



IBM PERFORMANCE EVENTS

Smarter Decisions. Better Results.

Extend the value of BI with Predictive Analytics

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Agenda

- The changing nature of decision making
- The power of predictive analytics
- SPSS introduction
- Power of Cognos + SPSS
- Informed decision making with statistics
- Informed decision making with predictors
- Integration of Cognos BI + SPSS Modeler
- Summary

How Decision-Making is Changing

“We are in a historic moment of horse-versus-locomotive competition, where intuitive and experiential expertise is losing out time and time again to number crunching.”

Ian Ayres, author of “Super Crunchers”



Quality and value of decisions

Decisions from “Intuition”

- “Instinct”
- “Hunches”
- Based on experience

Automated Decision-Making

- Knowledge, policies and practices embodied in business rules
- Decisions made efficiently and consistently
- Objective

Predictive Decision-Making

- Accurate predictions based on historic patterns
- Leverage all available data
- Flexible, evidence-based decisions
- Robust in volatile environments – models re-generated from latest data to reflect changing fashions, trends, etc.

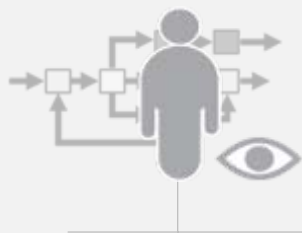
Imagine If Your Decision Makers Could...

...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

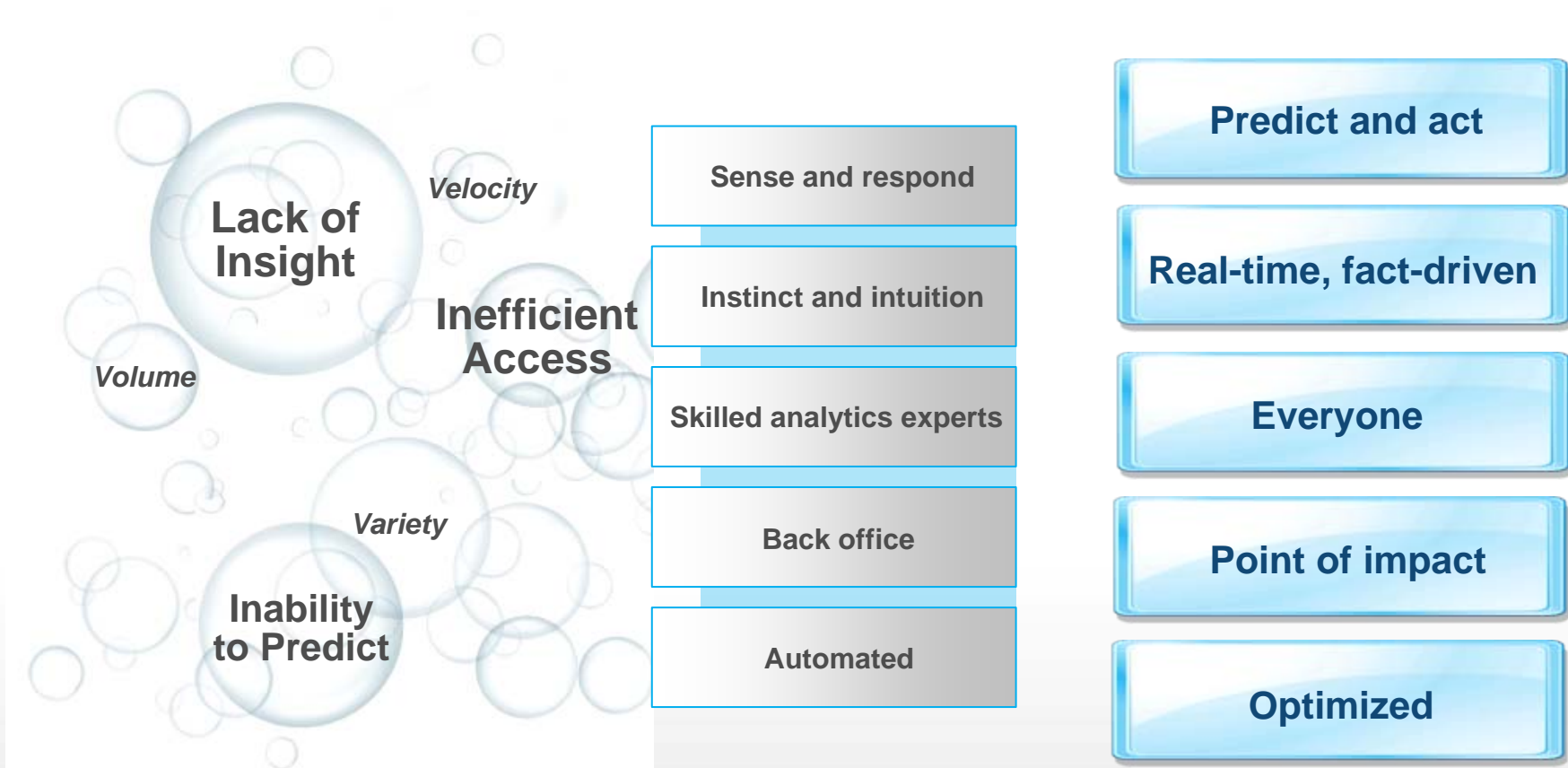
Loan Officer

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

New ways of working to optimize decisions and actions



New ways of working to optimize decisions and actions



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





Industry Leader in Predictive Analytics

- 40+ year heritage, with a single aim:
 - to drive the widespread use of data in decision making
- Drove the creation of the Predictive Analytics market
- Acquired by IBM October 2009



- Enables organizations to predict future events and proactively act upon that insight to drive better business outcomes

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



Manager



Business User



Line of Business 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?

DASHBOARDING SCORECARDING

REPORTING QUERY

ANALYSIS PLANNING

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



Manager



Business User



Line of Business Manager



Business Analyst



Financial Analyst

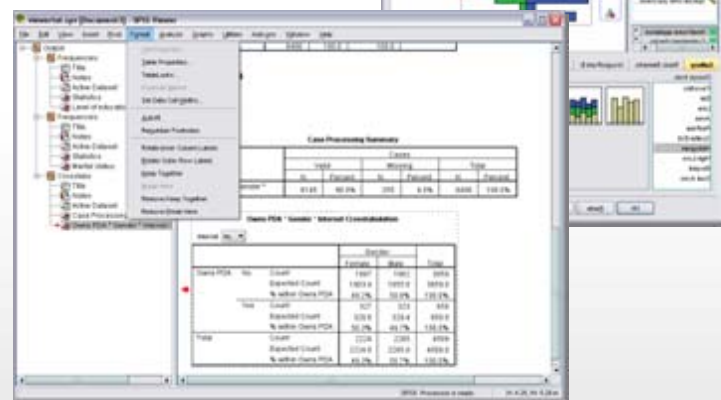
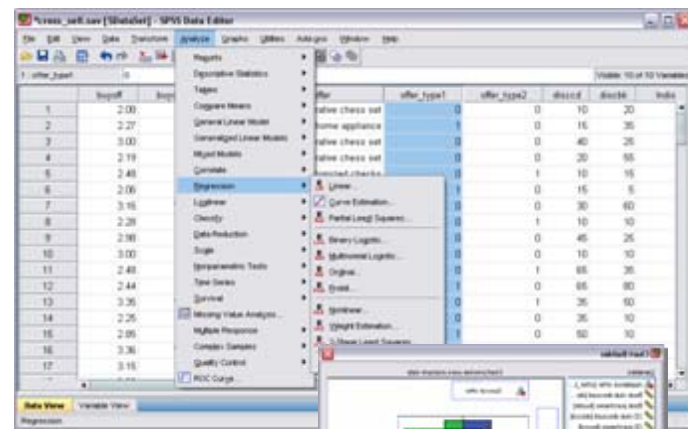
Make informed decisions with statistics

Validate your assumptions and test hypotheses

IBM SPSS Statistical Analysis

Solution Highlights

- Comprehensive workbench
- Increase functionality with add on modules, scripting and programmability
- Flexible deployment options maximize resource utilization



	manufact	model	sales	resale	type	price	engine_s	horsepow	wheelbas	width	leng
1	Acura	Integra	16.919	16.360	Automobile	21.500	1.8	140	101.2	67.3	
2	Acura	TL	39.384	19.875	Automobile	28.400	3.2	225	108.1	70.3	
3	Acura	CL	14.114	18.225	Automobile		3.2	225	106.9	70.6	
4	Acura	RL	8.588	29.725	Automobile	42.000	3.5	210	114.6	71.4	
5	Audi	A4	20.397	22.255	Automobile	23.990	1.8	150	102.6	68.2	
6	Audi	A6	18.780	23.555	Automobile	33.950	2.8	200	108.7	76.1	
7	Audi									74.0	
8	BMW									68.4	
9	BMW									68.5	
10	BMW									70.9	
11	Buick									72.7	
12	Buick									72.7	
13	Buick									74.7	
14	Buick									73.5	
15	Cadillac									74.5	
16	Cadillac									75.0	
17	Cadillac									75.5	
18	Cadillac									70.3	
19	Cadillac	Escalade	14.785		Truck	46.225	5.7	255	117.5	77.0	
20	Chevrolet	Cavalier	145.519	9.250	Automobile	13.260	2.2	115	104.1	67.9	
21	Chevrolet	Malibu	135.126	11.225	Automobile	16.535	3.1	170	107.0	69.4	
22	Chevrolet	Lumina	24.629	10.310	Automobile	18.890	3.1	175	107.5	72.5	

Demo
SPSS Statistics

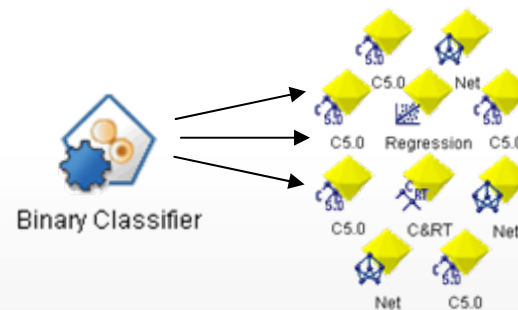
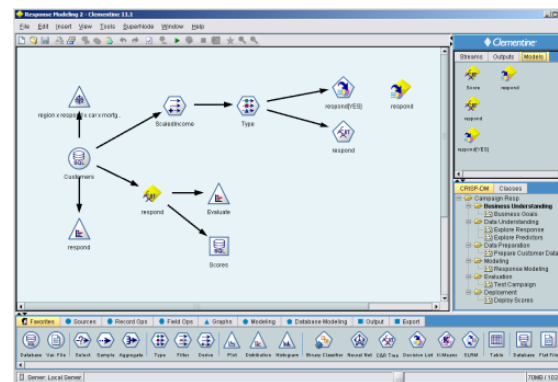
Make informed decisions with predictors

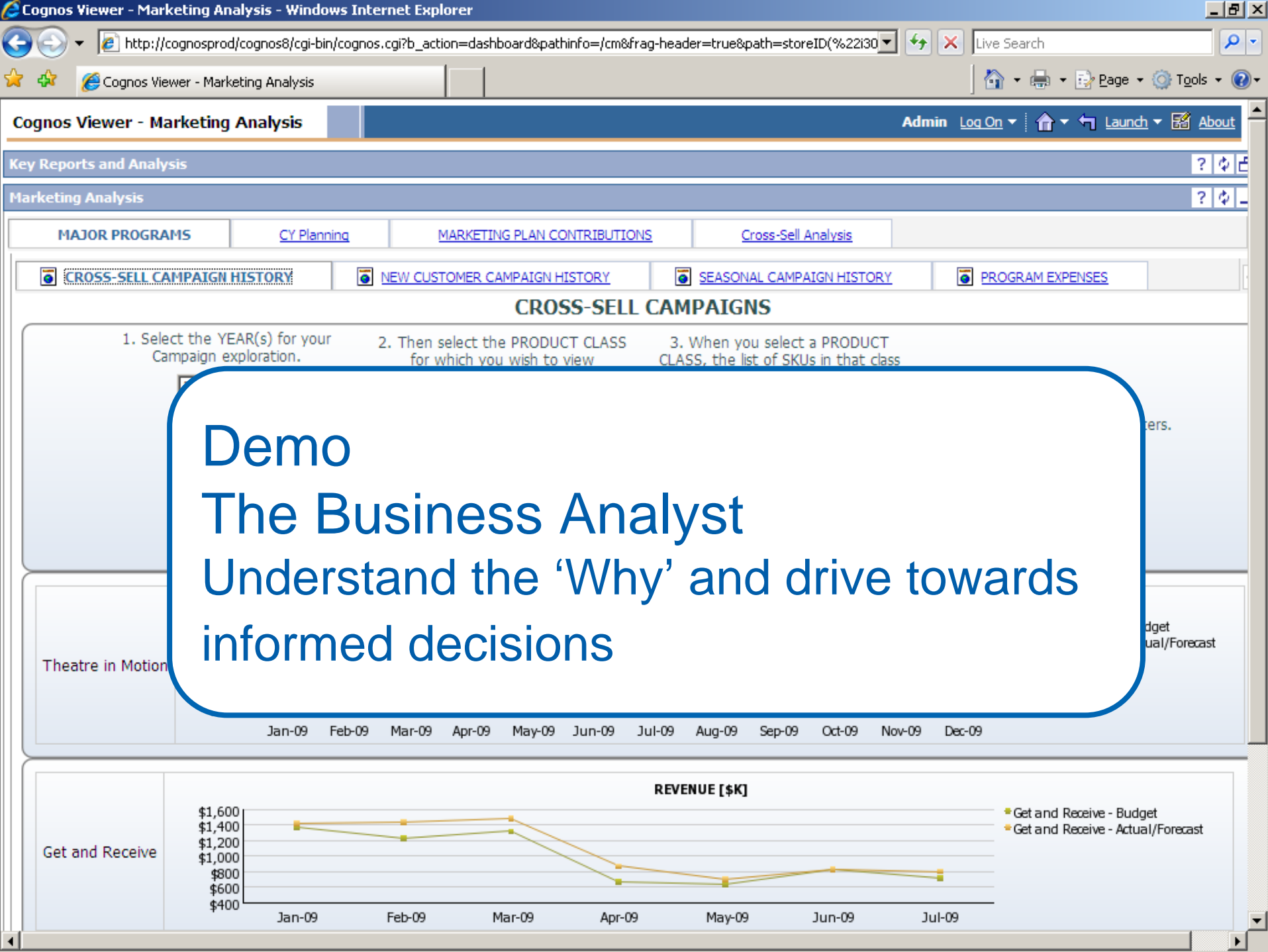
Infer the outcome of every interaction by modeling the hidden relationships in your data

IBM SPSS Predictive Analytics

Solution Highlights

- Easy to learn, no programming approach to data mining
- Automatically create accurate, deployable predictive models
- Choose the best solution with multi- model evaluation
- Data mining within standard databases
- Multithreading, clustering and use of embedded algorithms



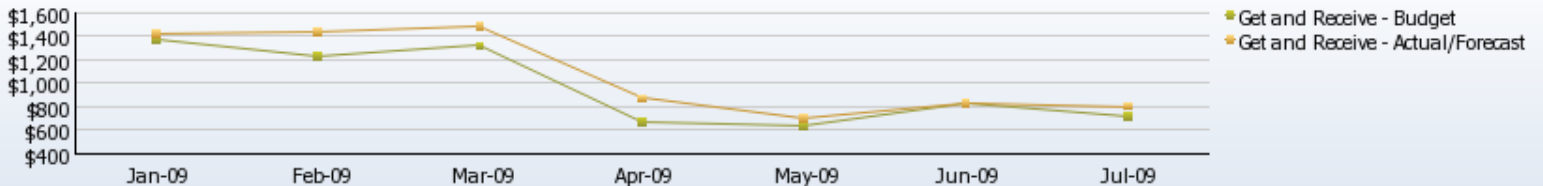


Demo
The Business Analyst
Understand the 'Why' and drive towards
informed decisions

1. Select the YEAR(s) for your Campaign exploration.
2. Then select the PRODUCT CLASS for which you wish to view
3. When you select a PRODUCT CLASS, the list of SKUs in that class

Jan-09 Feb-09 Mar-09 Apr-09 May-09 Jun-09 Jul-09 Aug-09 Sep-09 Oct-09 Nov-09 Dec-09

REVENUE [\$K]



Get and Receive

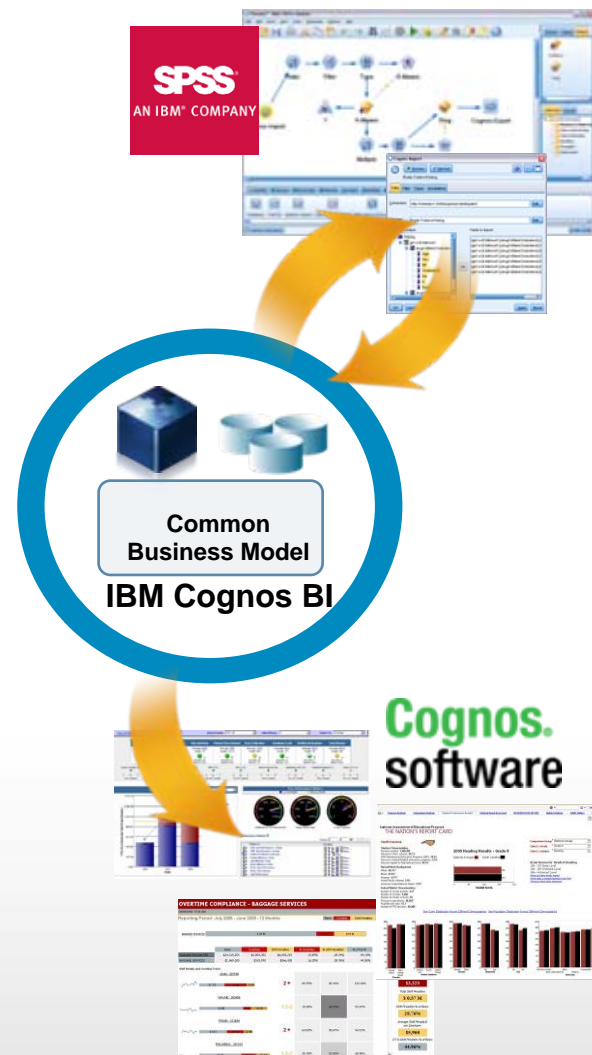
Deliver the power of predictive analytics into the hands of the business users

Uncover key insights in your corporate data by integrating predictive analytics as a core activity to drive business decisions

Integration with IBM SPSS Modeler

Solution Highlights

- Leverage BI to identify problem or situation needing attention
- Develop factual context using reliable trends, patterns and predictions.
- Easily distribute the results to broad user communities



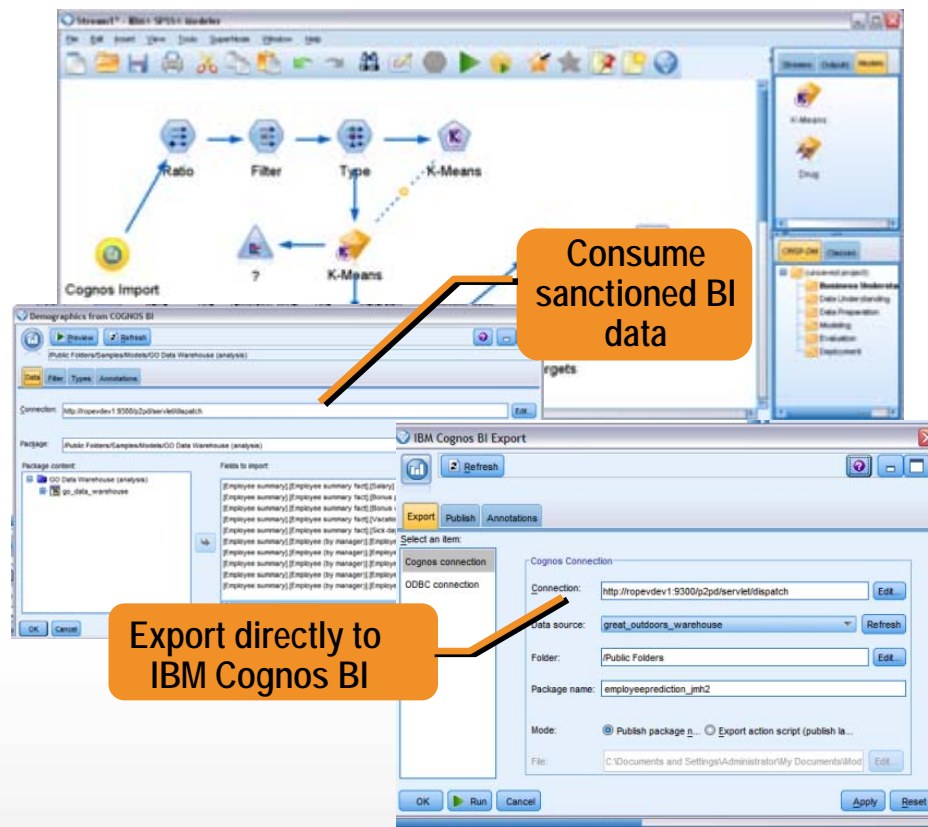
Streamline process to create and distribute predictive results

Leverage your investment in data modeling and IBM Cognos BI

IBM SPSS Modeler 14.1

Solution Highlights

- Interact with familiar data view
- minimize IT involvement for data access and preparation.
- Automatically publish predictive results to Cognos BI package



Add predictive intelligence IBM Cognos BI Dashboards

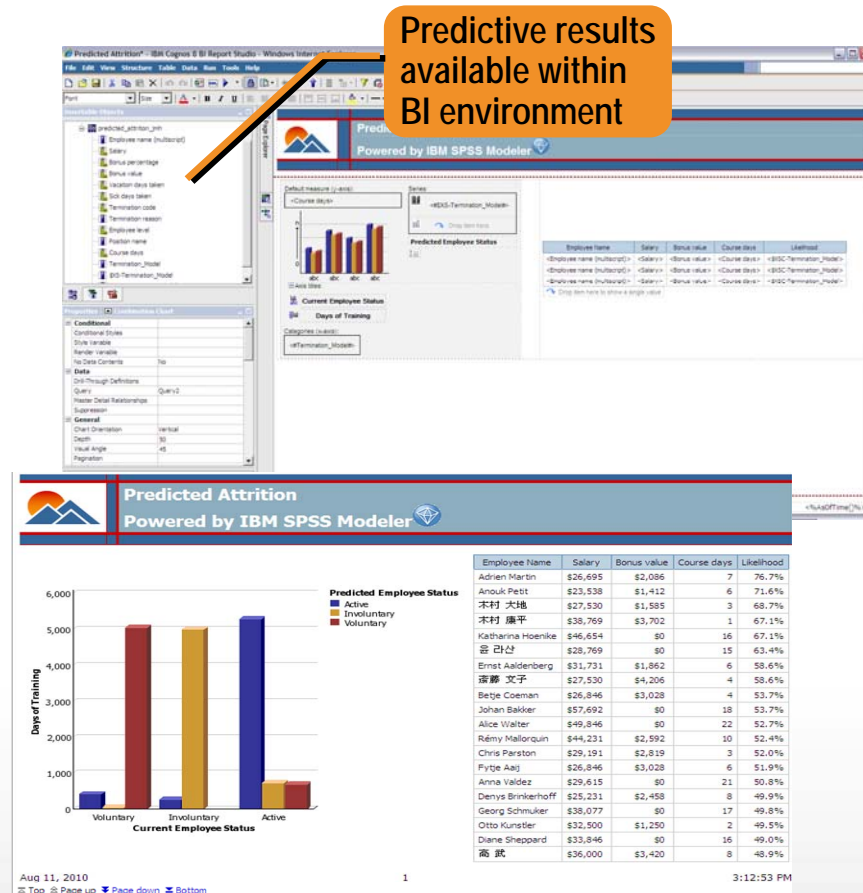
Focus efforts around the future – anticipate, rather than react.

IBM Cognos Business Intelligence

Solution Highlights

- Predictive results immediately available to IBM Cognos Business Intelligence
- Easily compare current state to predicted result
- Measure by effect of key factors on predicted outcome.

Predictive results available within BI environment





IBM COGNOS 8 Business Intelligence

Demo
SPSS Modeler 14.1 and Cognos BI



Summary



How are we doing?

Why are we on/off track?

What should we do next?

- IBM Business Analytics answers the 3 performance management questions
 - Drives better business outcomes by freeing the business to develop new insights
 - Provides the predictive ‘brains’ for the next generation of decision making and business optimization
 - Predictive intelligence can be broadly distributed to decision makers via IBM Cognos BI reports and dashboards