500 energy customers worldwide

100% of Fortune 500 US Utilities are SAS customers

1976 SAS founded and 2 utilities among initial customers
What is your perception of SAS?

Then – SAS Only for Programmers

Now – SAS is for Business! (and Programmers :)

`proc catmod order=data;
 weight wt;
 response / out=preds;
 model severity=trt hospital;
 run;
 quit;
 /* Keep just the predicted values, predictors, and response */
data pred2;
 set preds;
 if _type_='PROB';
   keep severity trt hospital _pred_;
 run;
 /* Find predicted response level (level with highest predicted probability) in each sample. */
proc summary data=pred2 nway;
 class trt hospital;
 var _pred_; 
 output out=predlvl (drop=_type_ _freq_) 
   maxid(_pred_(severity))=predlvl;
 run;
 /* Transpose the predicted values so that there is one observation per sample containing predicted values for each response level. */
proc transpose data=pred2 out=pred3 (drop=_name_);
 by trt hospital;
 id severity;
 var _pred_; 
 run;`
WHAT SAS PROVIDES - OVERVIEW

- Scalable to all your data
- Interactive and Visual Reporting
- Analytical Data Exploration
- Analytical Modeling
Modern, interactive, easy-to-use data manipulation, reporting, exploration and modeling
Communication of results via Web, Office & Mobile
Deployment on-premise or in the cloud
**SAS® VISUAL ANALYTICS**

**BUSINESS VISUALIZATION DRIVEN BY ANALYTICS**

**ENTERPRISE/DEPARTMENTAL AND SELF SERVICE**
- Scalable with any size data
- In-memory analytics
- Many deployment options

**VISUALIZATION POWERED BY SAS ANALYTICS**
- BI/Reporting -to- analytics
- Analytics for everyone

**REPORTING, MOBILE COLLABORATION**
- Create once, schedule, distribute
- Native mobile BI apps
- Integration with MS Office and SharePoint apps
SAS® VISUAL ANALYTICS

DELIVERS A SINGLE SOLUTION FOR FASTER, SMARTER DECISIONS

Central Entry Point

Integration

Role-based Views

DATA BUILDER
- Join data from multiple sources
- Create calculated and derived columns
- Load data

ADMINISTRATOR
- Monitor SAS® LASR™ Analytic server
- Load/unload data
- Manage security

EXPLORER
- Perform ad-hoc analysis and data discovery
- Apply advanced analytics

DESIGNER
- Create dashboard style reports for web or mobile

MOBILE BI
- Native iOS and Android applications that deliver interactive reports

SAS® LASR™ ANALYTIC SERVER
MEETING YOUR BUSINESS NEEDS THROUGH FLEXIBILITY

Traditional “on premise” Deployments

Public | Private

SAS Visual Analytics for SAS Cloud

SSOD

SAS In-Memory Analytics
COLLABORATION AND INFORMATION SHARING

MOBILE BI

COLLABORATION APPLICATIONS

DESKTOP APPLICATIONS

WEB

VISUALIZATIONS  REPORTS  DASHBOARDS  COMMENTS  INSIGHTS
SAS® VISUAL ANALYTICS

Self-service Data Preparation
Interactive Reporting & Dashboards
Data Exploration
Approachable Analytics
SAS® VISUAL ANALYTICS

Import and join data from variety of sources
Create column expressions and filter data
Manage, run and schedule data queries
Pivot rows into new columns
Load tables, append tables & rows in-memory
On-the-fly hierarchies for drill-down
Tile & precision layouts for flexible design
Predefined filters, groupings, formatting
Add variety of charts & action elements
Range or threshold alerts; Dashboards
Autocharting chooses the best suitable graph
What does it mean? for predictive relationships
Interactive visuals to tell a compelling story
Hierarchies, aggregations, dynamic filtering
Add comments, share & collaborate
SAS® VISUAL ANALYTICS

- Descriptive analytics, incl. correlations
- Forecasting and Scenario Analysis
- Text Analysis, including sentiment
- Decision Trees for classification
- Path Analysis

Approachable Analytics
EXPLORATION AND MODELING – WHAT DOES IT BRING?

Influence

Relationships

Increased understanding

Eliminating guesswork with predictive analytics

Contributions

Data driven exploration
APPROACHABLE ANALYTICS

ANALYTICS CONTINUUM

Dashboarding & Reporting

Predictive Analytics

Exploration, Visualization & Descriptive Statistics

Analytics Continuum
KEY RESOURCES

- External Web Page
- **Try Before You Buy** (Free)
- Industry specific demos and reports
- SAS VA Documentation
- SAS VA How-Do-I Video Tutorials
- SAS VA Community
SAS® VISUAL ANALYTICS FOR UTILITIES

YouTube Video for Utilities

Sample Reports for Utilities

Download the SAS Mobile BI app for phone or tablet from
- iTunes App Store for iOS
- Google Play for Android
THANK YOU