Compliance**

Strengthened audit trails, documentation, and transparency across all CECL assumptions, reducing model risk and regulatory exposure.
- ◆ **Operational Efficiency**

Automated data ingestion, loss calculation, Q-Factor workflows, and reporting reduced manual spreadsheet work and lowered operational risk.
- ◆ **Superior Client Experience**

Clients now benefit from timely updates, Clear CECL dashboards, Before/After impact and multiple reports.
- ◆ **Future-Ready Platform**

Modular and extensible, supporting additional methodologies, macro-economic models, and deeper analytics without redesigning.

Key Technologies Used

HTML, CSS, JavaScript, jQuery, and Bootstrap for UI; Python/Django with Django REST Framework for backend services; SQL Server for data storage; ELK Stack for monitoring; Jenkins for CI/CD; Docker & Kubernetes for containerization; Git for version control; and Unit Test for automated testing.

