Qlik Architecture & Technology

See the whole story in your data

Marcel van Laarhoven
Solution Architect
Visualization alone isn’t the answer

There is a broad spectrum of needs and analytics use cases across any business, all of which are important.

Why our approach is unique

A visual analytics platform

See the whole story that lives within your data
Innovative associative model enables users to probe all the possible associations that exist in their data, across all data sources, to answer not just “What happened?”, but “Why?”, and “What is likely to happen?”
See the whole story that lives within your data
See the whole story that lives within your data

Example: Tell us all of the patients who had a hip replacement that cost more than $10,000; the surgeons that treated those patients that have used different prosthetics for those hip replacements...

Linear data visualization

Result of the partial story: You reduce the number of operations

versus

Associative visual analytics

Result of the whole story: You increase effectiveness of procedures to maintain the number of operations
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A platform for all your visual analytics needs
More than a tool, Qlik’s platform approach enables centrally deployed guided analytics, self-service data visualization, embedded and custom built analytics, collaboration and reporting.
Qlik’s modern BI portfolio

Value Added Services

Applications

Foundation

Services

Ecosystem

Qlik’s modern BI portfolio

Qlik Value Added Services

Qlik Foundation

Qlik Applications

Qlik Ecosystem

Qlik’s modern BI portfolio

Qlik Value Added Services

Qlik Foundation

Qlik Applications

Qlik Ecosystem
Qlik® platform-enabled visual analytics

Qlik Sense® Enterprise

Self-service data visualization

Guided analytics

Embedded analytics

Custom analytics applications

Reporting and collaboration

Decentralized analysis and exploration for individuals and groups

Centrally deployed guided analytics to multiple knowledge workers

Analytics embedded in web and enterprise applications

Custom-built analytics applications for internal and external use

Pixel-perfect report distribution across the enterprise

QlikView®

Qlik® Analytics Platform

QlikView® NPrinting
By using the Qlik® Analytics Platform, customers and partners can seamlessly embed Qlik’s powerful visual analytics capabilities, powered by the QIX engine and visualizations, right into their applications by using modern and open API’s.
Introducing Qlik® Analytics Platform

With Qlik’s patented Associative Data Indexing technology at its core, Qlik Analytics Platform delivers capabilities for:

- **Delighting Developers**
  - Embed visual analytics anywhere
  - Direct access to QIX engine
  - Modern and open APIs

- **Delivering for OEM**
  - Beautiful visualizations
  - Deliver maximum value to your customers
  - Licensing to match any use

- **A platform for the enterprise**
  - Extend with governance
  - Analytics in your workflow apps

- **Engage your partner and customer communities**
Use-case – Embedded Analytics

- Easily embed apps, sheets and visualizations in a wide range of environment, for example:
  - Portals
  - Web applications
  - Intranet and Extranet sites

- Qlik® Analytics Platform provides a number of JavaScript-based APIs for embedding Qlik Sense content:
  - Single Integration API for iFrame integration
  - Capability APIs for embedding objects in web pages
  - Backend API for communicating with the backend of Qlik Sense
Integrate visual analytics with great flexibility in your own software. It can, for example, be integrated as a:
- Windows application
- Web-based application

Qlik® Analytics Platform provides client side integration capabilities through open, standard APIs for:
- Visualization extension for enabling new ways of visualizing data and enhance user input and interaction.
- Mashups for creating new applications to meet unique business requirements.
- Single Integration to integrate single visualizations, sheets or snapshots into an iframe.
Integration

Sales Revenue

93.88 M

5.2% Sales Revenue vs Prior Period
Create your own visualization type and expand the capabilities of your Qlik Platform.

Integration is just an upload to the server in order to use it at the frontend and inside your applications.

Templates are available to speed up your development process.


This is working with standard Web-Technology CSS3, HTML5 and JavaScript.
Use Existing Libraries

**FusionCharts**

JavaScript charts for web & mobile

**Chart.js**

Simple, clean and engaging charts for designers and developers
Demo
## What is Qlik® Analytics Platform

Qlik® Analytics Platform vs Qlik Sense® Enterprise

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**Qlik® Analytics Platform**

**Qlik Sense® Enterprise**

Part of the Qlik Sense® family of products, the Qlik® Analytics Platform puts the power of the QIX associative data indexing engine and visualizations in the hands of application developers through powerful, open and modern API's, allowing you to see the whole story within your data.
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Agility for the business user, with trust and scale for IT
Support the business and IT; Data sourcing and preparation, visualization and analytics, collaboration and reporting all within a governed framework
Qlik® platform-enabled visual analytics

Qlik Sense® Enterprise

Self-service data visualization
Decentralized analysis and exploration for individuals and groups

Guided analytics
Centrally deployed guided analytics to multiple knowledge workers

Embedded analytics
Analytics embedded in web and enterprise applications

Custom analytics applications
Custom-built analytics applications for internal and external use

Reporting and collaboration
Pixel-perfect report distribution across the enterprise

Qlik® Analytics Platform
Governed Self-Service
Dividing the work

When using Self Service BI, you choose who can do what and what level of freedom users get. No longer IT delivers and Business consumes

**IT**

- **Manage** data load process (ETL)
- **Ensure** calculations are correct (Definition of measures)
- Database connections
- Folder connections
- Scheduling tasks
- Server management
- **Security** configuration

**Business Users**

- **Read** dashboard (Display only)
- **Modify** for own use, create new visualizations, re-use what governed functionality is provided.
- Modify for own use, create new measures and use all fields.
- **Publish** your new creations to the community without IT involvement.
- Share your findings, discovered in the data. (Create stories)
- **Create** new dashboards from scratch from internal or external sources.
Guided Analytics & Self-Service

In order to make sure each user reaches their level of self-service, roles can be applied providing each user the correct capabilities.
Consumption patterns

- Users consume visualization apps to quickly answer the next question.
- User personalize their own visualizations leveraging pre-built libraries.
- User build, extend, and publish content leveraging pre-built libraries.
Adding user roles

- **Business-Users**: Consume visualization apps to quickly answer the next question.
- **Contributor**: extends the application with visualizations, sheets and data stories incl. publish.
- **Developer**: builds applications, models and prepares data for other users.
- **Admin**: administrates all apps for a certain department (stream).
Demo?
Qlik® platform-enabled visual analytics

**Qlik Sense® Enterprise**

- **Self-service data visualization**
- **Guided analytics**
- **Embedded analytics**
- **Custom analytics applications**
- **Reporting and collaboration**

**QlikView®**

- Decentralized analysis and exploration for individuals and groups
- Centrally deployed guided analytics to multiple knowledge workers
- Analytics embedded in web and enterprise applications
- Custom-built analytics applications for internal and external use
- Pixel-perfect report distribution across the enterprise
Deploying the portfolio
How do they work together?
Qlik Sense® deployments are able to share and reuse much of the value built within QlikView®

60-80% of the effort associated with most BI projects is related to data & expression logic and is therefore reusable!

Same expression logic
Same data logic
Same engine technology

Reusable Data Layer
Qlik Data Layer
Common platform

- Re-use of QlikView Data Architecture:
  - Re-use data layer (QVD)
  - Re-use existing data models & complex business logic
- Automatic publishing to both systems
- Single point of Truth & Maintenance
- Multiple use cases:
  - Self-service visualization
  - Guided Analytics
Coexistence: Different Solutions by Department

Centrally Managed Data Layer
Coexistence: Different Solutions by Application
Qlik Supported cases

- 1 physical machine
  - QlikView & Qlik Sense running on the same server.

Windows Host

- Ports will be used twice
- Not recommended
- unsupported

- 1 physical machine
  - QlikView & Qlik Sense running on separate virtual servers

virtual environment

- supported

- 2 physical machines
  - QlikView & Qlik Sense running on different machines

- supported
Single Portal
Navigating between QlikView & Qlik Sense