

About Us

Rising Sun Advisors, LLC is a **ISO/IEC 27001:2013-certified management consulting firm** based in Washington, DC that excels in human-learning based solutions, operating at the intersection of Business and Cyber Security.

Cyber Risk Analytics Capability

Our statistical experience and capabilities extends far beyond these examples. As consultants, we are well-versed in developing specific methodologies tailored to your cyber objectives for each engagement, and advising clients on specific ways to improve their processes.



Challenge

As technology penetration on the overall economy grows, so do cyber risks. Recent high-profile cyber-attacks (e.g., U.S. Federal agencies, FireEye, credit rating agencies, retail stores, social media sites, and corporate banks) indicate a growing likelihood / high probability of cyber-attacks on “lowest common denominator” organizations to scale in sophistication. Besides an increasing role of technology across both, private and public sectors, another catalyst to rapid growth in cyber-attacks has been the worldwide media frenzy around cyber-attacks (e.g., Wannacry, and Anonymous), exposing an increasingly complex and diverse threat environment that is expanding at an unprecedented rate. The organizational impact of these compromises affects mission-critical operations, market capitalization, reputation, and the market confidence of victim organizations, as well as the economy and U.S. national security as a whole.

As grim and harsh as the reality may be, understanding the vast amounts of data that organizations capture (or could capture) can lead to a breakthrough – *Transforming the Chief Information Security Officer (CISO) organization into a Quantitative Cyber Operations & Risk Management organization.*

An organization’s cyber security function working at the intersection of quantitative modeling can and should generate additional positive externalities in the longer term.

Our Cyber Risk Analytics analysts very much understand and appreciate the practical nature of taking on “*art of the possible*” solutions development.

Rising Sun Advisors’ Hypotheses: Preeminent Cybersecurity Analytics Opportunities

- ✓ **A more standardized means to fund projects**
- ✓ **Improved performance metrics for the department due to clearly defined cost & benefit information relating to security projects**
- ✓ **Better prioritizing of projects – can set priority based on ROI**
- ✓ **Effective means to manage limited department resources**
- ✓ **Allows the end results to be tied to the organization’s financial objectives**
- ✓ **Less susceptible to issues relating to company politics**

Rising Sun Advisors’ Cyber Risk Analytics Framework

We specialize in applying and consulting on traditional analytical and statistical methods and models to Cyber Security & Information Risk challenges by employing a broad [open-source] toolkit of approaches to facilitate our work - examples below (e.g., descriptive statistics & data visualization, time series analysis, forecasting). We compliment vertical depth from industry (financial services “quants”, health scientists, etc.) with cyber security expertise across strategic, operational, and technical layers to ensure integration with organization’s mission. The first step would be to review and analyze the current analytics program that is being developed. We then tailor our technical approach to the specific task requirements in close collaboration with the

organization’s Information Security team at the onset of the engagement, and identify the optimal method(s) to provide your organization with the necessary analytical and/or statistical support required.

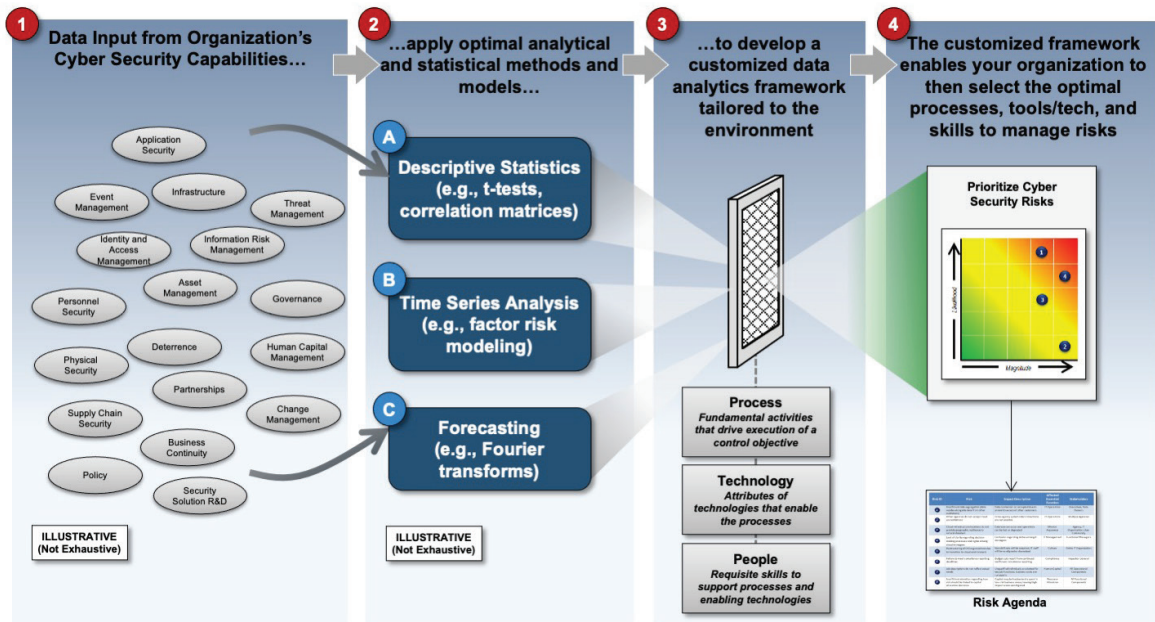


Figure 1: Rising Sun Advisors’ Cyber Risk Analytics Capabilities

A: Descriptive Statistics & Data Visualization

We regularly employ a variety of descriptive statistical methods in our work, including t-tests, correlation matrices, and variance analysis. Our Data Scientists have conducted deep statistical analysis leveraging these methods while working with data to arrive at complex public policy conclusions. In one example, our Data Scientist has conducted analysis of discount rates data that impact macro- and micro-economic factors to provide insights for determining the organization’s own discount rate framework for a given infrastructure project. This parallel in cybersecurity would be to analyze macro and micro-cybersecurity factors (e.g., unusual outbound network traffic, anomalies in privileged user account activity, geographical irregularities, log-in red flags) to provide and pinpoint areas of vulnerability in the strategic, operational, or technical aspects of your organization’s cybersecurity program.

In addition, we specialize in data visualization, offering techniques for conveying the information stored within data in intuitive and informational ways. The goal is to find how data can show where the next threat to harm your organization could come from. Previous data breaches in similar institutions provide insights into what methods were used to harm other similar organizations. The modeling methods would enable the team to determine what kind of pattern(s) are likely to be employed by adversaries for the next wave of cyber-attacks. One example of an approach for such modeling is to analyze data patterns through the consolidated log data (described further below), which may in-fact identify previously undetected vulnerabilities within the environment. Another example is to identify changes in data through time (e.g., type of data, velocity of data movement, timing of movement, regional variances) to identify potential vulnerabilities, or possibly even previously undetected breaches, by comparing a block of historical data patterns with recent data patterns. Developing such modeling capabilities would enable your organization to “forecast” or “predict” where the next attack can occur in near real-time.

B: Time Series Analysis

Our analysts are familiar with a wide array of time series analytical techniques and experienced at evaluating analyses and offering recommendations for improvement. Our essential appraisal tools include a variety of regression methodologies, including multivariate and non-linear techniques. We also have experience with factor risk modeling and principal component analysis (PCA), which helps us evaluate and build powerful tools for describing the drivers and variability of a time series (e.g., using time series analyses to track 'normal' cyber behavior and trends, and identify unusual activity).

C: Forecasting

We also have experience extending time series analyses to generate future projections through a variety of forecasting techniques, from autoregressive integrated moving average (ARIMA) and autoregressive moving average (ARMA) models, to harmonic regression and Fourier transforms. We apply our experience to help clients optimize their forecasting methodologies to leverage the latest and most effective tools available (e.g., using forecasting methods to "forecast" data movement across your organization's platforms and/or regions).

Summary

Rising Sun provides specialized expertise in quantitative strategy design and development, statistical modeling and simulation, policy suite and policy requirements, risk management framework, and controls testing, and audits, assessments, and reporting to commercial and government customers. Our expertise enables us to serve clients across financial services, health care and energy verticals. Rising Sun offers operational experience across cyber security strategic, operational and technical layers. We couple our cyber security expertise with financial services operational experience in private equity, fixed income trading, high-frequency trading strategies, quant toolkit development, machine learning and predictive modeling algorithms utilizing SAS, SAS Enterprise Miner, SPSS Clementine, and SQL. This enables the CISO and CIO organizations to align front-office perspective directly into the firm's cyber security priorities.

The Rising Sun Advisors Difference

We take great care in ensuring environmental, ecological, and financial sustainability while providing cybersecurity experts with depth and industry experience. This approach results in **significantly lower overhead** for the firm as compared to many other consultancies, a **culture that fosters social impact** and **community service**, and **significant cost-to-value ratio** for our clients.

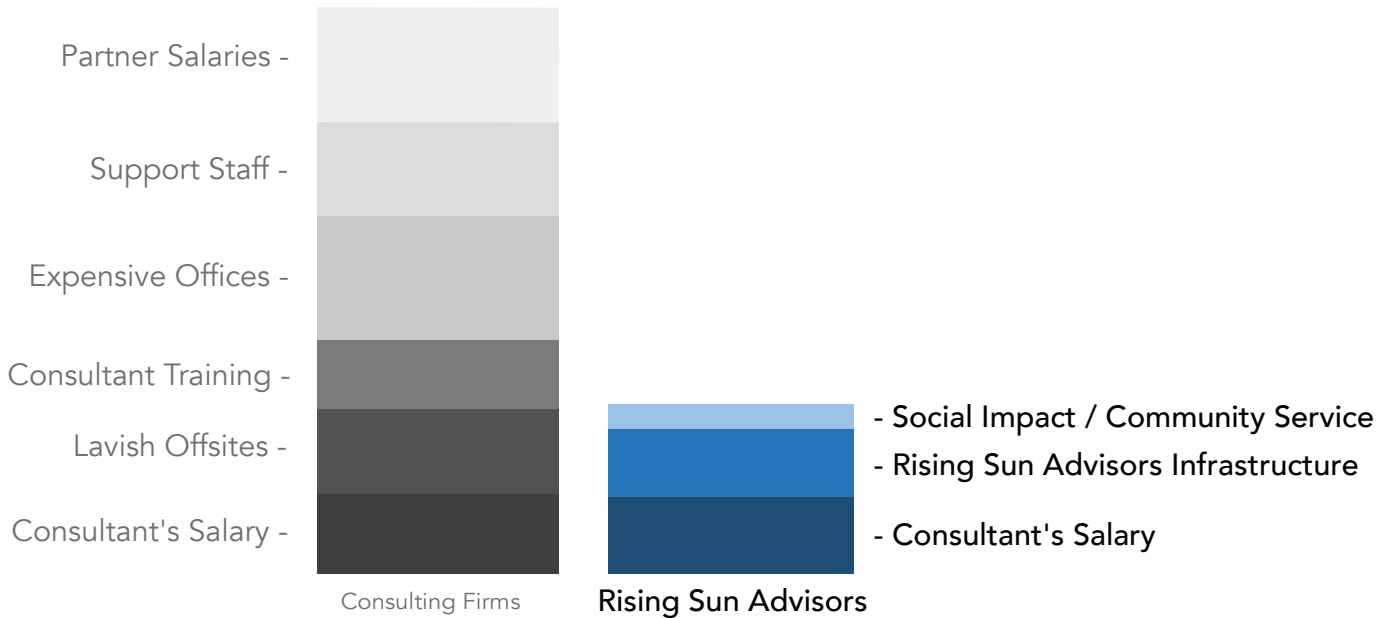


Figure 2: Rising Sun Advisors' Difference

About Rising Sun Advisors, LLC

Rising Sun Advisors, LLC is a **ISO/IEC 27001:2013-certified management consulting firm** serving leading businesses, governments, non-governmental organizations, and not-for-profit clients. Our mission at Rising Sun is to enable the business and mission of an organization by **making lasting improvements to our clients' digital, cybersecurity, and privacy performance** while enabling the "sun to rise" for others by **contributing a portion of the top-line revenue to charities and supporting community service**. Our consulting practice is based upon **knowledge, truth, and compassion** where we work with great people, on enriching projects, and strive to leave the world a better place than we found it.

Leadership Bios



Mr. Miheer Khona is the President & CEO of Rising Sun Advisors. He has over 15 years of experience in Strategy, Transformation and Governance at the intersection of Cyber Security and Information Risk Management. Mr. Khona brings with him a strong analytical and engineering background in serving the needs of various clients in private and public sectors (U.S. and International Governments). He led the efforts in developing the Financial Services domain of [Internet Security Alliance's Cybersecurity Social Contract publication](#) – blending the realms of politics, economics, and cyber security viewpoints into a market-based implementation model for the current U.S. Executive Office of the President (EOP) and the Congress. Prior to founding the boutique management consulting firm, he successfully led the design and execution of a next-generation Global Operating Model for a Bank of New York Mellon's Information Risk Management Division as the Head of Information Risk Strategy & Transformation. Prior to a career in financial services, Mr. Khona provided strategic and technical analysis of global information security programs and developed enterprise risk management frameworks for clients in the private and public sectors as a Management Consultant. A sampling of clients that Mr. Khona has had the privilege of serving includes, International Governments, U.S. Department of Labor, U.S. Department of Energy, U.S. Department of Transportation, U.S. Department of Commerce, a Global Retail & Investment Bank, World Bank Group, Depository Trust and Clearing Corporation (DTCC), Fannie Mae, Global Commercial & Retail Bank.

Mr. Khona currently serves on the [Economic Development Subcommittee for the Governor of Maryland's Cyber Security Council](#), and is a Board Member of the [School of Applied Sciences & Technology at Thomas Edison State University](#). Mr. Khona holds Bachelor of Science degree in Information Technology from the Volgenau School of Engineering at George Mason University, and an Executive Master of Business Administration (MBA) degree from Brown University and Instituto de Empresa (IE Business School). Mr. Khona has also held the following designations: Certified Information Systems Security Professional (CISSP), Security+, ISO/IEC 27001 ISMS Lead Auditor, ISO/IEC 27001 Information Security Risk & Implementation Practitioner.

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