SAS® VISUAL ANALYTICS
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All of your data.

Analyzed all at once... in seconds.

Results wherever you are.

SAS® VISUAL ANALYTICS

EXPLORE   DESIGN

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SAS® VISUAL ANALYTICS

ENABLES SIMPLY SMARTER BUSINESS INTELLIGENCE

• Delivers approachable analytics across the enterprise
• Offers self-service capabilities to gain immediate insights
• Supports IT data management and control
SAS® VISUAL ANALYTICS

EMPOWERS AN ANALYTICS-DRIVEN CULTURE

• Broadens adoption of sophisticated analytics
• Increases amount of analytic talent in organizations
THE PREDICTIVE ANALYTICS LIFECYCLE

BUSINESS MANAGER
- Domain Expert
- Makes Decisions
- Evaluates Processes and ROI

BUSINESS ANALYST
- Data Exploration
- Data Visualization
- Report Creation

IT SYSTEMS / MANAGEMENT
- Model Validation
- Model Deployment
- Model Monitoring
- Data Preparation

DATA MINER / STATISTICIAN
- Exploratory Analysis
- Descriptive Segmentation
- Predictive Modeling

The Predictive Analytics Lifecycle:

- Identify/Formulate Problem
- Data Preparation
- Data Exploration
- Transform & Select
- Build Model
- Validate Model
- Deploy Model
- Evaluate/Monitor Results

Domain Expert Makes Decisions Evaluates Processes and ROI
BUSINESS MANAGER

Data Exploration Data Visualization Report Creation
BUSINESS ANALYST

Model Validation Model Deployment Model Monitoring Data Preparation
IT SYSTEMS / MANAGEMENT

Exploratory Analysis Descriptive Segmentation Predictive Modeling
DATA MINER / STATISTICIAN
THE PREDICTIVE ANALYTICS LIFECYCLE

IDENTIFY / FORMULATE PROBLEM

DATA PREPARATION

DATA EXPLORATION

TRANSFORM & SELECT

BUILD MODEL

VALIDATE MODEL

DEPLOY MODEL

EVALUATE / MONITOR RESULTS

BUSINESS MANAGER

Domain Expert
Makes Decisions
Evaluates Processes and ROI

BUSINESS ANALYST

Data Exploration
Data Visualization
Report Creation

IT SYSTEMS / MANAGEMENT

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DATA MINER / STATISTICIAN

Exploratory Analysis
Descriptive Segmentation
Predictive Modeling

Domain Expert Makes Decisions Evaluates Processes and ROI
BANKING:
Improve Customer insight (segmentation, cross-sell, retention),
Regulatory & compliance, etc.

INSURANCE:
Product pricing, Claims analytics, etc.

TELCO:
Faster Action Against Churn, etc.

MANUFACTURING:
Drive Better Yield, Utilization, Satisfaction and Profitability, etc.

GOVERNMENT:
Regulatory & compliance, Fraud detection, etc.

Etc.
SAS® VISUAL ANALYTICS OFFERS A SINGLE SOLUTION

EXPLORE
DISCOVER
REPORT
DELIVER

WHAT?

WHY?

VISUAL ANALYTICS
SAS® VISUAL ANALYTICS

KEY HIGHLIGHTS

Fast Flexible Data
- Access to large amounts of data from exploration and reporting
- In Memory technology for instant data access and visual rendering

Consumable Analytics
- Key analytical capabilities in easy to understand format

Data Exploration and Business Visualization
- Auto Charting and Geo Mapping
- Reporting and Dashboarding Capabilities
- Contextual Filtering and Highlighting
- Flexible Hierarchies and Drill-down / Drill Across
- Drag-n-Drop capabilities across user interface

Adaptive Presentation
- Visualizations for web and mobile consumption
- Interactive reporting viewing capabilities on iPad
Central Entry Point Integration Role-based Views

DATA PREPARATION
- Monitor SAS® LASR™ Analytic server
- Load and join data
- Create calculated columns

EXPLORER
- Perform ad-hoc analysis and data discovery

DESIGNER
- Create dashboard style reports for web or mobile

VIEWER
- Delivers interactive reports via the Web

MOBILE BI
- Delivers interactive reports via native iOS application

SAS® VISUAL ANALYTICS DELIVERS A SINGLE SOLUTION FOR FASTER, SMARTER DECISIONS
- Home page for all users
- Role based views
- Navigation to varied end user actions
  - Data Exploration
  - Report Creation
  - Report Viewing
- Administration tasks
  - Data Preparation and Monitoring
- Favourites and Search
- Collaboration via report commenting
- Prepare Data
  - Join multiple data tables
  - Calculated columns (full expression builder)
  - Filter columns and rows
  - Load tables in memory
  - Apply security
  - Export SAS code
- SAS LASR Server monitor
  - Resource (CPU, I/O, Memory)
  - Process (user session focused)
- Mobile device logging history and blacklisting
Data exploration and discovery
- Visualize your data to find relationships, trends, discrepancies etc.
- Auto-Charting
- Various Visuals: Bar-Charts, Line Charts, Scatter Plots, Bubble Plot, Geo Maps, and others
- Consumable Analytics: Correlations (Relationships) and Regression (Linear, Best Fit), Summary statistics
- Dynamic Hierarchies - Drill Down, Drill Across Siblings
- Save and share your exploration
- Design tool for creating reports and dashboards
- Leverage existing Explorations and tables to create reports
- WYSIWYG design
- Integrated report designer and viewer
- Use multiple data sources
- Report object interactions / prompts
SAS® VISUAL ANALYTICS VIEWER

- Visualize reports previously created
  - Multiple data sources
  - Interactions
  - Tables and Explorations
- Collaboration via commenting
- “Adaptive presentation” - build once, deploy on any channel & device
- Native apps for iPad (Android in next release)
- Leverage existing SAS security
- Security focused with support for device encryption, remote wipe, blacklisting, SSL connections etc.
- Highly visual and interactive
- Offline capabilities
- View report comments
SAS® VISUAL ANALYTICS DELIVERS A SINGLE SOLUTION FOR FASTER, SMARTER DECISIONS

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SAS® LASR™ ANALYTIC SERVER
SAS® VISUAL ANALYTICS EMPOWERS ANALYTICS-BASED INFORMATION SHARING AND INSIGHT DISCOVERY
SAS® VISUAL ANALYTICS ENABLES THE DELIVERY OF FASTER, MORE ACCURATE INSIGHTS FOR MORE CONFIDENT DECISIONS
SAS® VISUAL ANALYTICS PROVIDES THE IDEAL BALANCE OF DATA MANAGEMENT AND USER ACCESSIBILITY

IT / DATA MANAGER
Sample Architecture
8 blade deployment scenario
SAS® VISUAL ANALYTICS

SYSTEM REQUIREMENTS

- Separate dedicated environment (8 blade minimum)
  - Supported on Dell, Hewlett Packard

- Operating Systems
  - Red Hat Enterprise Linux 6
  - SUSE Linux Enterprise Server 11 SP1

- JBoss Enterprise Application Platform 5.1

- Browsers
  - Firefox 3.6 and higher
  - IE 7 & beyond (*IE 8 in compatibility mode & IE 9*)

- Apache Hadoop for persistence (SAS provided)
  - Apache Hadoop 0.21.0
Why SAS® Visual Analytics?

- The **first end-to-end** solution that radically affects the way you work with **all** your data
- The **only** in-memory analytic engine that overcomes limitations of traditional relational databases
- The **most** cost-effective way to scale your IT infrastructure using commodity hardware
Why SAS® Visual Analytics?

For Business
- Explore all data and fuel insight discovery for competitive advantage
- Accelerate analytic model development life cycles exponentially
- Deliver insights to mobile colleagues via the Web and iPad®

For IT
- Control governance and empower colleagues with easy access to all data
- Leverage commodity hardware for scalability and efficient cost-effective growth
For more information