



# Product Research: Case



*Saven Technologies*

# Strategy Report

## CHARTING A STRATEGIC DIRECTION: EQUITY ANALYTICS



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## 1.0 Introduction

Any intelligent implementation strategy involves three fundamental steps: information gathering, information processing and execution (Figure 1a). Establishing efficient protocols for each of these processes reduces the risk of failure and poor implementation.



**Figure 1a: Fundamental processes involved in intelligent implementation strategies.**

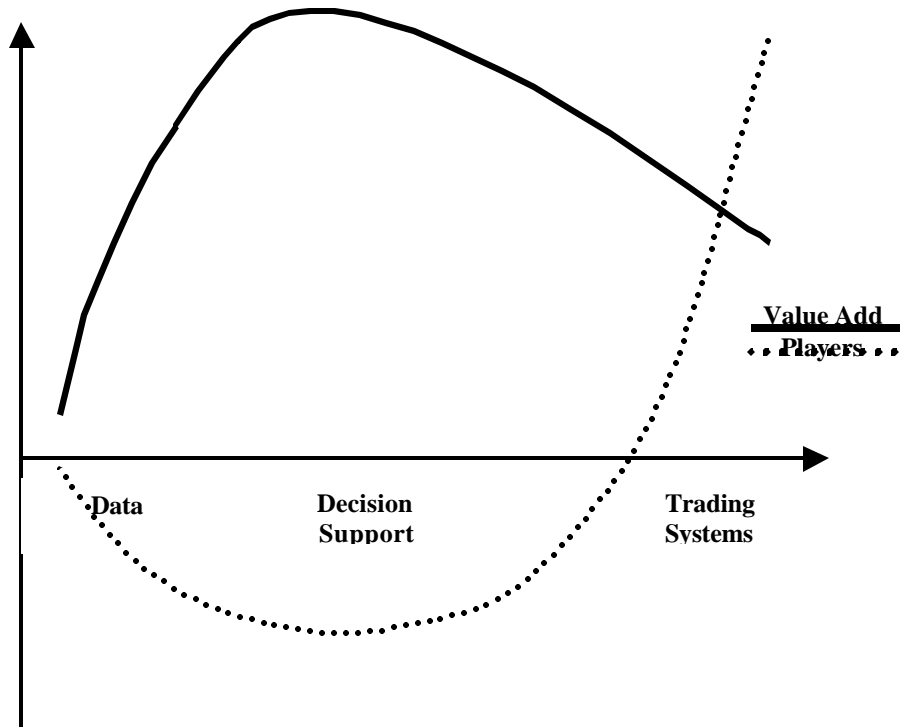
This framework adapted to the financial markets brings into focus the following processes (Figure 1b): raw information including stock price data, company financials, economic environment and news is processed through different analysis philosophies (technical, fundamental, psychological) which facilitate the trader to make a decision and execute it through various trading systems.



**Figure 1b: Fundamental processes in financial markets.**

Before 1995, there was considerable value added in providing real-time and historical information to the financial community. This value has eroded with the rapid emergence of the Web, but availability of real-time data is still critical for institutional investors. Another effect of the improvement in information technology and telecommunication together with the emergence of the Web has been in the explosion of trading systems.

The Analysis and Decision Support segment has seen relatively fewer adaptations even with the latest technology although this is the most critical process that influences trading decisions. Figure 2 shows a perceptual map of the value added in each process and the number of players in each segment.



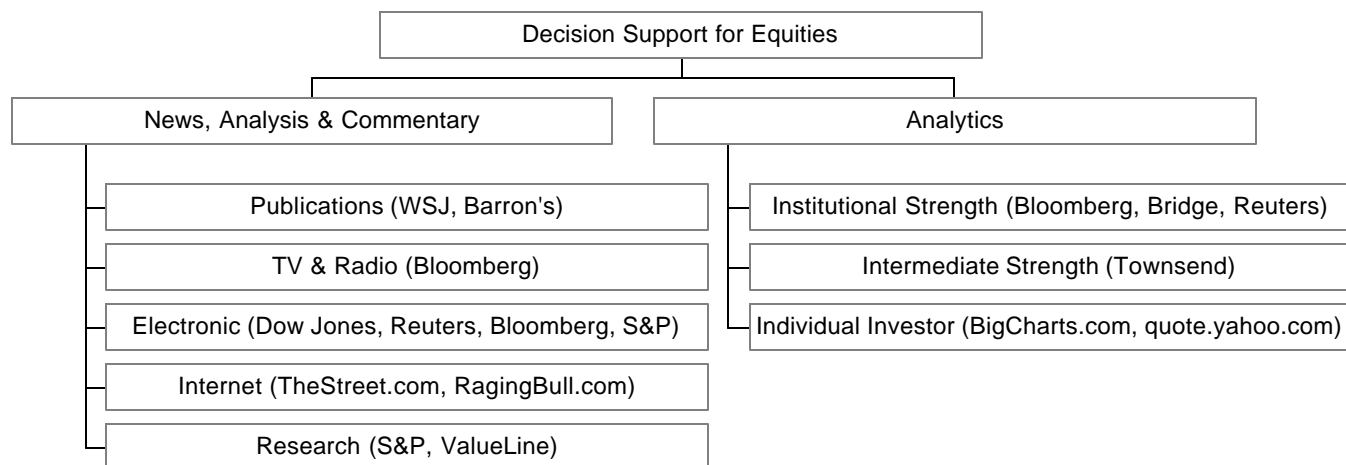
**Figure 2: Value added and number of players in each market segment.**

There is a significant gap between the providers of decision support systems relative to its importance in the financial markets. This segment as it relates to equity analytics is the focus of this report. The different decision support approaches are identified, along with the key players, the strategies currently being employed by them and how Saven can strategically deploy its advanced analytics suite for best results.

## **2.0 The Decision Support Market**

This market is primarily composed of vendors that offer opinionated research, recommendations, and analysis based on one or a combination of the following: news events, company fundamentals, technical analysis, macro- and micro-economic environment (Figure 3).

A limited number of companies offer institutional strength analytics – both technical and fundamental. Technical analytics are primarily derived from the price history of the stock while fundamental analytics are derived from the financial statements of the stock. They may also incorporate macro-economic factors such as interest rates and inflation.



**Figure 3: Breakdown of the decision support market for equities.**

Considering the crucial nature of this segment in decision making for equities, the number of players in the market is limited. The reasons for this are:

- Bloomberg built a strong foundation on analytics from its inception and is recognized as the de facto standard in the industry. There are virtually no institutional investors who do not access the Bloomberg Terminal on a regular basis.
- Attempts by Reuters, Bridge and Dow Jones (which has since sold its analytics operation to Bridge) over the past few years have generally failed to loosen Bloomberg's grip on the analytics market. None of the other vendors have the full functionality provided by Bloomberg.
- Analytics inherently are relatively tougher to implement than the other parts of the equation shown in Figure 2. By mid-1999, there were about 200 vendors that provide trading-related software and technologies and practically no significant analytics players.
- Companies follow a path of least resistance to product development rather than tackle the tougher issues. This inevitably leads to a situation where companies start out with the intention of building analytics and eventually gravitate to either providing news and quotes or developing trading systems.
- Bloomberg has invested over a decade of product development fine-tuning its analytics package which steeply raises the entry barrier to tackle the leader in the market.

Another trend in recent years has been the rapid emergence of the day trader. In 1999, this market in the USA alone is estimated at \$10 billion and is expected to grow to about \$30 billion by 2003. This growth has been powered entirely by the Internet and, paradoxically, the online investor has no significant analytics tools available online. The early success of sites such as BihCharts.com that offer basic analytics is an indication of the pent-up demand. As more investors go online worldwide, the day-trader market is expected to further surge and as the world moves towards 24 hour markets driven by ECNs, the role for robust decision support tools becomes even more critical.

### 3.0 Product Strategy

All the content offered by the major players – Bloomberg, Reuters and Bridge – can be classified into two categories: aggregations and custom content. Aggregations include data gathered from various sources while custom content is developed by each player through their own efforts or through joint ventures/acquisitions. The bulk of the features in all products are aggregations which are relatively standard; usually the user cannot distinguish the aggregation of one company from the other as almost all of them use the same sources.

Standard features:

1. Quotes and News

Real-time and historical quotes and news gathered from various exchanges and news agencies.

2. Fundamentals

Company related information derived primarily from financial statements and analyst recommendations.

3. Commentary

Custom content based on news, price action and fundamentals.

4. Research

Analysis of stocks based on fundamentals and technical analytics.

Going beyond these generic features, each company adds its own analytics which differentiate the offerings from each vendor. The issues related to these analytics are discussed in this section.

### 3.1 Product Comparison: The Men and the Boys

Bloomberg offers the most complete suite of analytics features available on the market, followed by Bridge and Reuters. A feature-by-feature comparison is shown in Tables 1-3. Bridge (BridgeChannel) and Reuters (ReutersPlus Web) also offer light-weight versions of their terminals available via the Internet. These products are targeted primarily at the individual investor and also complement their conventional LAN/WAN offerings. S&P's Xpresso is a further entrant in this space.

Bloomberg has been largely unsuccessful in its attempts to port its existing code to the Internet architecture. Although the analytics features are powerful, the interface is not adaptable and is not transferable to the interactivity and speed required for the Internet.

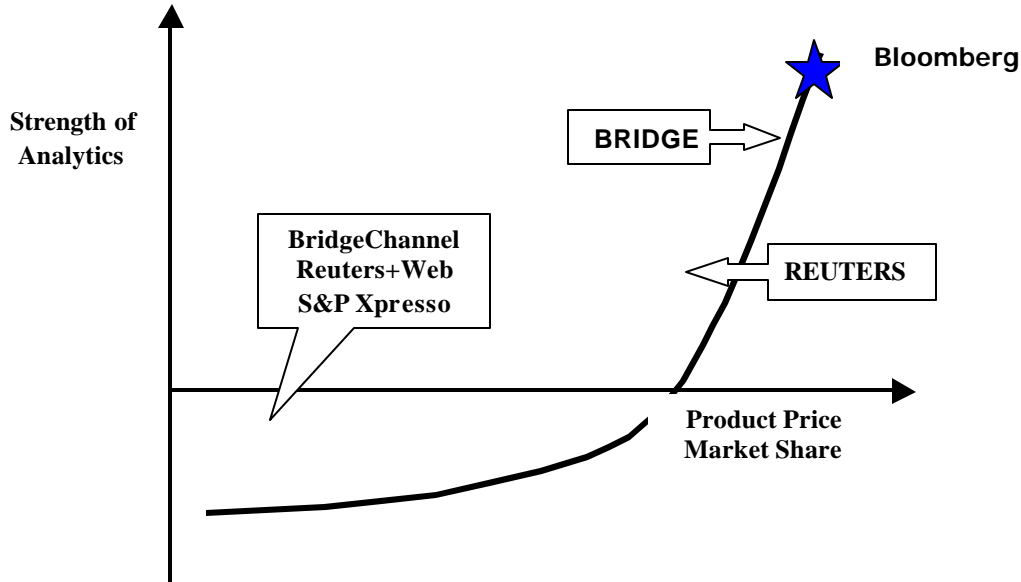
Bridge has made several acquisitions to expand the range of its products and is actively embracing the Internet as a delivery mechanism. With its TIBCO subsidiary, Reuters has also actively moved to the Internet, although its product depth is relatively weak. S&P has been an early adopter of Internet technologies and is yet to gain significant market share from the established leaders.

### 3.2 Product Differentiation: Analytics

The strength of the analytics offered by each vendor directly reflects their position in the market. *The trader is looking for intelligence rather than information.* And, institutions are willing to pay top dollar for features that can make sense from the sea of information available. As information generation further accelerates, the need for market intelligence becomes more critical

further increasing the gap between the vendors that supply decision support tools and the vendors that do not.

Figure 5 shows a perceptual map of the market shares and product prices of various vendors correlated with the strength of their analytics.



**Figure 4: Value added from an analytics suite**

The value added to the product increases exponentially with the addition of advanced analytics. While Bloomberg can command a price of \$1200 per station, ReutersPlus has a lower market share even at a lower price of around \$425 per station. The light-weight products at the other end of the spectrum are sometimes given away for free by the vendors to induce the clients to purchase the pricier heavy-weight versions and at best can be priced in the \$100-\$150 range.

### **3.3 Product Development: Light-weight or Heavy-weight?**

The development of Java-based products by Bridge and Reuters that can be deployed on the Internet is a defensive measure. Inevitably, the financial markets are moving to the Internet. The existing players are cautious *not* to accelerate the development of Web-based products as they can potentially cannibalize their existing products. More likely, they will adopt a gradual transition to the Internet rather than a fast-paced approach. Their light-weight products provide a "toe in the water" to assess the changing Internet landscape.

This puts Standard & Poor's in an interesting position as it does not have any vested interest in maintaining the status quo and can rapidly transform the market with a focused approach. To do so, Xpresso must traverse up the curve (Figure 4) and match the functionality provided by the other players. The implications are discussed further in Section 4.0 below.

### **3.4 Product Positioning: Individual or Institutional?**

There are about 5 million active online investors in the US and the number is expected to explode to 15 million by 2003. But, individual investors do not generally use the sophisticated tools available and free tools provided by sites such as BigCharts and Yahoo Finance are quite adequate.

For revenue generation, this market segment is a poor choice but can be a powerful force in increasing brand awareness due to the pent-up demand for low-to-moderate strength decision support tools.

The institutions need more sophisticated decision support tools and are willing to spend for a tool-set that is complete, robust and easy to use. None of the existing players use the full power and interactivity provided by Internet technologies in this \$14 billion market. Providing a complete suite of intuitive and interactive analytics across various financial markets supported by complementary services will clearly result in market leadership and a generous revenue stream.

#### **4.0 S&P Xpresso: Lost at Sea or Charting a New Direction?**

Standard & Poor's Xpresso is at an interesting cross roads. Of all the major players, S&P has the best potential to be a strong force in the online decision support market because:

- Xpresso's architecture is designed to be deployed on the Internet.
- S&P already has the other support features that complement the product such as research reports, credit and bond reports, data in the futures and fixed income markets and International financial data (See Figure 5).
- The brand recognition of Standard & Poor's can be leveraged across different markets, although this may not necessarily be an advantage in Internet space.
- Importantly, S&P does not have the inertia of its competitors who are reluctant to deploy a full scale Web application due to fears of cannibalization of their existing products.

Xpresso can be used as a platform to unify content across the different divisions of Standard & Poor's to provide a common gateway or, in Internet language, a financial markets portal that can rival the strength of Bloomberg. This would establish S&P as a clear leader in the financial markets data space, not just in equities. In any industry, existing leaders can be displaced by the emergence of bold, new players with innovative solutions.

The potential obstacles to such a move are:

- Lack of a full suite of analytics that is the defining characteristic of market leaders.
- Inter-departmental inertia that could dampen efforts to unify content.

A strategic solution is a "dot com spin-off" of SPXpresso.com as an independent, self-directed entity by McGraw-Hill. Saven feels that the market capitalization of such a venture could rival that of the parent in five years.

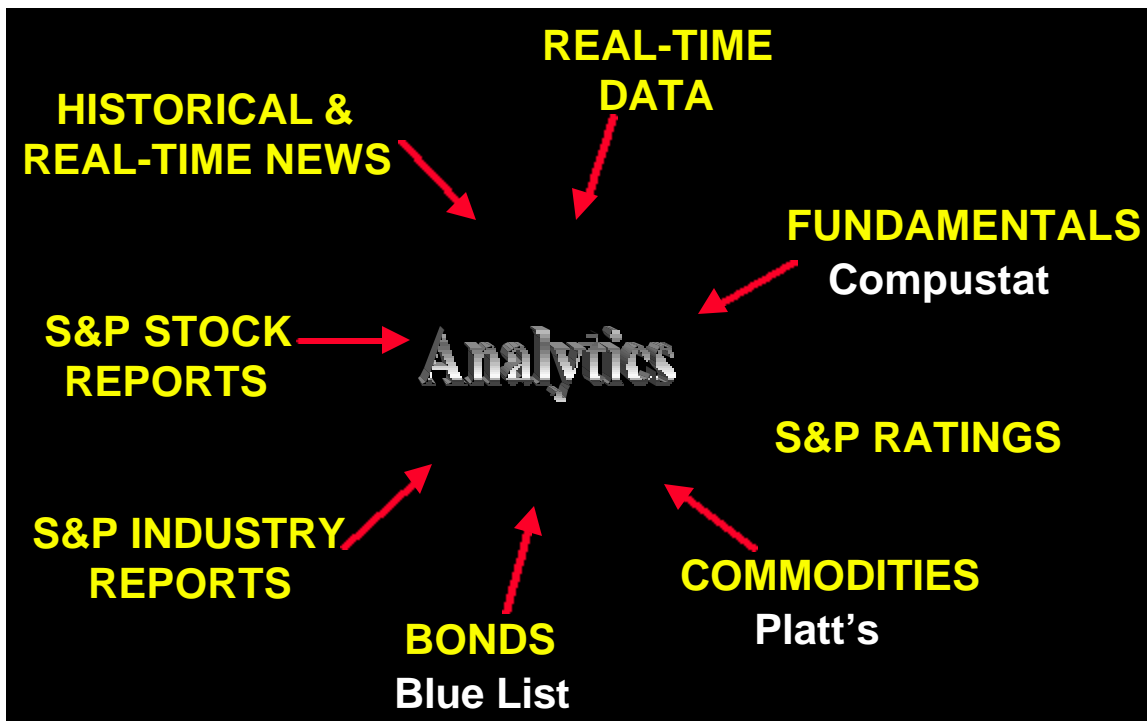


Figure 5: A complete suite of Standard & Poor's information services built around an Analytics framework.

## 5.0 Conclusions

Based on the study, the following conclusions may be drawn:

- **Analytics**

Market leadership in the financial market data and information business is defined by the degree of the strength of the analytics provided. Not only do companies with a strong analytics focus command a higher price for their product, they also have the largest market share. To the institutional investor, this is the single differentiator between products offered by different vendors.

- **Internet Transition**

Existing leaders are reluctant to rapidly transition to the Internet due to the threat of cannibalization. This opens a short window of opportunity to a focused, unbiased new entrant who can execute with speed.

- **Market Focus**

The perennial question of individual vs. institutional becomes redundant with an Internet approach. Targeting institutions generates revenue, targeting individuals generates traffic and increases brand credibility.

- **Portal Approach**

A single portal can effectively serve different markets such as equities, fixed income, futures and commodities, mutual funds, currency markets and international financial markets. Rapid execution on a solid analytics base will assure market leadership well into the new century.

## About Saven Technologies

Saven Technologies is an Information Technology Services Provider that specializes in planning, managing and implementing Information Technology solutions. Through offices in USA, UK and India, Saven offers consulting services on an onsite, offsite and offshore basis. Saven also develops products complementary to its consulting operations that further add immediate, measurable value to clients.

Our focus is to deliver custom solutions for financial industry. As a pioneer in innovative solutions and technologies, the company has vast experience in a broad spectrum of mission-critical offerings that include B2B and B2C financial enterprise integration, electronic trading, finance portal, market data and exchange automation solutions. The company's solutions enable financial services clients to deploy real-time event-driven e-Business applications that enable them to respond to rapidly changing markets and business events anywhere in the world. Our consulting services enjoy the challenge of building state-of-the-art systems and have proven, over-and-over, their ability to deliver.

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**Table 1: Comparison of intra-day analytics by product.**

<b>Feature</b>	<b>Bloomberg</b>	<b>ReutersPlus</b>	<b>BridgeStation</b>	<b>BridgeChannel</b>	<b>S&amp;P Xpresso</b>
<b>Price Action</b>					
Price Graph	▶	▶	▶	▶	▶
Time Intervals	▶	▶	▶	▶	▶
Bar Graph	▶	▶	▶		
Candle Graph	▶		▶		
Point & Figure	▶		▶		
Market Picture	▶				
Market Histogram	▶				
<b>Momentum and Oscillators</b>					
Daily MACD	▶	▶	▶	▶	▶
Mov. Avg. Env.	▶		▶	▶	▶
Stochastics	▶	▶	▶	▶	▶
Rate of Change	▶	▶	▶	▶	▶
Commodity Channel Index	▶		▶		
Bollinger Bands	▶	▶	▶		
Pivot Calculator	▶				
Relative Strength Index	▶	▶	▶		▶
On-balance Volume	▶	▶	▶		
Money Flow Graph	▶	▶	▶		
Trading Envelopes	▶	▶	▶		
Butterfly			▶		
Open Interest			▶		
Spread			▶		
<b>Trend Analysis</b>					
Price Fibonacci Graph	▶				
Parabolic Systems	▶				
Block Flow Graph	▶				
Dir. Mov. Indicator	▶				

*Note: Both the light-weight packages – BridgeChannel and Xpresso – do not provide analytics on tick data.*

**Table 2: Comparison of historical analytics by product.**

<b>Feature</b>	<b>Bloomberg</b>	<b>ReutersPlus</b>	<b>BridgeStation</b>	<b>BridgeChannel</b>	<b>S&amp;P Xpresso</b>
<b>Price Action</b>					
Px & Volume Graph	▶		▶	▶	▶
Candle Graph	▶		▶	▶	▶
% Price Graph	▶				
Comparative Price	▶				▶
Moving Averages	▶	▶	▶	▶	▶
<b>Momentum and Oscillators</b>					
MACD	▶	▶	▶	▶	▶
Mov. Avg. Env.	▶		▶		▶
Stochastics	▶	▶	▶	▶	▶
Rate of Change	▶	▶	▶	▶	▶
Price Oscillator	▶		▶		
Bollinger Bands	▶	▶	▶		
Trading Envelopes	▶	▶	▶	▶	
Chaikin Oscillator	▶				
McClellan Oscillator	▶				
Williams %R	▶	▶	▶		
On-balance Volume	▶	▶	▶		
Relative Strength Index	▶	▶	▶	▶	▶
Pivot Graph	▶				
Advance/Decline Ratio				▶	
Put/Call Ratio				▶	
Short Interest	▶	▶	▶		
<b>Trend Analysis</b>					
Fibonacci Graph	▶		▶		
Parabolic Systems	▶		▶		
Money Flow Graph	▶	▶	▶		
Candlestick Patterns	▶		▶		
Hurst Component	▶				
Dir. Mov. Indicator	▶				

**Table 3: Comparison of risk analytics by product.**

<b>Feature</b>	<b>Bloomberg</b>	<b>ReutersPlus</b>	<b>BridgeStation</b>	<b>BridgeChannel</b>	<b>S&amp;P Xpresso</b>
<b>Risk</b>					
Beta	▶		▶		
Equity Hedge	▶				
<b>Volatility</b>					
Volatility Graph	▶		▶		
Hist. Volatility	▶		▶		
Hist. Imp. Volatility	▶		▶		
Volatility Skew Graph	▶				
Term Structure	▶				
<b>Portfolios</b>					
Portfolio Risk					
CAPM					

Table 4: Comparison of derivatives analytics by product.

Feature	Bloomberg	ReutersPlus	BridgeStation	BridgeChannel	S&P Xpresso
<b>Warrants &amp; Convertibles</b>					
Warrant Valuation	▶				
Warrant Monitor	▶				
Conv. Data Table	▶				
<b>Options</b>					
Option Valuation	▶		▶		
Put/Call Data	▶	▶	▶	▶	▶
Call Analysis Table	▶		▶		
Put Analysis Table	▶		▶		
Covered Call Scan	▶		▶		
Covered Put Scan	▶		▶		
The Greeks	▶	▶	▶		
Exotic Options	▶				
Executive Options	▶				
Options + Warrants	▶				
Spread Analysis	▶				
Zero Cost Dollar Val.	▶				
Delta Neutral Hedge					

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