Institutional Risk Analytics

www.institutionalriskanalytics.com

Executive Summary

We design and build customized, enterprise-grade risk analysis tools for credit officers, auditors, corporate lenders, regulators and other financial decision makers. Our risk management systems rely on industry-standard relational databases and utilize structured public and privileged data to meet the internal risk ratings and other compliance requirements of Sarbanes-Oxley and the New Basel Capital Accord ("Basel II").

Our Products

We have two standardized analytical products which are configured for immediate use in general financial performance and risk management applications:

- **IRA Bank Monitor**: The unique performance and risk model of all FDIC insured depository institutions, including a variety of financial metrics and Basel II risk factors.

- **IRA Corporate Monitor**: A comprehensive analytics & peering engine using structured data to perform fundamental analysis of US and international companies.

The tests and calculation methodologies used in these system are drawn from a library of financial metrics which are derived from academic and regulatory sources that may be customized for other applications, including audit assurance, risk ratings, regulatory surveillance and investment banking.

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The IRA Bank Monitor

The IRA Bank Monitor is unique performance and risk model of all FDIC insured depository institutions, using "as filed" structured data obtained in electronic form from the FDIC's Call/TFR database.

The IRA Bank Monitor includes all historical data and derived metrics available from the FDIC dataset for the past decade and features pre-processed measures that display different elements of bank performance:

- Financial Performance
- Basel II Credit Risk
- Risk Based Capital Adequacy
- Interest Rate Risk
- Operational/Business Model Risk
- Derivatives/Counterparty Risk

Standardized modules within the IRA Bank Monitor are currently under development for regulatory applications and internal Basel II benchmarking, including operational risk and economic capital calculations.

The IRA Corporate Monitor

The IRA Corporate Monitor is a comprehensive analytics & peering engine using structured public company data to perform fundamental analysis of US and international companies.

The IRA Corporate Monitor is a non-Merton rating system that uses no market price data. Instead, we employ classical corporate finance and performance tests drawn from the leading academic sources and our proprietary methods to perform forensic analysis on the financial statements of commercial and financial companies, including:

- Advanced analytics tests for solvency, volatility and business stress.

- Behavioral analysis ratios and volatility measures designed to combat fraud and identify "noisy" corporate profiles.

- As reported and reformulated fundamental data displayed in Excel-compatible tabular format.

As with the IRA Bank Monitor, we provide custom design and consulting services with respect to the Corporate Monitor to allow the client to expand and fine-tune the standard test and statistical display choices so as to make the final product a truly transparent and proprietary system.

Washington & Wall Street

In addition to our analytics products and consulting services, IRA publishes the decade-old *Washington & Wall Street*, a research service which reports on legislation and regulation in Washington that affects the financial markets.

By reporting on the legislative and regulatory landscape in Washington that affects US banks and public companies, we are able to better design and execute analytical systems that are compliant with Basel II and Sarbanes-Oxley.

Custom Analytics

IRA provides professional consulting services for systems development supporting risk management and assurance organizations. We specialize in designing and integrating total solutions. Here are some examples of how we work with our clients:

- IRA typically licenses our analytics engine with full visibility of the computations and the ability of the client to specify all system elements. In certain cases, we give the client the ability to purchase a copy of the analytics engine.

- We customize the metrics engine to use the structured database(s) of the client's choice.

- We currently represent several vendors of structured public company data, including CoreData and WorldVestBase, but any industry-standard structured data may be employed in our systems.

- We can also include other types of risk indicators and ratings in the system to provide different perspectives on a given risk measurement task.

IRA provides design, programming and maintenance support so that the client can focus its people and resources on performing analytics rather than managing systems and data.

Our objective is to give our clients the power of a commercial grade data and analytics system, with full access to and control over its design, without the need to employ a full-time staff of financial data and systems programmers.

By giving the client, rather than the vendor, the ultimate control over the design and data inputs for the system, we help our clients satisfy the requirement for *internal risk based ratings* in Basel II and similar duties under the Sarbanes-Oxley legislation.

Consulting Services

IRA also provides consulting on policy, strategy and forensic issues applicable to financial risk. Here are some examples:

Architecture Design and Upgrading

We act as your prime contractor to assemble turn-key analytics systems for public and private data. We have the architecture design and technical expertise to assist organizations in implementing risk management solutions that increase analytical transparency and data throughput, thereby managing the cost of each transaction. We assess your current systems and design a least-cost approach to bring your existing risk measurement systems and data sources up to commercially competitive, legally compliant standards.

Case-Based Analytics Outsourcing

We provide outsourced solutions for analytical research processing tasks that give you control over the processing of data while protecting your privileged data. Our combination of fundamental, heuristic and statistical analytics systems synthesize information from disparate sources and assemble concise assessments of a company's financial behavior. We organize the data sources, including financial analysis, ratings and corporate behavior testing services, to fully document opinions regarding both public and private companies.

Methodology Pilot Programs

The landscape of financial analytics and risk management is changing in response to both technique weakness and regulatory pressures. We build and operate pilot programs to test emerging analytical processes to determine if they have the desired decision enhancement and cost avoidance potential suitable for full adoption by institutions. Pilot programs may be firm specific or funded by groups of institutions seeking to deal with a common issue.

Source Analysis and Recommendation Services

A variety of third-party balance sheet, behavioral and actuarial measures are available in the marketplace. Each has a unique approach to observing and describing credit risk. Vendors vary in the extent of their coverage, the depth of their treatment and the degree of automation available to support their business models. We monitor these sources and can recommend mixtures of vended sources appropriate to your analysis, due-diligence and documentation needs.

Additional information is available upon request.

Management Team

Dennis Lewis Lord Santiago

Dennis Santiago is CEO and a Managing Director of IRA, with responsibility for operations, analytics and product development. He has worked on fixed income, equity analytics, business and financial news and has a strong rapport with the market data industry. Dennis is the author of our institutional research tools and head of research for our corporate analytics initiatives.

Dennis worked in the aerospace industry during the 80's as a military operations research analyst with Rockwell International's North American Aircraft division specializing in national policy, global stability and warfighting strategy.

He joined the finance industry in 1991. His appointments include serving as Vice President, Corporate Development, for Data Broadcasting Corporation where he developed products such as the BondVu fixed-income securities analysis system and the InSite market data terminal.

Dennis was one of the founding team members of DBC's CBSMarketWatch.com venture. He has also served as Chief Strategy Officer for Chicago-based Zacks Investment Research and was Chief Technology Officer of Houston-based Telescan, Inc. where he oversaw the support of CNBC.com, Forbes, American Express, and others.

In 2001, Dennis joined Los Angeles based holding company CommonTech LLC to design and implement of eCommerce business models. Ultimately serving as President of CommonTech, he led the infrastructure expansion of LuxuryLink LLC, an online travel and eCommerce business and co-founded Cellar Marketing LLC, an online retailer of wine. Both businesses involved complex transaction and niche marketing systems designs. Dennis also performed the business case research for and participated in the founding of CommonTech's Audit Integrity LLC, a corporate behavior screening service that focuses on retail investing uses of public filings data.

Dennis holds a BSEE from the University of California at Irvine and an MBA from UCLA's Anderson School.

Richard Christopher Whalen

Richard Christopher Whalen is Senior Vice President and a Managing Director of IRA with responsibility for sales, marketing and business development. Chris is a general securities principal and has worked as an investment banker, research analyst and journalist for more than two decades.

After graduating from Villanova University in 1981, Chris worked for the U.S. House of Representatives and then as a management trainee at the Federal Reserve Bank of New York, where he worked in the bank supervision and foreign exchange departments. Chris subsequently worked in the fixed income department of Bear, Stearns & Co, in London.

After returning to the U.S. in 1988, Chris spent a decade providing risk management and loan workout services to multinational companies and government agencies operating in Latin America. He provided due-diligence and credit workout services to a number of multinational clients operating in Mexico, including the Export-Import Bank of the US, Kroll Associates and Weyerhaeuser, and served as an adviser to the presidential campaign of Cuauhtémoc Cardenas Solórzano.

In 1997, Chris returned to Wall Street, working as an investment banker in the M&A Group of Bear, Stearns & Co. and later Prudential Securities where he focused on the technology sector. He then served as the managing director of The Free Internet Group Ltd., one of the largest independent Internet service providers in the UK.

In 2001, Chris returned to investment banking, working as a banker at Fechtor, Detwiler & Co. and an equity research analyst at Ramberg, Whalen & Co., following names such as IBM, Apple Computer, Hewlett-Packard and Cisco Systems.

Chris edits our free newsletter, *The Institutional Risk Analyst*, and our research service, *Washington & Wall Street*, and contributes regularly to publications such as *Barron's*, *The International Economy* and *The Washington Times*. He has appeared before the US Congress to testify on a variety of financial issues and speaks on topics such as investing and corporate governance.

Corporate Information

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