

Machine Learning with Qlik

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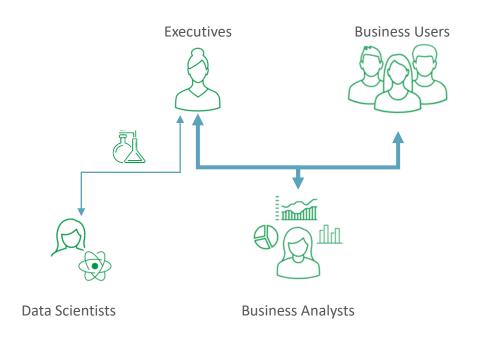




Agenda

 Why use Qlik[®] for Machine Learning? 	10 mins
Intro to Timeseries Analysis	5 mins
Hands-on Exercise 1: Forecasting	20 mins
PyTools Overview	5 mins
Intro to Machine Learning	5 mins
• Hands-on Exercise 2: Supervised Machine Learning	40 mins
Hands-on Exercise 3: Predictions	15 mins
• Wrap-up	5 mins

Where do our insights come from today?



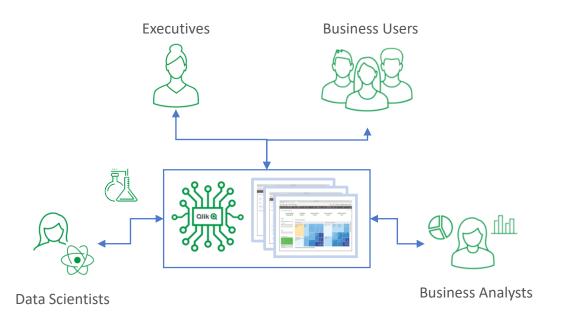
Most organizations rely on business analysts to analyze data.

Insights are limited to the questions asked and answered by a minority.

The answers to the most complex questions are out of the reach of a majority of decision makers today.



How can Qlik help you achieve balance?



Qlik provides deep analytical apps instead of dashboards.

These apps empower any user to ask and answer questions by themselves.

Advanced analytics can enrich these apps further, allowing decision makers to answer the most complex questions.

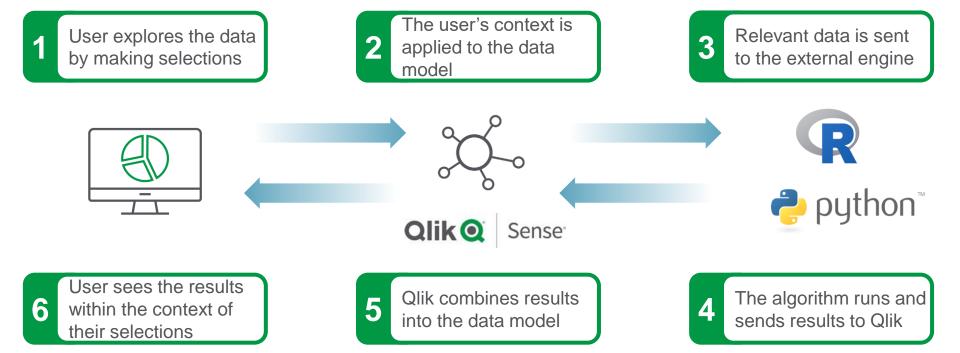


Demonstration

Applying clustering to real world data



How can we use advanced algorithms in Qlik?

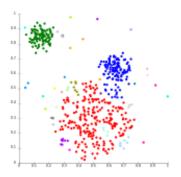




Topics we'll be covering today

Unsupervised Machine Learning

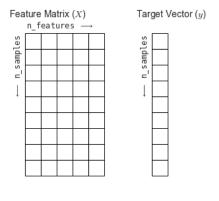
Inferring the patterns within datasets without reference to known, or labeled, outcomes.



Clustering, Dimensionality Reduction

Supervised Machine Learning

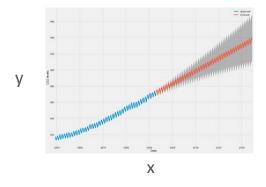
Training a model on labeled data to enable insights and predictions about future outcomes.



Classification, Regression

Timeseries Forecasting

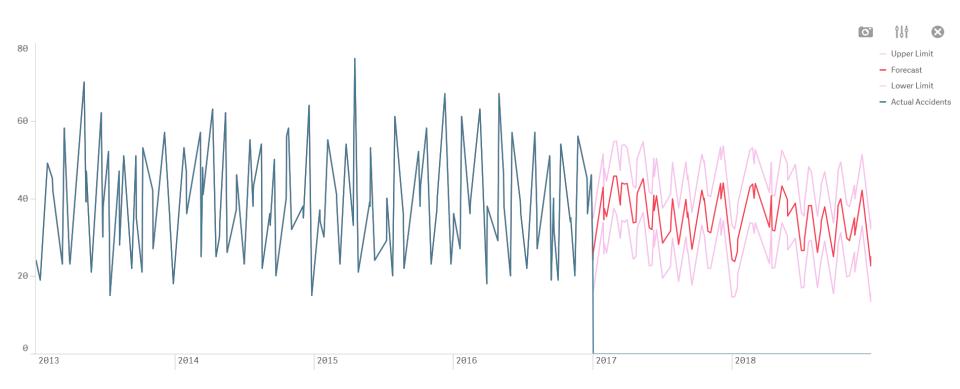
The use of a model to predict future values based on previously observed values.



$$y = f(x)$$



Timeseries Forecasting





Seasonality & Holiday Analysis





Timeseries Forecasting

Hands-on Exercise 1

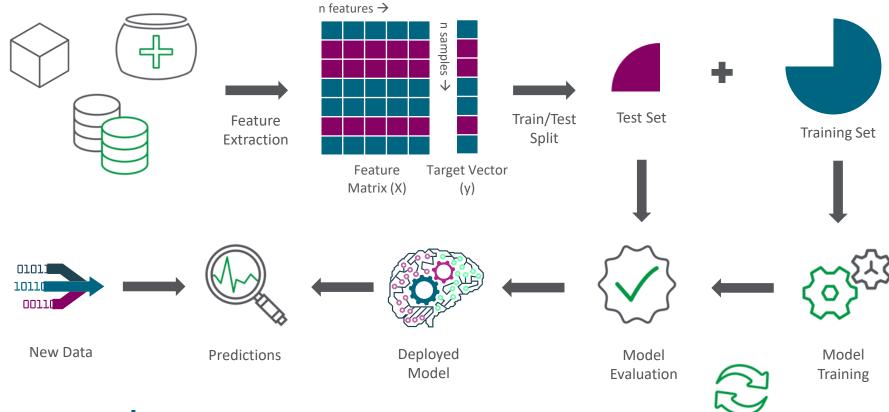


PyTools Overview

The Server-Side Extension used in the hands-on exercises.



Supervised Machine Learning



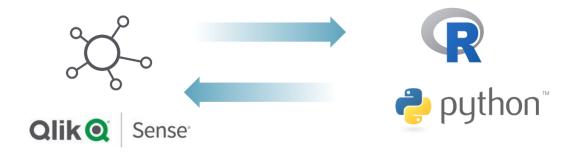


Supervised Machine Learning

Hands-on Exercises 2 & 3



Advanced Analytics with Qlik



Tackle the most complex questions

Communicate insights to a broad range of users

Build reusable and repeatable techniques

Integrate into a secure and governed platform





Thank You

Want to learn more? Check out these resources:



Stay in the know on Qlik product innovations. Register for our quarterly webinar series.

qlik.com/QlikInsider



Connect with Qlik enthusiasts around the world. Learn, share and explore. Register today.

community.qlik.com

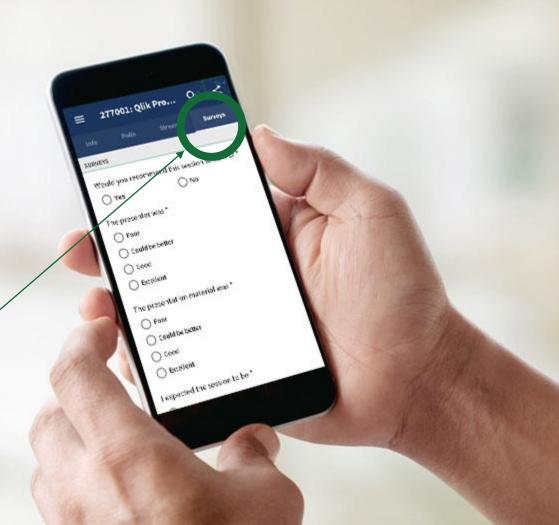
Breakout Session Survey

We strive to improve the event each year and are interested in hearing your feedback on this session.

To access the session survey please log into the mobile app and click this session on your personal agenda.

Click the Survey button in the top menu to complete the survey.

We thank you in advance!





Thank You