

J&A Financial Analytical Services

Ask the right questions... get the answers right

J&A Financial Analytical Services (JAFAS), a division of Jacobson & Associates, LLC, provides core technology, deployed devices, and related data consulting services, to select financial market

“Finance is a pure information processing game” --D.E. Shaw

participants interested in exploiting the innovation, power and speed of DaMi2™ – J&A’s Financial Analysis Engine. In the financial sector, JAFAS customers are able to gain the competitive advantage of utilizing the artificial intelligence-based, advanced analytics of DaMi2 to make the best decisions in their proprietary trading and investing activities.

Core Technology

DaMi2’s Financial Analysis Engine is an evolutionary analytical program, run on its own preconfigured, dedicated hardware platform, that efficiently manages a family of patent-pending Genetic Algorithms (GAs) specifically designed to provide precise solutions to complex real world challenges involving large data bases with numerous variables. Specifically tailored for the financial sector, these advanced analytical capabilities are enhanced with the flexibility to work not only with existing (static) data sources, but – unlike other GAs – real time (dynamic) information sources. In addition, DaMi2 is specially engineered to run on a stand-alone basis and is easily integrated with existing systems.

The predictive analytical capabilities of DaMi2 were originally designed by David L. Jacobson, the founder of J&A and former Chief Engineer of the Department of Defense for Health Affairs, to detect disease outbreak for the DoD (*specifically Persian Gulf War Illness*) in the late 1990s. DaMi2 combines advanced mathematics – modern quantitative analysis – with advanced computer science – artificial intelligence-based fields of pattern recognition and evolutionary computing.

While the technology is fairly complex, the principle is relatively straight forward – the more factors you can objectively examine, filter, prioritize and summarize in any analysis, the more precise the resulting information. As compared to other analytical technologies, DaMi2 simultaneously analyzes 20-30 times more quantitative and/or a qualitative factor contained in tremendous data sets, adds self-generated prioritization capabilities, and runs significantly faster in delivering the most precise, actionable results.

“Providing the right information has proven much more difficult than providing lots of it.”
--Laudauer

Financial Markets

JAFAS is currently working with significant financial institutions to establish proprietary trading and investing programs by adapting DaMi2 to their particular requirements. JAFAS is working in, or has translated its methodology to the key financial markets – i.e., Fixed Income, Foreign Exchange, Futures & Options, Equities and Commodities. DaMi2-based trading and investing systems are highly effective in the transparent financial markets and the more discreet trading and

private investing/lending financial markets, due to the unique combination of DaMi2's scientifically-based technological innovation and J&A's broad multi-sector data mining experience.

Pre-Trade/Investment Analytics

DaMi2 is capable of being adapted to other value-added services for financial market participants – e.g., Risk Analysis and Portfolio Construction. However, JAFAS has chosen to focus on a value-driven solution in the sector of pre-trade and investment analytics. *JAFAS is the only company successfully employing GAs at this level in the field of pre-trade analytics.*

“The brain’s strong point is its flexibility.”
–Campbell

Value-Driven Proposition

The specific decisions that a trader or other investment professional makes that either add or subtract to an investment portfolio's performance are: 1. security selection, 2. asset allocation, 3. hedging, and 4. transaction costs. While most technology-based solutions and tools (software, financial models, etc.) focus on portfolio allocation optimization, risk analysis, and transaction efficiencies, DaMi2's analytics focus on the most important investment decision – selecting the most profitable investment opportunity within highly dynamic markets. *The right investment – at the right time.*

Active Trading Scenario

In an active trading scenario, the DaMi2 engine provides a trader with predictive analytical information that recommends, at any point in time, not only the security that represents the best investment opportunity but also, on a continually updated basis, when the security should be sold to make the best return on investment.

DaMi2 analyzes historical and current data to find those securities that have the most exploitable predictive trends. The certainty is more precise because of the quantity and quality of the factors objectively analyzed. And, because it is constantly analyzing (evolutionary computing) these and other securities' trends (competing investment opportunities), DaMi2 identifies when the trends stop or are less certain than those for another security. There is no requirement to play the entire market, DaMi2 points you to the most lucrative investment selections at any point in time, based on thousands of data sources, not just a few.

“I was very excited about finding these magical devices that, once you discovered the right design, you could turn on and they would get smarter.” --D.E. Shaw

DaMi2 is the most scientifically advanced, pre-trade analytical tool available to the Market today.

Engagement

JAFAS is selective in its engagements, particularly in the discreet financial markets with relatively few “players.” We would be happy to discuss your specific investment objectives.