

# Qlik analytics showcase for leading banking and insurance companies in Azerbaijan

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ABB

# About me

## Qlik Business Intelligence and Integration expert

**Mahammad Yagubli**

4+ years experience with Qlik Data Analytics and Integration  
in finance and insurance:

- **ABB**
- **Ateshgah Insurance Company**

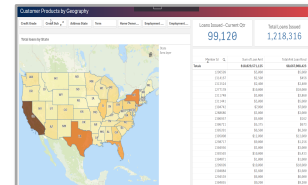
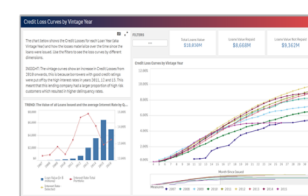
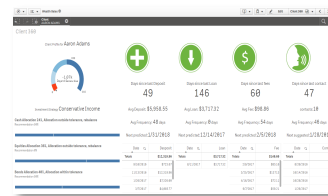
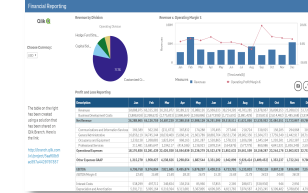
50+ Qlik applications developed

30+ data sources integrated in Qlik



# Key analytics areas for banking

- Customer & Product Profitability
- Portfolio Performance
- Client Facing Portals
- Segmentation & Attrition
- Limits & Exposures
- Financial Reporting
- Branch Analysis
- Pricing

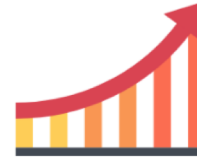


# Qlik Sense usage in ABB

Qlik Sense is used since 2019



Retail Sales



Corporate sales



Marketing



Finance



Risk



IT

# Qlik Advantages for finance sector

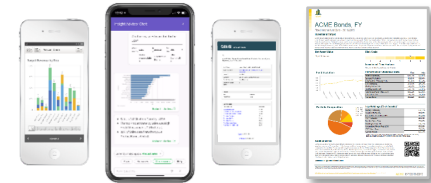
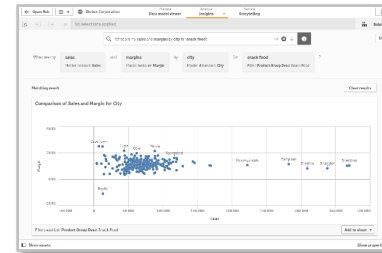
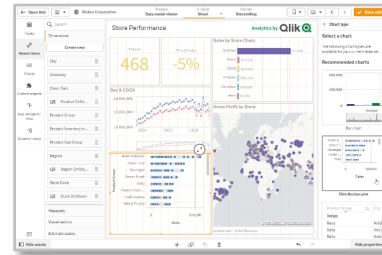
Based on 4+ years of personal experience in banking and insurance companies



# Different Use-Cases are possible with Qlik

## From self-service to centralized applications and reports

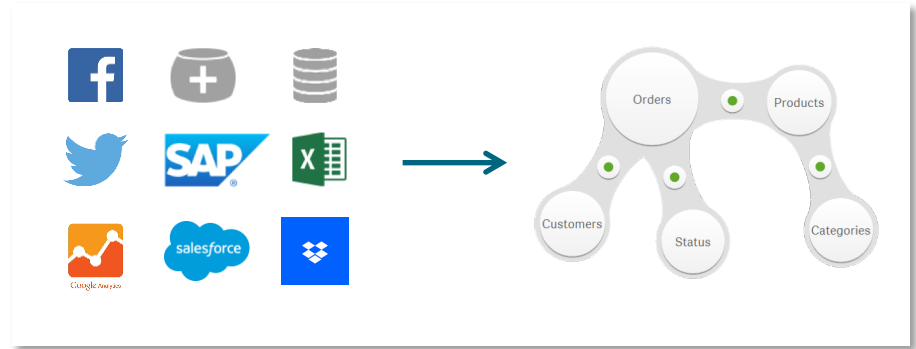
- Qlik supports a variety of analytical use-cases and scenarios (for professional to low-qualified users)
  - Self-service visualization and discovery
  - Interactive dashboards
  - Mobile analytics
  - Reporting
  - Alerting
  - Search & conversational analytics
  - Custom and embedded analytics
  - AutoML



# Big (and Small) Data Integration

Bring together and prepare limitless combinations of data

- Smart, self-service data preparation with association recommendations, intelligent profiling, and visual transformation
- Powerful ETL scripting for complex data integration challenges
- Broad connectivity to file based, on premise, cloud, and web sources
- On-demand app generation for analyzing “slices” of big data.



# My experience with data sources integration to Qlik



## Databases

- Oracle
- NoSQL
- MongoDB
- MSSQL



## Cloud services

- Google Analytics
- Various marketing cloud services and web-pages



## Enterprise applications

- ERP systems (various)
- Salesforce
- Jira
- Wrike



## Files

- Excel
- Qvd
- Plain Text

+ REST connection to multiple data sources



# The Qlik Associative Engine

## Driving interactive, free-form exploration and analysis

### Data indexed and highly optimized

#### Data integration

- Brings together many data sources
- Unifies full set of record-level data
- No lost data, no double counting
- No need for SQL joins at load time

#### Compressed binary index

- Compressed binary data format
- Highly optimized, in-memory cache
- Maximizes performance
- Drives associative user experience



### 'Speed of thought' calculation after every click

#### Logical inference

- Sets global context (selection state)
- Determines associations across all related tables based on global context
- Highlights associated *and unrelated* values for users in green/white/gray

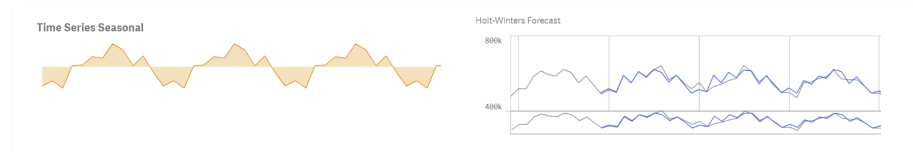
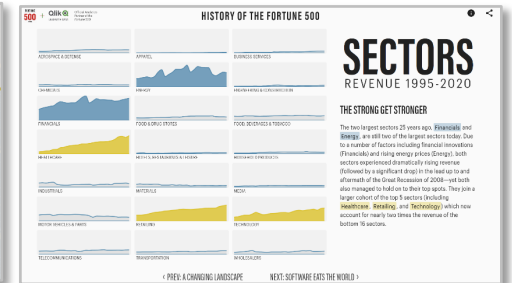
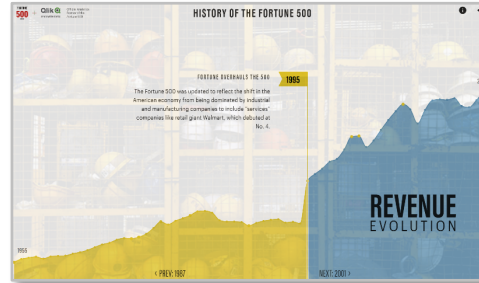
#### Dynamic calculation

- Recalculates all analytics from record-level data based on global context
- Delivers 'speed-of-thought' response
- Supports high numbers of users and massive, complex data sets

# Open Customization and Extension

## Customize, extend, and embed for new use cases and capabilities

- A complete set of open and standard APIs for customization and extension
  - Mashups and custom apps
  - Embedded analytics in operational apps
  - Extensions for new types of visualizations and functionality
- Advanced analytics integration delivers the power of third-party data science / predictive models to business users
  - Real-time, visual exploration of calculations from predictive models
  - Pass data to and get instant calculations from third party engines, as the user makes selections
  - Open source connectors for R and Python

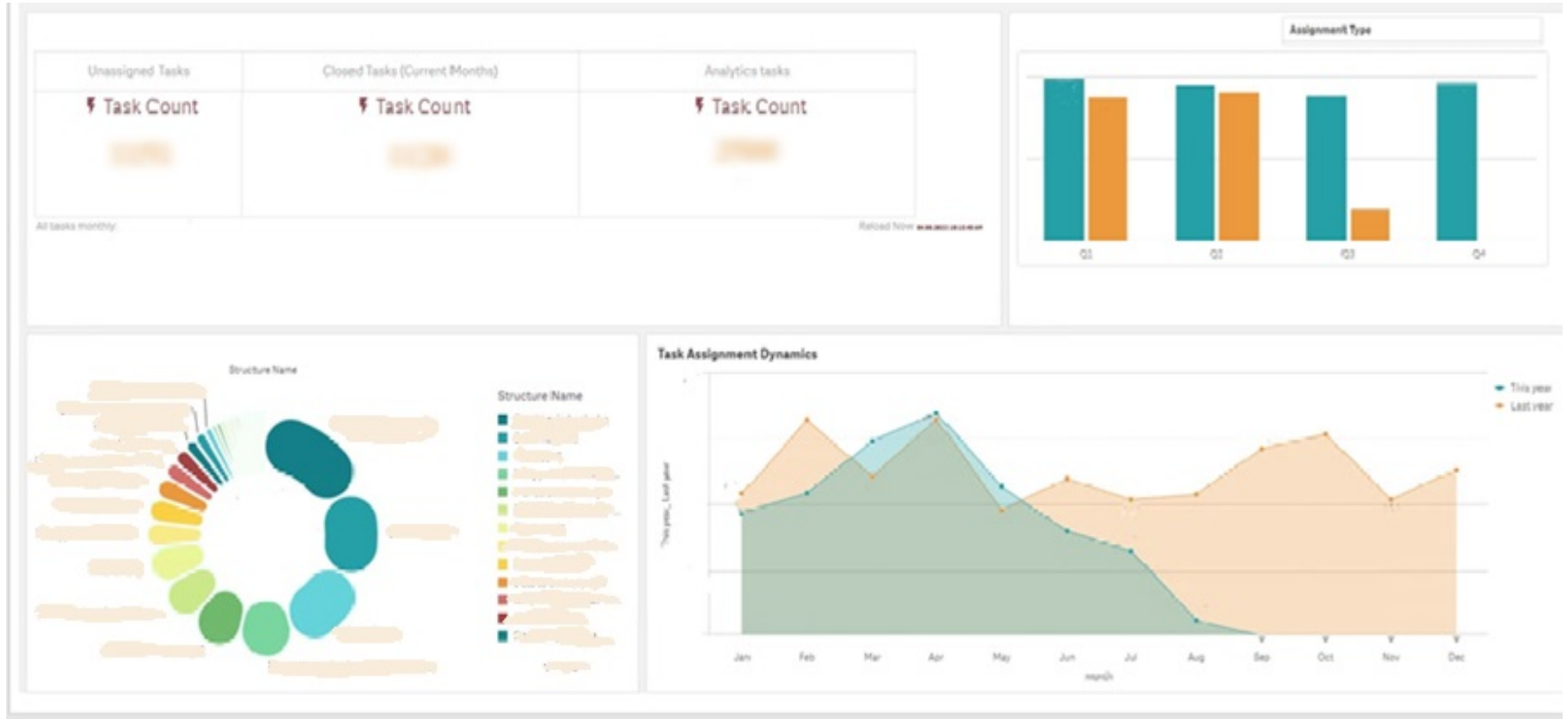


# Qlik Applications for finance sector

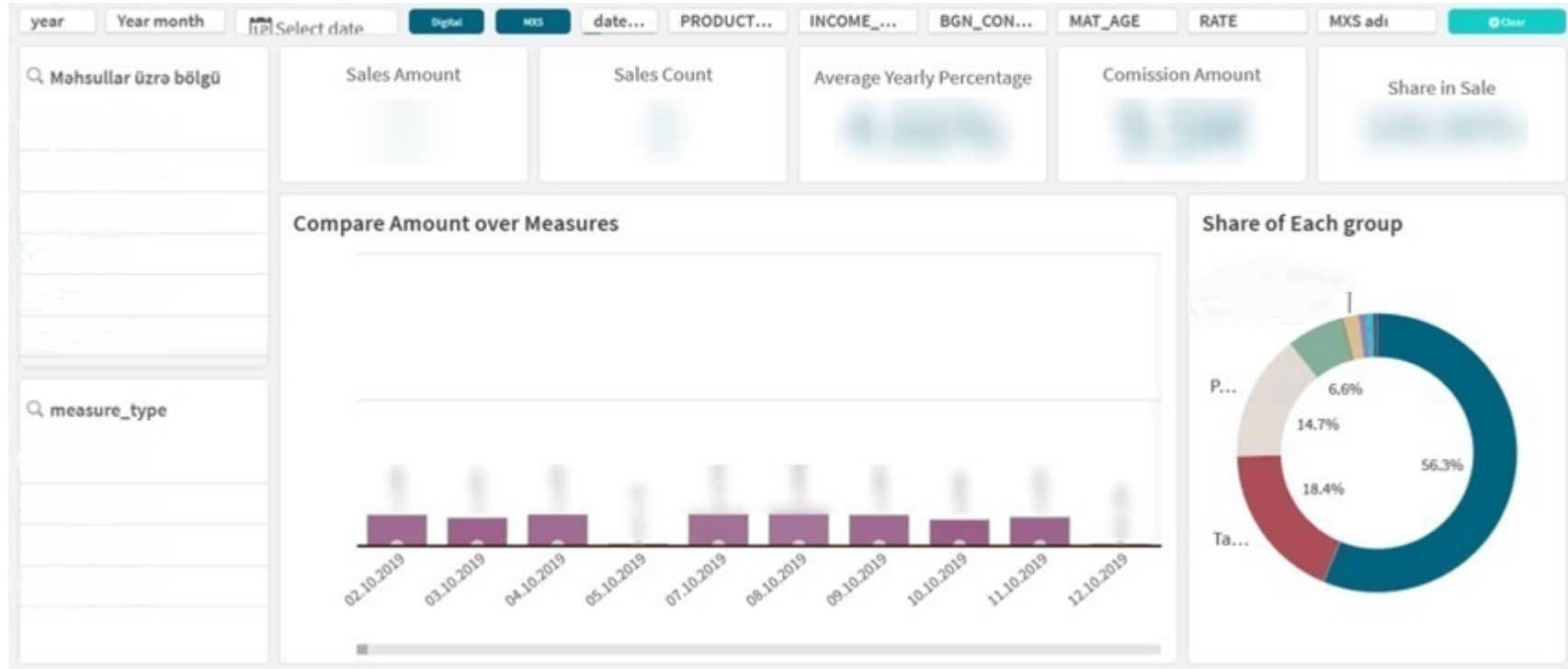
Real-life examples



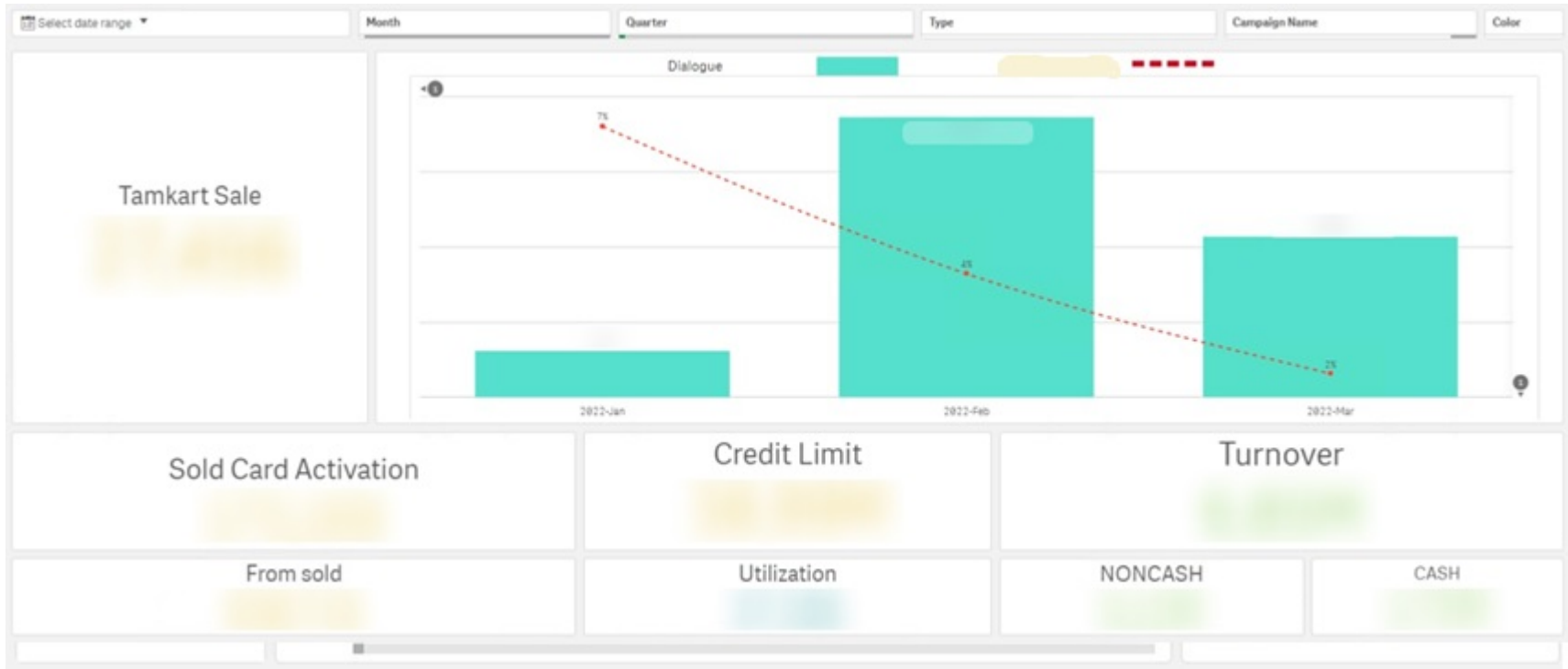
# Qlik extension example in practice



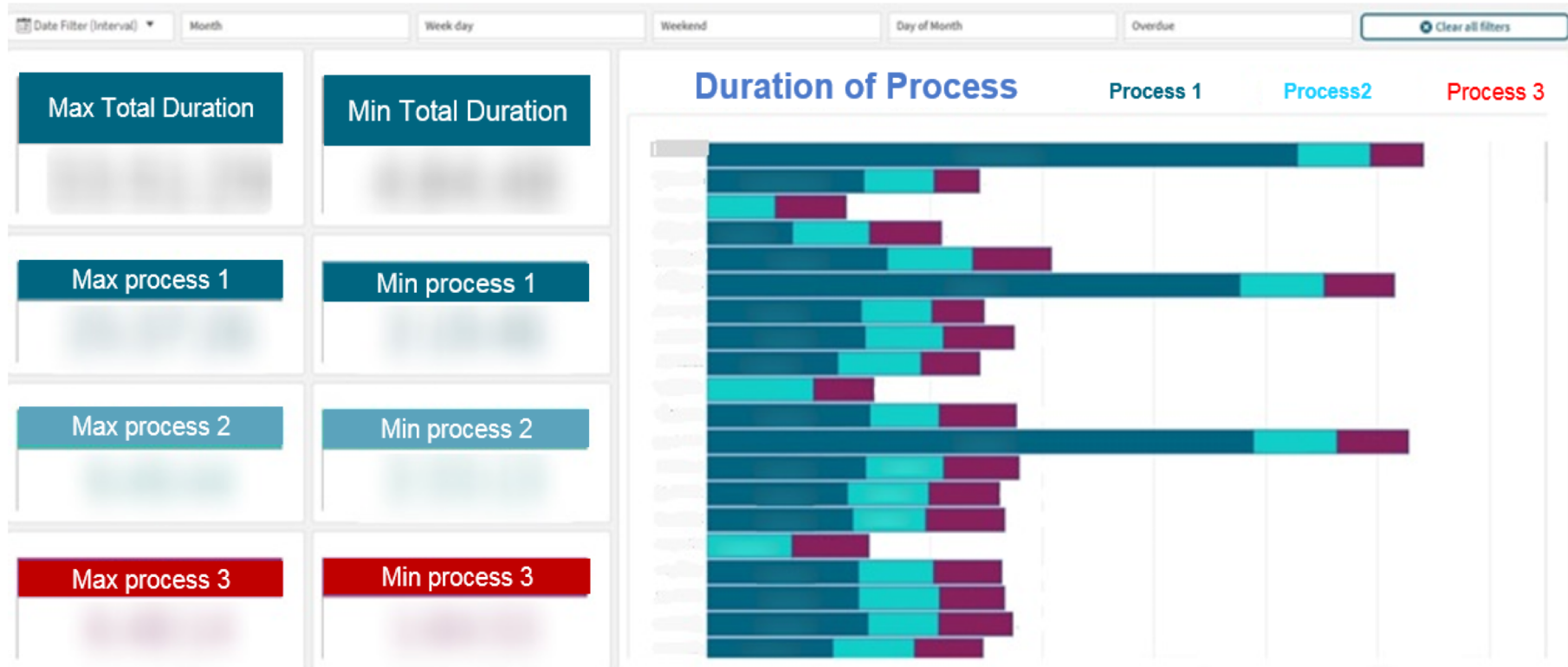
# Overall sales analytics



# Sales KPI analytics for credit card



# Qlik usage for IT analytics



# Self-service reporting (ad-hoc) in Qlik Sense and QlikView

## Any user can customize report by choosing necessary dimensions and measures

The screenshot shows the Qlik Sense Custom Report interface. On the left, there are two panels: 'Dimension' and 'Measure'. The 'Dimension' panel lists: authors, bookID, language\_code, publication\_date, publisher, and title. The 'Measure' panel lists: average\_rating, num\_pages, ratings\_count, and text\_reviews\_count. The central 'Report' area is empty with the text 'Please select at least one dimension and one measure'.

The screenshot shows the Qlik Sense Custom Report interface with a populated report table. The 'Dimension' panel has 'authors' selected. The 'Measure' panel has 'average\_rating' selected. The report table displays the following data:

authors	Average Rating
<b>Totals</b>	<b>3.9340753</b>
A.B. Yehoshua/Hillel Halkin	3.76
A.D.P. Briggs/Leo Tolstoy/Fyodor Dostoyevsky	3.76
A.E. Cunningham/Narain Eliason/Charles F. Miller/Terry Dowling/Paul Rhoads/Jack Vance/Tom Shippey/Gene Wolfe/David Langford/Dan Simmons/David Mathew	4.15
A.J. Jacobs	3.76
A.M. Homes	3.28
A.N. Roquelaure/Anne Rice	3.735
A.S. Byatt	3.77
Abbie Hoffman/Anita Hoffman	3.96
Abdul Rahman Muni/Peter Theroux	4.13
Abigail Adams/Frank Shuffetton	4.14
Abigail Thomas	3.74
Abolqasem Ferdowsi/Dick Davis/Azar Nafisi	4.51
Abraham Lincoln/Bob Blaisdell	4.15
Abraham Lincoln/Don E. Fehrenbacher	4.36
Abraham Lincoln/Gore Vidal	4.22

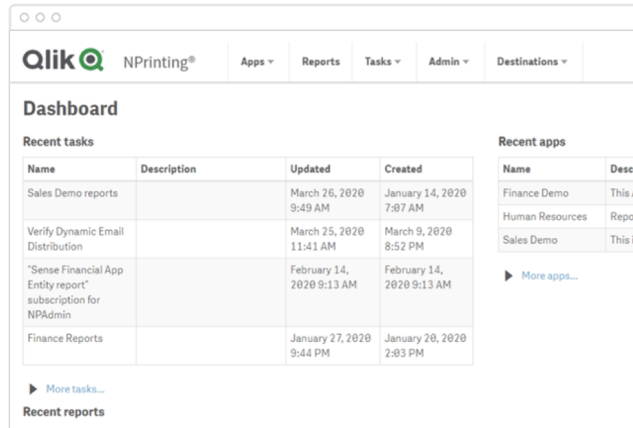
The screenshot shows the QlikView interface with a complex data visualization dashboard. It features multiple overlapping windows and charts, including a map and various data tables, illustrating the advanced reporting capabilities of QlikView.



# Plans to go further with Qlik analytics

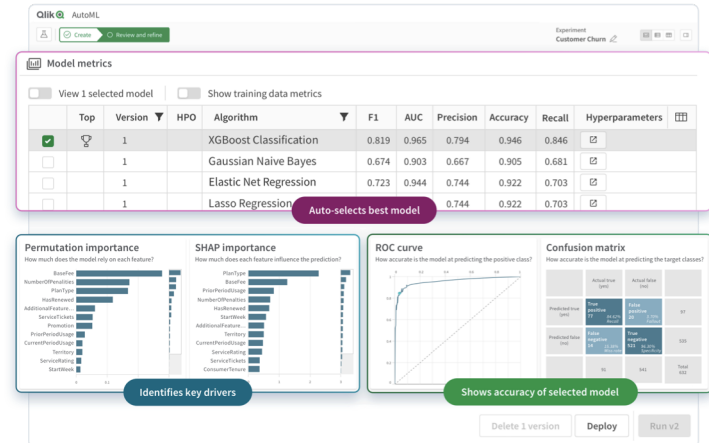
## Qlik NPrinting:

- Multi-channel delivery (email, web, portal, corporate directory, Qlik Sense Hub)
- On-demand reporting



## Qlik AutoML:

- Code-free
- ML experience for analytics teams to test hypothesis by themselves, without distracting ML/DS specialists



Thank you!

