

SAP BusinessObjects Predictive Analytics



Antoine Chabert
Product Management
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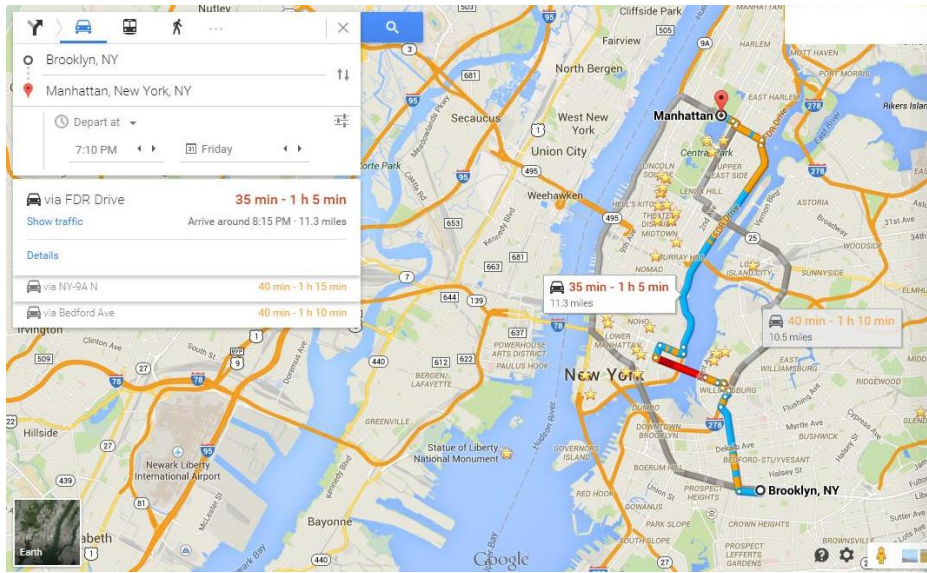
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A fortune teller, wearing a gold turban with a blue gem and ornate purple and gold clothing, is shown from the chest up. They are holding a crystal ball on a stand with both hands, looking intently at it. The background is a plain, light blue wall.

This is not Predictive Analytics!



Paris, France

Fri
Thunderstorm

18°F/°C

Precipitation: 90%
Humidity: 79%
Wind: 21 km/h

Temperature Precipitation Wind



Who will win the presidency?

Chance of winning

Hillary Clinton

Donald Trump

'A Song of Ice and Data': students create death prediction software for Game of Thrones - video



Predictive Analytics is the consumer expectation baseline!



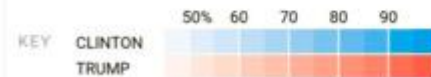
Implementing SAP HANA
(2nd Edition)
Jonathan Haun
★★★★★ 2
Hardcover
\$57.38 Prime



SAP HANA Administration
Richard Bremer
★★★★★ 7
Hardcover
\$51.70 Prime



ABAP Development for
SAP HANA
Thorsten Schneider
★★★★☆ 1
Hardcover
\$49.82 Prime



Electoral votes

Popular vote

Clinton

315.8

Clinton

48.0%

Trump

222.0

Trump

43.6%



Jay Kreps, Principle Engineering Manger at LinkedIn

Connect



Jeremy Gillick, Senior Web Developer at LinkedIn

Connect



Albert Wang, User Experience Design at LinkedIn

Connect

Solve Real Business Problems

By Optimizing Resources and Improving Margins

SALES & MARKETING



- Churn Reduction
- Customer Acquisition
- **Lead Scoring**
- Product Recommendation
- Campaign Optimization
- Customer Segmentation
- Next Best Offer/Action

OPERATIONS



- Predictive Maintenance
- Load Forecasting
- Inventory/Demand Optimization
- Product Recommendation
- Price Optimization
- Manufacturing Process Opt.
- **Quality Management**
- Yield Management

FRAUD AND RISK



- Fraud and Abuse Detection
- Claim Analysis
- Collection and Delinquency
- Credit Scoring
- Operational Risk Modeling
- **Crime Threat**
- Revenue and Loss Analysis

FINANCE AND HR



- **Cash Flow and Forecasting**
- Budgeting Simulation
- Profitability and Margin Analysis
- Financial Risk Modeling
- Employee Retention Modeling
- Succession Planning

OTHER SECTORS



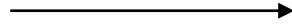
- Life Sciences
- Health Care
- Media
- High Education
- Public Sector / Social Sciences
- Construction and Mining
- Travel and Hospitality
- Big Data and IoT

What is Predictive Analytics

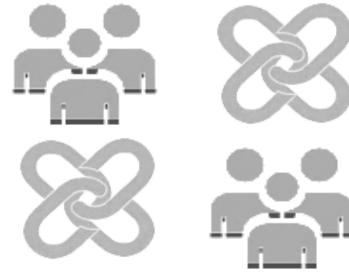
Historical data



Learn



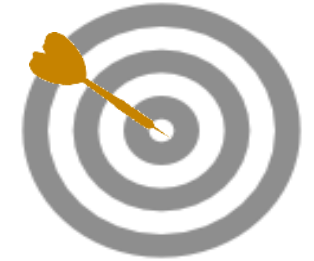
Automatically detect
recurrent behaviors



Apply



Apply to new data



Which data?

- Customers
- Products
- Transactions
- Assets

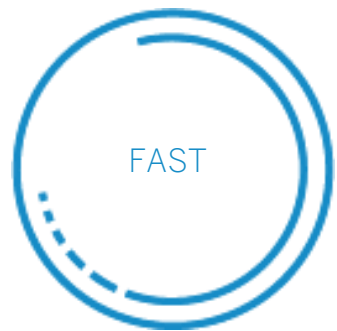
Which models?

- Churn
- Propensity
- Risk
- Fraud

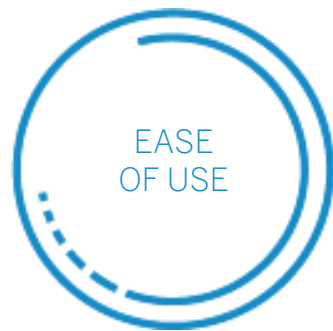
For which LOBs?

- Marketing
- Finance
- Maintenance

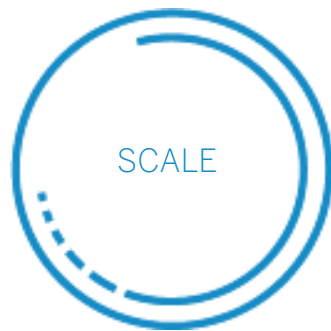
Our Core Value Proposition



Minutes to hours vs.
weeks to months



Automated techniques
using clicks over code



From 10 to 1,000's of
models and data sets



SAP HANA | HCP



Prepare | Model
Deploy | Automate | Embed

Use the power of predictive analytics from SAP

Value proposition for OEM partners

- No data science skills required!
- Create a clear competitive differentiator and new revenue streams with high value/ROI features (churn, x-sell, recommendations, maintenance, etc.)
- Close the skills gap between data scientists and business users
- Integrate automated predictive modeling capabilities into your applications and build predictive models in minutes, not weeks
- “Tight” or “Loose” coupling:
 - Tight: Embed libraries directly into your application or call them remotely
 - Loose: Embed predictive outcomes by using in-database scoring

Use the power of predictive analytics from SAP

Value proposition for OEM customers

For your customers, your solutions will:

- Give to more people access to the insight they need in context, at the decision point
- Enable what-if scenarios in real time on the SAP HANA platform
- Accelerate decision making and improve business agility and outcomes

SAP Advanced Analytics Solutions

Create, apply and manage predictive models

SAP BusinessObjects **Predictive Analytics**



Automated Analytics / Predictive Factory



Expert Analytics

Leverage the results of the predictive models

SAP HANA Applications
(S/4 HANA, Fraud Management...)

SAP Analytics
(EPM, Business Intelligence...)

Access and store data, apply predictive models

SAP HANA / SAP HCP

Automated
Predictive
Library

Predictive
Analysis
Library

Other
Native
Libraries

R Scripts

Hadoop

Major databases
(SQL Server, Oracle,
Teradata, MySQL...)

Support All Predictive Needs



Automated Analytics

- **End-to-end automation** of your predictive projects.
- Guided, powerful **data preparation**
- Fast **deployment**
- **Predictive Factory** to manage 1000s of models



Expert Analytics

- **Customization** of the predictive projects.
- Extended support of **SAP HANA** Native libraries
- Support 8000+ **R** algorithms
- **Drag and drop** model creation



Business Analysts
Citizen Data Scientists



Data Scientists

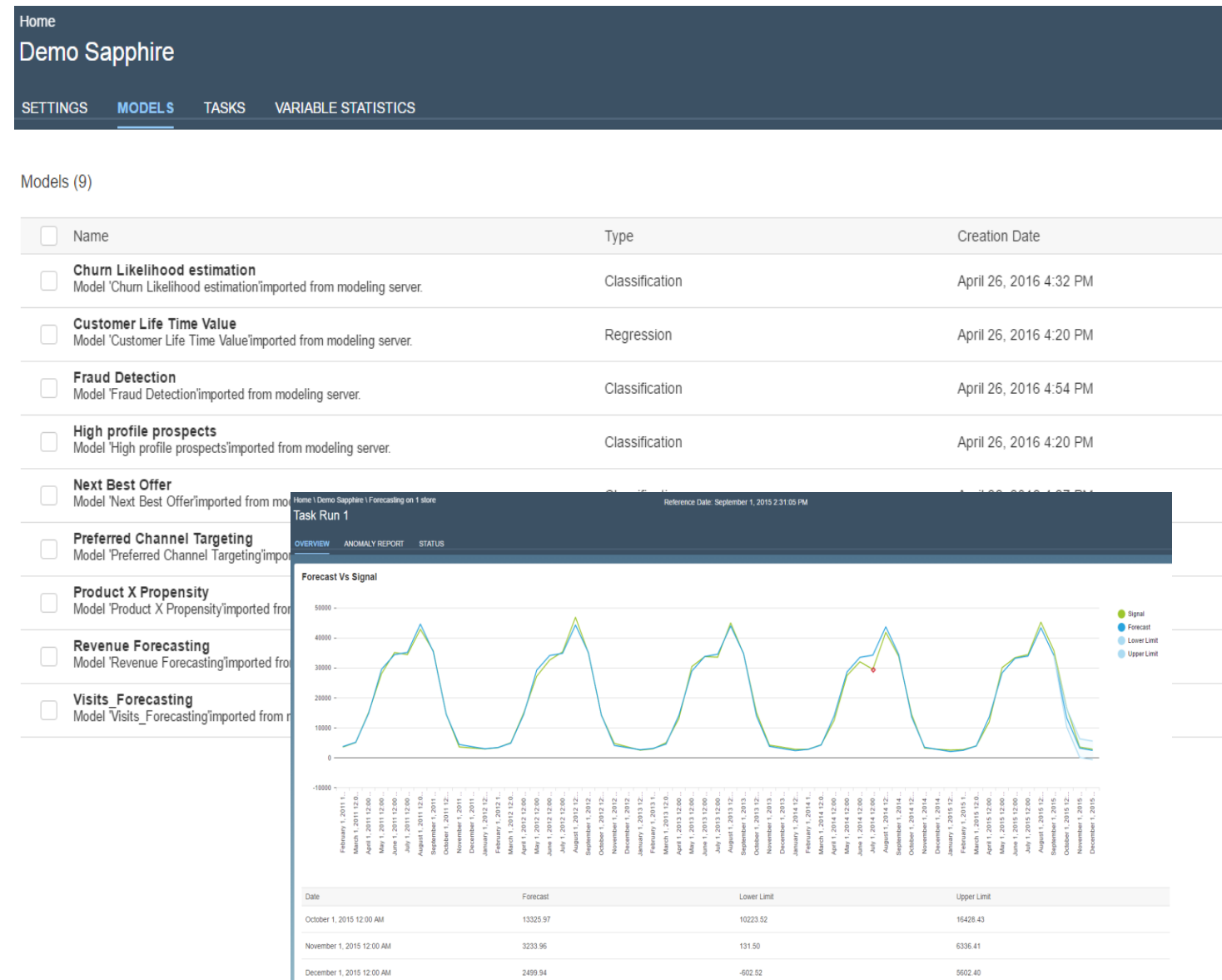


The Predictive Factory

- Manage the lifecycle of predictive models
- Automatically retrain, apply, test for deviation and forecast your models.
- Robustly embed Predictive Analytics at scale in business processes.

Key benefits

- Manage thousands of models easily
- Automate model refresh and application
- No scripting needed
- Multi-User, collaborative experience



SAP HANA Cloud Platform predictive services

Ready-to-be-integrated web services that delivers predictive analytics insights

- Dataset, Forecast, Key Influencer, Outliers, Scoring equation, What-if

Highly specific web services that respond to specific business needs

- All the data mining process is packaged inside the service and is hidden from the user.

Services are available on HCP to allow any existing or new applications on HCP to embed predictive analytics features.

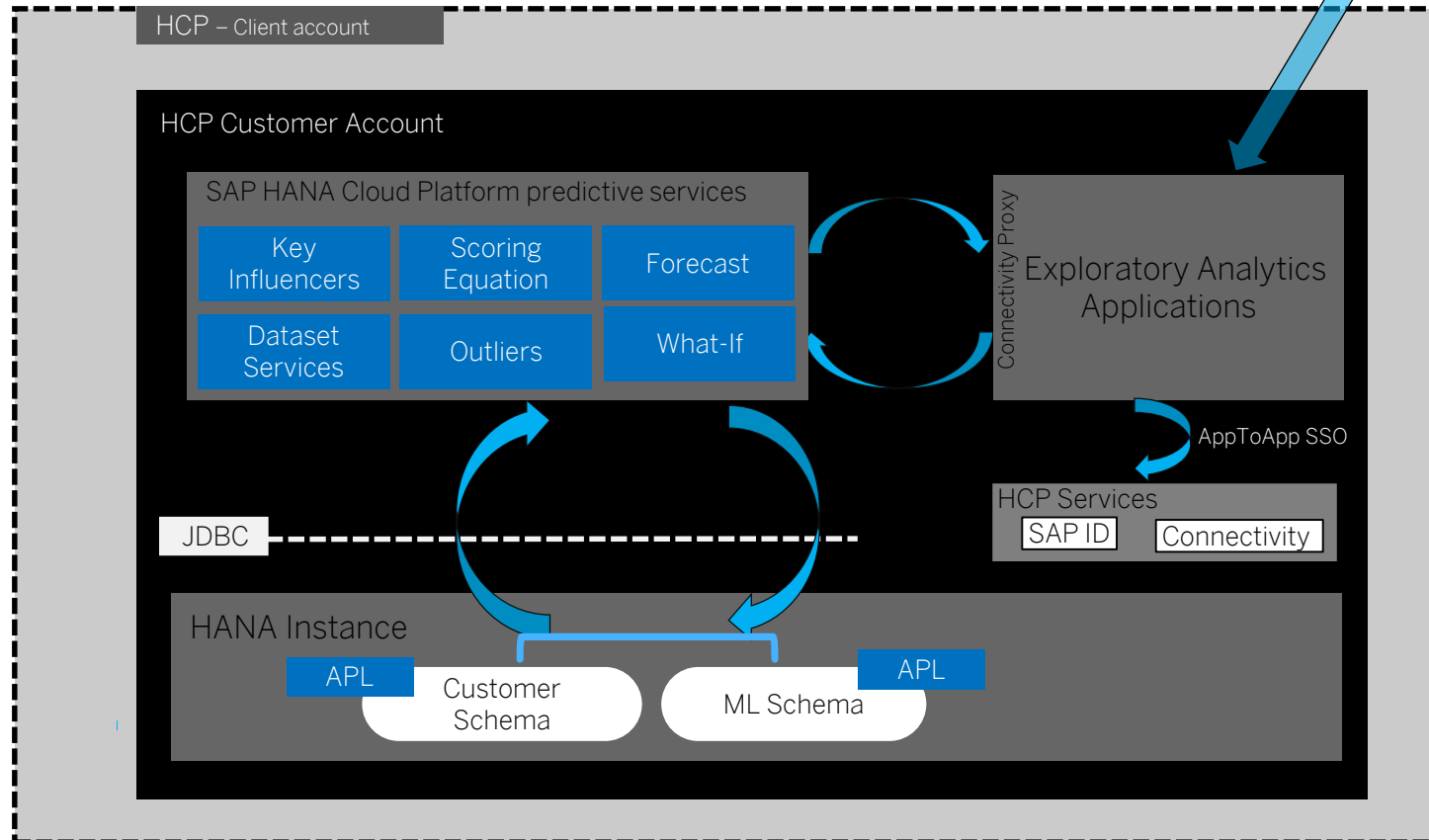
Simple to use

- SAP HANA Cloud Platform predictive services are based on HANA Automated Predictive Library (APL)
- 1 call ⇔ 1 business need
- Results are understandable



HCP predictive services Architecture

HTTPS



Embed Predictive Analytics in your application

SAP BusinessObjects Predictive Analytics comes with a comprehensive API for the Automated mode.

- C++
- Java
- A proprietary scripting language
- APL

These allow piloting the Predictive Engine as if using the interface.

Reimagine The Entire Predictive Experience

Today

Release 3.0 (Sapphire 2016)

Planned Innovations

The road ahead!



1st Fiori-based component

The Predictive Factory

Manage 1000s of datasets and models

Expert Models and Segmented Classification

High and Low Touch UX's

For all users: newbies and experts



Guided and Expert modes

Unify Model Creation



Guided, Expert (PAL, R)

Predictive IP

Generic and specialized algorithms

Complete HANA PAL Support

Cloud

Easy to consume apps and micro services



HCP predictive services

More HCP predictive Services, services in SAP HANA



Native Spark Modeling

Support Vora, Expert Models based on Spark ML Lib

Big Data

Make sense of your big data assets

On Premise

Hand in hand with SAP HANA and SAP BI



End-to-end compatibility with SAP HANA and SAP BI

Simplify SAP HANA integration

Embedded in Processes and Apps

Locate predictive where business users are working

Fraud Management

S/4 HANA

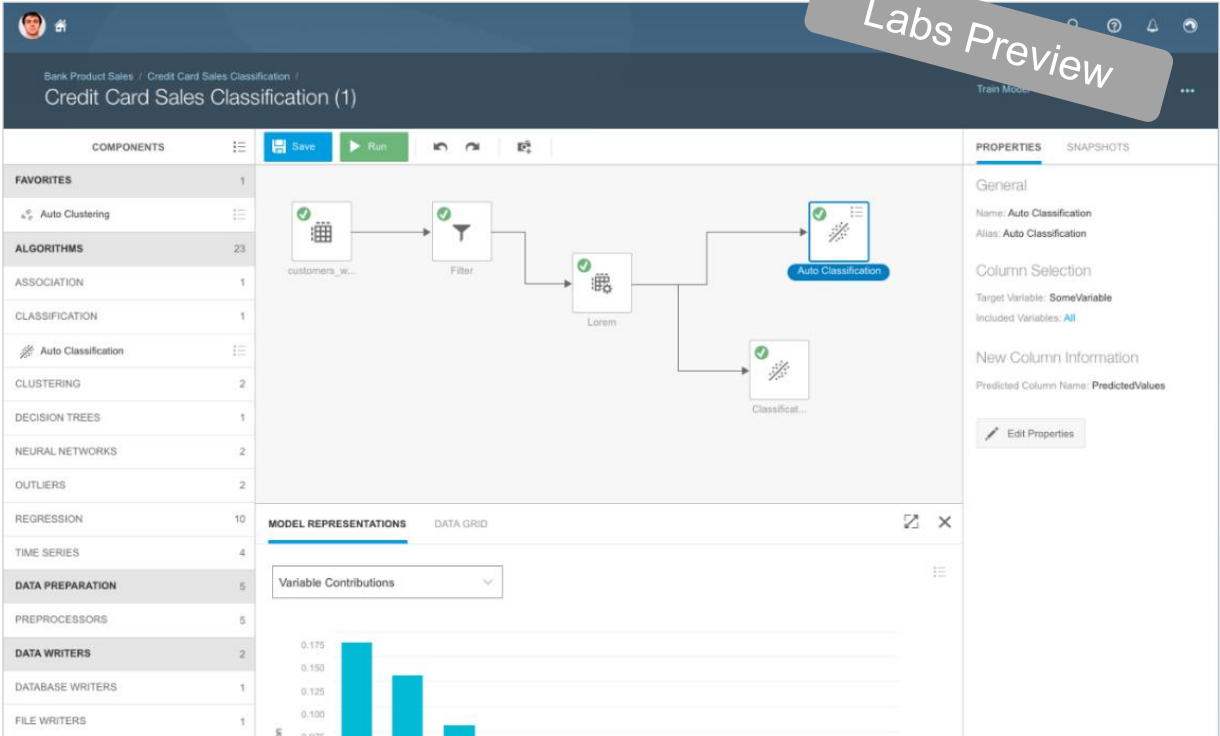
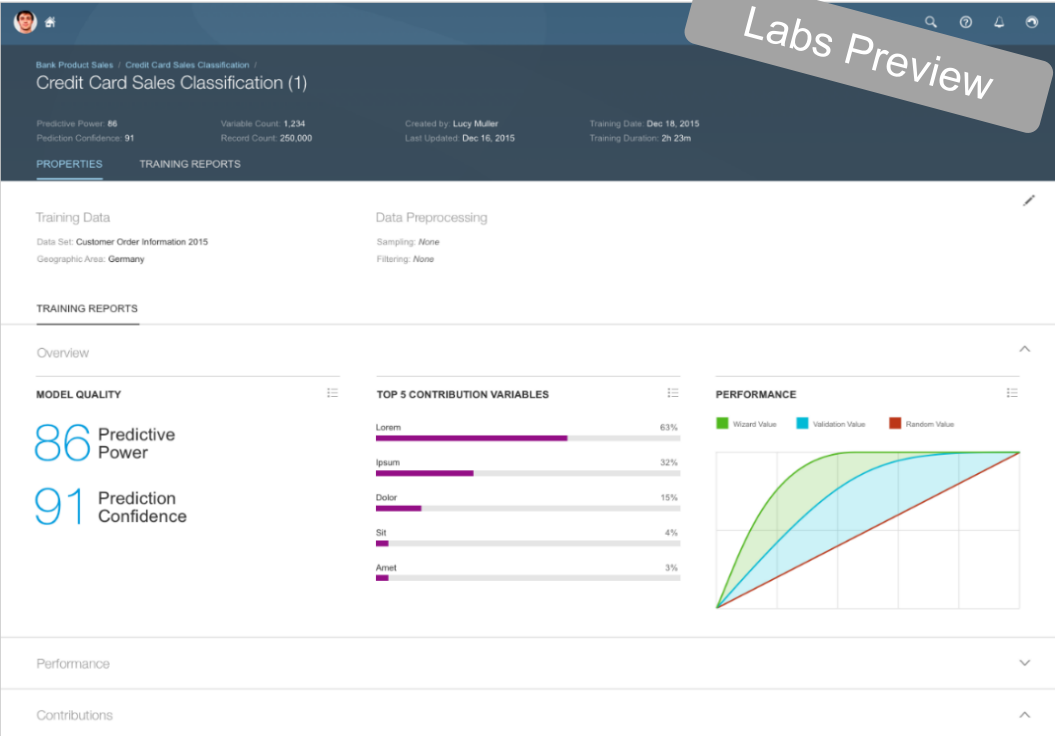


High and Low Touch UX's

For all users: newbies and experts



Planned
Innovations



This is the current state of planning and may be changed by SAP at any time.

Useful Links

Key links

- SAP OEM Partner site <http://www.sap.com/partners/oem>
- Roadmaps on SAP Service Marketplace <http://service.sap.com/saproadmaps>
- SAP Community Network <http://scn.sap.com/>
- Predictive Analytics Community <http://scn.sap.com/community/predictive-analytics>
- SAP BusinessObjects Predictive Analytics 30 days Trial <https://www.sap.com/trypredictive>
- SAP BusinessObjects Predictive Analytics <http://go.sap.com/solution/platform-technology/predictive-analytics.html>

Where to go to provide product feedback and ideas

- SAP Idea Place <https://ideas.sap.com>
- Predictive Idea Place <https://ideas.sap.com/PredictiveAnalytics>
- Influence programs <http://service.sap.com/influence>

Sign up to our newsletter

<http://scn.sap.com/docs/DOC-66912>