

Executive Brief — SecureBank™

A decision-grade framework for quantifying systemic cyber risk in regulated financial environments

Executive Brief

Purpose

Enable executive leadership to **quantify systemic cyber risk**, compare strategic options, and make **defensible financial and regulatory decisions** before cyber incidents materialize.

The Executive Problem

Cybersecurity decisions in financially regulated institutions remain driven by compliance posture, control maturity, and qualitative risk ratings. These instruments describe *what controls exist*, but they do not answer the question that defines executive accountability:

How much money will the institution lose — and how fast — under a realistic cyber failure scenario?

As financial architectures become increasingly interconnected, compromise propagates across identity systems, transaction engines, payment channels, and customer interfaces, producing cascading financial and regulatory consequences. By the time impact is fully visible, the window for strategic decision-making has already closed.

What SecureBank Changes

SecureBank reframes cyber risk as a **systemic financial exposure**, not a technical anomaly. Rather than static assessments, the framework models how compromise propagates through interconnected systems, how losses accumulate over time, and when regulatory thresholds are crossed.

The result is **decision-grade intelligence**, not security telemetry.

How the Framework Works

SecureBank operates as a five-layer decision framework:

- **Threat Propagation** — models direction, velocity, and reach across functional zones.
- **Systemic Dependencies** — identifies amplification points, bottlenecks, and cascade paths.
- **Impact Quantification** — computes expected loss and maximum plausible loss by zone and time window.
- **Regulatory Exposure** — aligns loss trajectories with notification thresholds and supervisory escalation.

- **Decision & Resilience** — ranks options by systemic risk reduction per dollar invested and defines actionable targets.

What Executives Gain

SecureBank enables leadership:

- Compare security investments using **financial impact**, not control counts.
- Identify architectures that **amplify or contain systemic loss**.
- Understand **time-critical escalation paths** before incidents occur.
- Support decisions with **documented, defensible assumptions**.
- Align cyber decisions with **capital, resilience, and regulatory accountability**.

Governance Impact

SecureBank produces a structured decision record linking technical signals to financial exposure and regulatory obligations, supporting board oversight, audit readiness, and supervisory review.

Next Step

Apply SecureBank to a defined high-exposure scope using realistic scenarios and institution-specific data to establish a decision baseline for future investments and resilience planning.