



The decision power of the Key Performance Predictor (KPP)

*Jaap Vink
Senior Principal
November 11, 2009*



Information Management software



An Information Explosion ... and Faster Decisions Required

Volume of Digital Data

- 57% CAGR for enterprise data through 2010
- Machine generated data : Sensors, RFID, GPS..

Variety of Information

- 80% of new data growth is unstructured content
- Emails, images, audio, video..

Velocity of Decision Making

- Rapidly changing business climate
- Need to get ahead of the curve : predict issues and fix them



***Business Imperative:
Accelerate innovation, business optimization,
and sustained competitive differentiation***



Challenges facing Decision Makers Today



1 in 3

business leaders frequently make critical decisions without the information they need

1 in 2

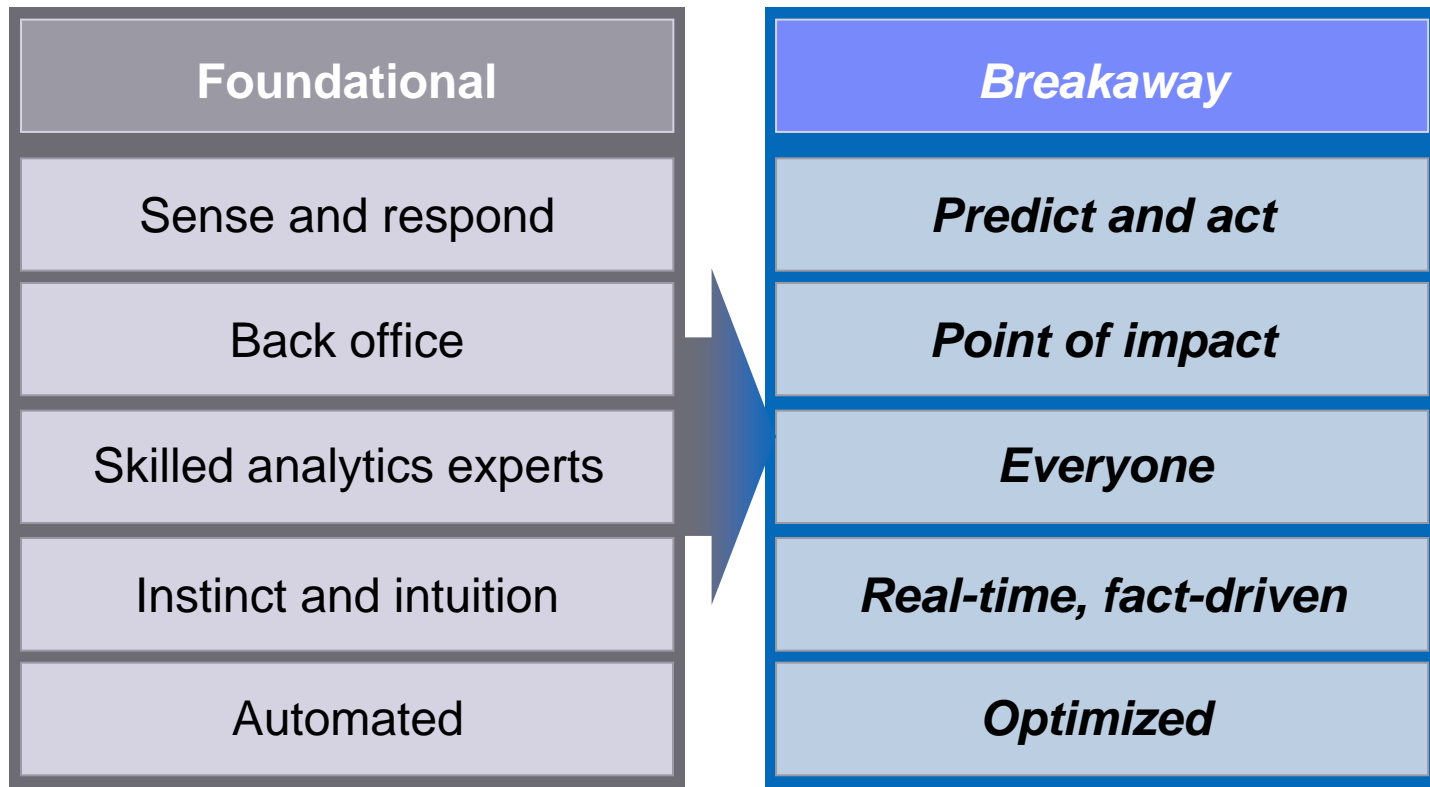
don't have access to the information across their organization needed to do their jobs

19+ hours

Spent by knowledge workers each week just searching for and understanding information



Next Generation Efficiencies come from Optimizing Every Decision, Transaction or Process at the Point of Impact...



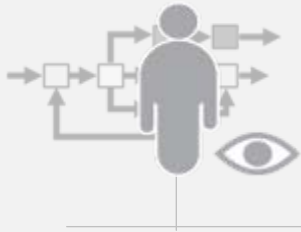
Imagine If Your Decision Makers Could...

...predict and treat infection in premature newborns 24 hours earlier?

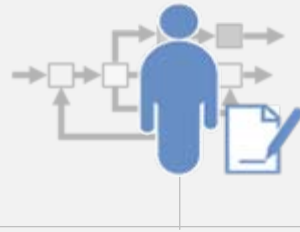
...adjust credit lines as transactions are occurring to account for risk fluctuations?

...determine who is most likely to buy if offered discounts at time of sale?

...apply inferred social relationships of customers to prevent churn?



Physician



Loan Officer



Retail Sales Associate



Telco Call Center Rep

...optimize every transaction, process and decision at the point of impact, based on the current situation, without requiring that everyone be an analytical expert





How can I **capture and analyze information** about how my customers, prospects or employees are feeling?

How can I **predict behaviors and preferences** so I can reduce churn, prevent fraud, maximize campaign results and more?

How can I **make decisions in real-time** or ahead of a potential issue, instead of making decisions when it is too late?



Predictive Analytics offers Unique Insights to Answer those Tough Business Questions



- Predictive Analytics is a transformational technology that enables more proactive decision making, driving new forms of competitive advantage
- Analyzes patterns found in historical and current transaction data as well as attitudinal survey data to predict potential future outcomes





Introducing SPSS, an IBM Company

- A leading provider of predictive analytic software, services and solutions
 - **Software** – data collection, text and data mining, advanced statistical analysis and deployment technologies
 - **Services** – implementation, training, consulting, and customization
 - **Solutions** – combine software and services to deliver high-value line-of-business solutions; used for optimizing marketing campaigns, call center effectiveness, identification of fraudulent activity and more
- 40 years of experience and a broad customer base
 - 250,000 customers: 100 countries, 50 states, 100% of top universities

Enables decision makers to predict future events and proactively act upon that insight to drive better business outcomes



Enabling the Predictive Analytics Process

Capture

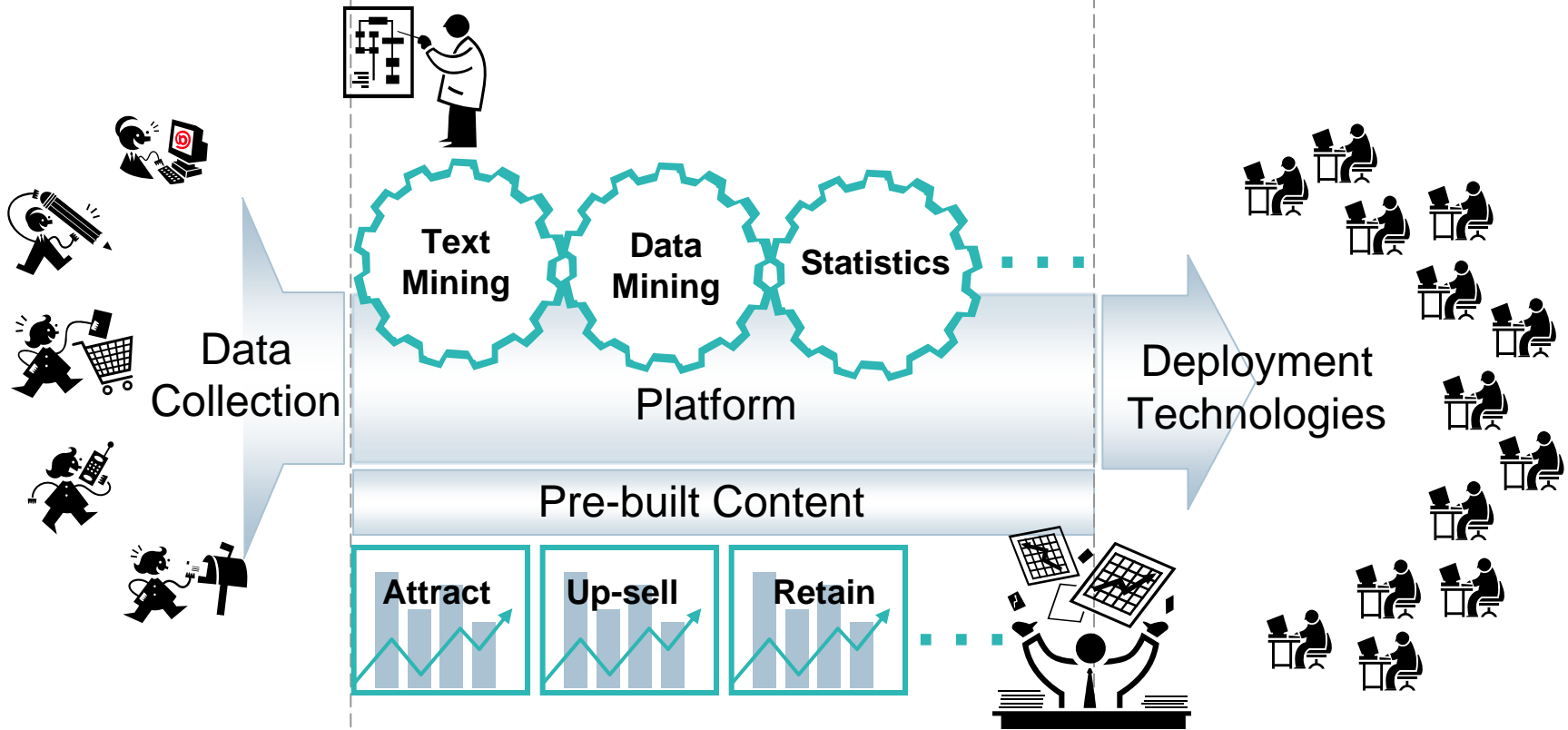
Data Collection delivers an accurate view of customer attitudes and opinions

Predict

Predictive capabilities bring repeatability to ongoing decision making, and drive confidence in your results and decisions

Act

Unique deployment technologies and methodologies maximize the impact of analytics in your operation



SPSS Predictive Analytics Software

4 Key Categories

➔ Data Collection

Delivers accurate view of customer attitudes & opinions

- **IBM SPSS Data Collection**

➔ Statistics

Drives confidence in your results & decisions

- **IBM SPSS Statistics**

➔ Modeling

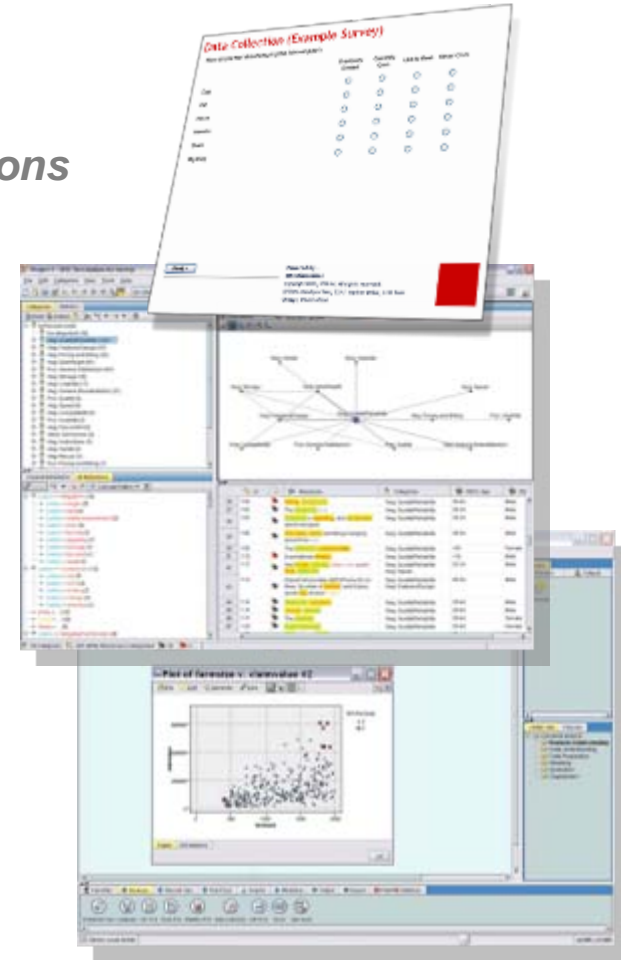
Brings repeatability to ongoing decision making

- **IBM SPSS Modeler**
- **IBM SPSS Text Analytics**

➔ Deployment

Maximizes the impact of analytics in your operation

- **IBM SPSS Decision Management**
- **IBM SPSS Collaboration & Deployment Services**



SPSS, an IBM Company Uniquely Offers You...



Value of analytics across your organization

- Highly productive, business-friendly predictive modeling, collaboration and deployment services
- Based on the convergence of analytics, architecture and business processes



Open SOA that seamlessly fits your existing environment

- Componentized, enabling it to easily fit within your existing environment, immediately adding value without the need for a “rip and replace” of information infrastructure
- Natural part of a user’s normal activity versus a separate, disconnected application



Deep domain expertise with 40 years experience analyzing data about people

- Ability to dynamically capture attitudes, attributes and behaviors and improve people interactions



IBM BI and Performance Management Capabilities Help Decision Makers Find the Answers

How are we doing?

Why are we on/off track?

What should we do next?

DASHBOARDING

SCORECARDING

REPORTING

QUERY

ANALYSIS

PLANNING



Cognos
software



Executive



Business Manager



Casual Business User



Line Manager



Business Analyst



Financial Analyst

SPSS Enables New Solution Value for IBM Cognos Customers

How are we doing?

Why are we on/off track?

What should we do next?

Addition of KPPs (Key Performance Predictors)

Broad distribution of statistical results

Time series forecasting

New customer insight through Data Collection

Predictive analytics for deeper understanding of the data



Executive



Business Manager



Casual Business User



Line Manager



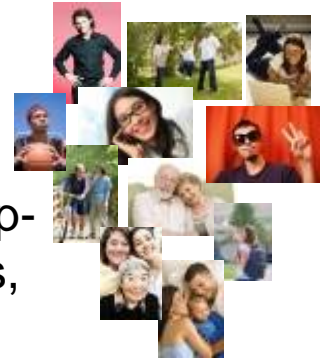
Business Analyst



Financial Analyst

Applying SPSS Portfolio to Accelerate Your Success

Example: Customer Intimacy



Reduces customer defection, increases uplift from cross-sell/up-sell targeting, and improves acquisition of the “right” customers, by enabling decision makers to:

- Understand unstructured data that is found in everything from e-mails, call center notes, blogs, and open ended survey questions
- Identify drivers of customer behavior via survey analysis
- Identify key performance predictors (KPPs) including customer defection and outcome of particular customer interactions
- Prioritize customer programs as part of real-time decision processes
- View customer insights alongside key performance information through standard IBM reports, analyses and dashboards



Executive



Business Manager



Casual Business User



Line Manager



Business Analyst



Financial Analyst



From “Sense & Respond” to “Predict & Act” (Customer Intimacy)

Key Performance Indicator

- Number of New Customers – Last Period
- Customer Cancellations - Last Period

Key Performance Predictor

- Expected Response on Acquisition Campaigns – Next Period
 - Expected Average LTV
- Likely Customer Cancellations - Next Period
 - % High LTV Customers
 - % Likely to accept retention offer

From “Sense & Respond” to “Predict & Act” (Retail)

Key Performance Indicator

- Shrinkage – Last Period

Key Performance Predictor

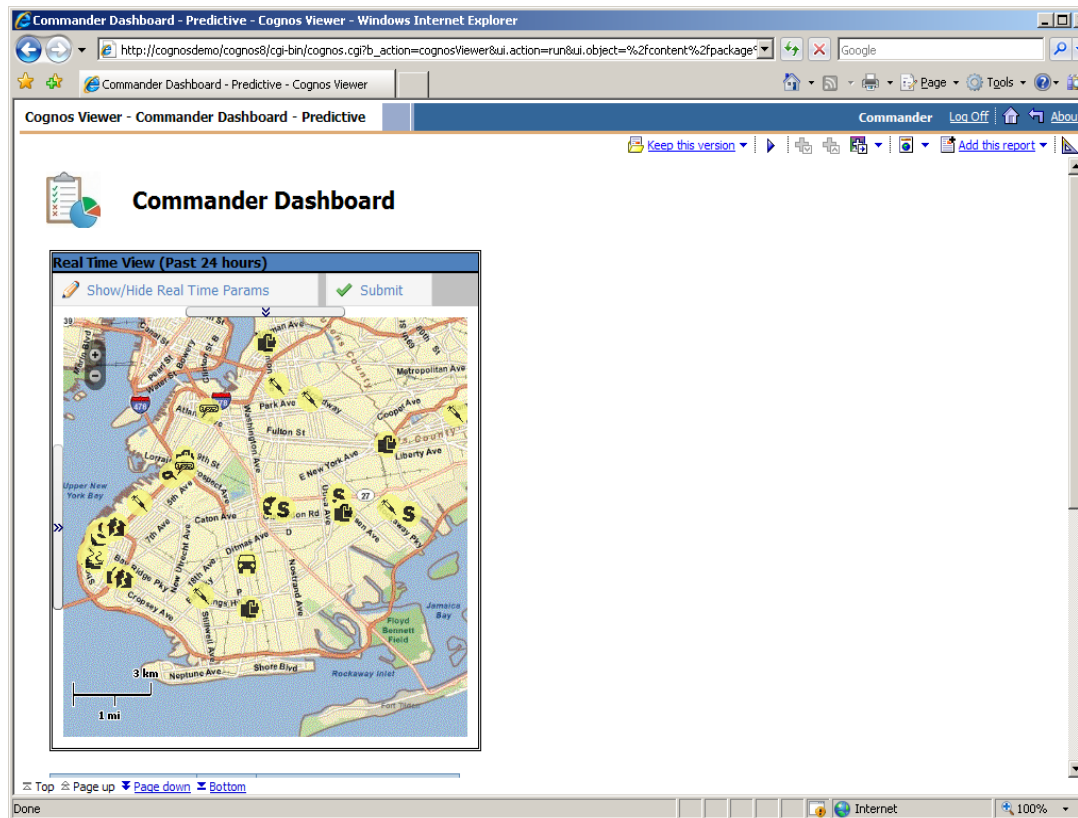
- Number of Sequences that predict “Counting”
 - Predictability leads to shrinkage
- Probability that a destruction is followed by a destruction (Fresh Foods)
 - Lower probability leads to less shrinkage
- Number of sequences in the shop floor process
 - More sequences (structure) leads to less shrinkage



From “Sense & Respond” to “Predict & Act” (Police)

Key Performance Indicator

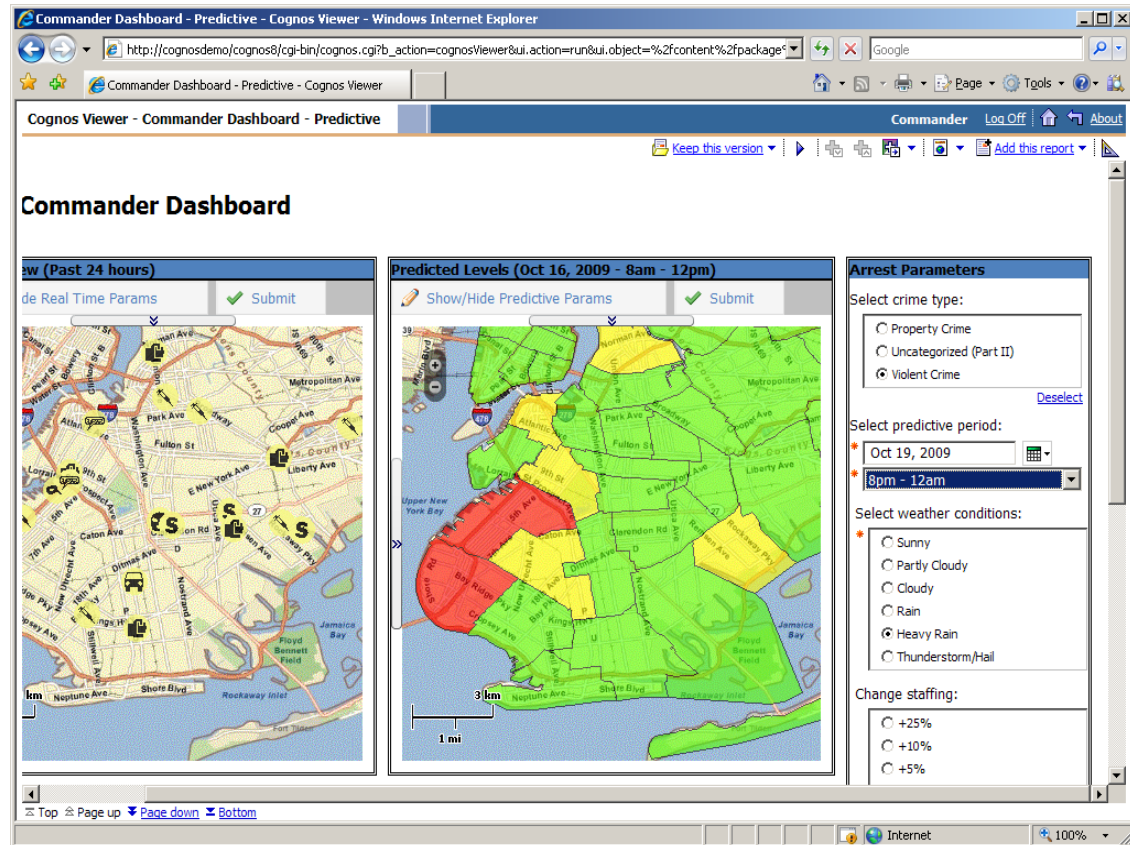
Key Performance Predictor



From “Sense & Respond” to “Predict & Act” (Police)

Key Performance Indicator

Key Performance Predictor

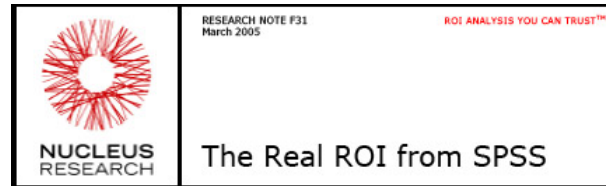


Customers Experience a Measurable ROI

- 94% of customers achieved a positive ROI, average payback in 10.7 months
- Over 90% of users attributed an increase in productivity to SPSS
- 81% of projects were deployed on time, 75% on or under budget

“This is one of the highest ROI scores Nucleus has ever seen in its Real ROI series of research reports”

Rebecca Wettemann, VP of Research, Nucleus Research



SPSS, an IBM Company Enables Next-Generation Decision Making

- A leading provider of predictive analytic software, services and solutions with 40 years of experience and a broad customer base
- Enables decision makers *across* the organization to **predict** future events and proactively **act** upon that insight to drive better business outcomes

***From sense and respond...
...to predict and act!***





Questions?

Jaap Vink
jaap.vink@nl.ibm.com



Information Management software

