



## HOW TO REDUCE YOUR CYBER RISK: CyVaR's Step-by-Step Process

When CISOs and CFOs discuss cyber risk, how often are they speaking the same language? To see the true risk to your company in terms of dollars and cents, PivotPoint's decision support solution, CyVaR, translates cyber risk to financial risk, allowing you to achieve better ROI on your security investments, lower your cyber risk—and ultimately secure the value of your business.

CyVaR breaks the cycle of miscommunication, enabling your executives to:

- Understand the company's cyber value-at-risk of business initiatives in financial terms;
- Quantify which controls are most relevant to lowering the company's financial risk and liability due to a data breach;
- Articulate those risk areas best addressed through cyber liability and direct loss insurance options.

### CyVaR in Action

The CyVaR technology 6-step process was developed to help organizations quantify their monetary Value-at-Risk resulting from cyber threats using a method that is based on mature computational techniques used in the financial industry.

**STEP 1. Profile & Value Enterprise** – Facilitates the creation of an individual profile unique to your business, your networks, and your threats through ingestion of your company financials and cyber infrastructure.

**STEP 2. Assess Defensive Posture** – Measure the defensive posture of applications and/or processes which enables CyVaR to see where attacks are likely to penetrate and how. Frameworks such as NIST 800-53, ISO-27001 and the Critical Security Controls are used to measure defenses.

**STEP 3. Simulate Cyber Attacks** – CyVaR identifies exposures and meaningful gaps through a combination of known attack sequences that represents, or is a simulation of, an actual attack against an organization's assets.

**STEP 4. Compute Value-at-Risk** – The CyVaR algorithm simulates technical loss on a network due to cyber attacks by running up to one million cyber attack simulations to calculate your potential losses.

**STEP 5. Simulate Risk Mitigation Options** – Once CyVaR finishes calculating Value-at-Risk, it focuses on simulating mitigations to identify options with the greatest impact on reducing risk.

**STEP 6. Results Reported** – Results are analyzed, correlated with financial data, and presented along with mitigation recommendations, giving the business the ability to better manage security investments, manage legal risk, and quantify how much cyber insurance may be needed.



Operationalizing both the asset valuation and the defensive posture (controls) analysis process, CyVaR also sets the stage for continued evaluation of the security investment process for an organization. As business requirements, technology infrastructure, control implementations, and the threat climate changes, CyVaR can maintain the balance between investment and security risk management.

## Let's Get Started

In order to get CyVaR up and running, demonstrating results in as little as a few days to 2 weeks, our staff will work with you to achieve success. As part of your license of CyVaR, we can help gather the needed information, train your staff, and get you started quickly.



### Preparation

Identification of the key business applications and/or processes that power your organization. Examples include: Point of Sale systems, Inventory Management, HRIS, and E-Mail.



### CyVaR Utilization

We assist your finance team in identifying the value associated with each application or process and your security team with gathering data to implement the control framework. On the finance side, that means a mini-business impact analysis (BIA) drawn from existing data, while on the security side its the review of existing security audits, pen test results, etc. From there, CyVaR goes to work using its unique process to quantify your cyber value-at-risk.



### Results & Action Plan

Armed with real financial information, executives can build action plans to manage, mitigate, and/or transfer risk depending on the strategy and priorities of your business. Use CyVaR results to prioritize spending for IT investments, manage legal risks, and quantify how much cyber insurance an organization may need.

And because your business changes and threats evolve, your cyber value-at-risk changes too. The CyVaR solution, once implemented, establishes a lifecycle of asset valuation, defensive posture analysis, risk calculation, and investment management that fuels continuous improvement in the cyber risk program.

## Solution Parameters

### Inputs from your organization

- Business applications (e.g., SAP) & their value to your business
- Computing environment (e.g., servers, clients, and access points)
- Security Control Framework (e.g., NIST CSF or ISO 27001/2)
- Defensive posture (e.g security audits, network topologies, penetration test results)

### Inputs from Industry

- Historical breach data
- Threat feed data
- Financial loss data

### CyVaR Outputs

- Loss distributions to derive your average and severe Cyber Value-at-Risk
- Prioritize mitigations that reduce your Cyber Value-at-Risk
- Automated reporting

