



## Mobility in Qlik® Sense

### Anywhere, anytime analytics

Qlik Sense is a next-generation self-service data visualization application that empowers everyone to easily create a range of flexible, interactive visualizations that drive exploration and discovery through intuition.

Qlik Sense is built on the QIX Associative Data Indexing engine, the second generation of Qlik's proven and patented engine technology, which allows people to explore data relationships across many sources that would otherwise be hidden in hierarchical or query-based approaches. It drives faster time to insight with intuitive exploration, Smart Search, and smart visualizations; broadens knowledge sharing with data storytelling and mobility; and promotes accuracy and reliability through enterprise governance capabilities that make it truly world-class.

Qlik Sense brings out the business analyst in everyone, taking self-service to a new level of power and flexibility, so that businesses are more informed and capable of acting and reacting faster.



## Explore and analyze — anywhere, anytime

### Associative data indexing

The QIX (Qlik® Index) engine is the second generation of the proven engine technology that has powered Qlik products for the last decade. It provides associative data indexing and dynamic calculation that empowers people to naturally explore using their intuition. Associative data indexing exposes relationships in complex, multi-source data sets that would otherwise be hidden in hierarchical or query based approaches. Users benefit from this feedback every time they make a selection or search, allowing them to gain understanding and take next steps.



The screenshot shows a data model with four dimensions: Product, Country, Region, and Customer. The Product dimension is expanded to show 'Mobile' selected. This selection automatically filters the other dimensions: Country is filtered to 'France', Region to 'North America', and Customer to 'YourFuture'. This illustrates how the associative engine dynamically updates the data set based on user selections.

Product	Country	Region	Customer
Mobile	France	North America	YourFuture
Mobile	France	North America	Other
Mobile	Germany	North America	Other
Mobile	United Kingdom	North America	Other
Mobile	United States	North America	Other
Mobile	Other	North America	Other

Mobility has become a core requirement for companies looking to gain competitive advantage through business intelligence (BI). Companies now routinely provide information to management and staff on their mobile devices. However, the predominant model has been focused on distribution and consumption of relatively static, pre-defined content. Although visually rich, these solutions typically can't do the one thing that adds the most value: provide immediate answers to un-anticipated questions whenever, and wherever they arise.

In order to truly enable field workers to solve problems in collaborative situations such as customer interactions and operations, a mobile analytics solution must provide the ability to actually analyze information. This could mean exploring a scenario together with a customer, searching across all information for a product that's underperforming, or even changing a chart or graph directly on the mobile device to reflect a new point of view that arises in conversation. Mobile BI as it currently stands does not equate to mobile analytics or mobile value creation.

In addition, people now use devices of all forms in the workplace. Vendors and app developers are finding it increasingly difficult to keep up with the changing landscape of mobile devices. Natively built apps for iOS and Android that were once regarded as the gold standard are becoming more and more difficult to maintain and adapt. Midsize devices that sit between tablets and smartphones are becoming more prevalent. And, the rise of hybrid touch devices in both small and large forms has made support across platforms an even greater challenge. Existing mobile BI solutions lack a seamless way to operate across all devices.

Qlik Sense is inherently mobile, built from the ground up to provide complete analytical functionality on all devices. There is no difference between the full desktop and mobile device experience. All capabilities, including visualization, analysis, creation, collaboration, and administration are available anywhere. Qlik Sense is accessed through a smart, responsive, touch-based HTML5 browser client. Whether a device is large or small, touch or keyboard based, Qlik Sense offers a fully optimized experience by intelligently adapting layout, information, and functionality for the device being used.

Qlik Sense delivers a number of key capabilities for mobility:

- Unrestricted mobile analysis
- Creation anywhere
- Gesture-based touch user interface
- Responsive design
- Small devices mode

## Unrestricted mobile analysis

Qlik® Sense does not restrict exploration and analysis on mobile devices in any way. This is critical to driving value, as mobile environments are unpredictable and users need immediate answers to questions that arise in the field. All aspects of Qlik Sense's interactive discovery experience can be used on a mobile device, including associative exploration, search, and interactive visualization. Collaboration and communication capabilities, including the hub, streams, and data storytelling, are available on any device as well. And because the QIX Associative Data Indexing engine powers the analysis on the server, there are no limits to data size or complexity, or how many users can analyze information. The QIX Engine provides the same analytical power regardless of device type.



## Creation anywhere

Because the full capabilities of Qlik Sense are available anywhere, users can not only analyze information but can also create visualizations directly on mobile devices. Qlik Sense offers an entirely server-side creation environment featuring drag and drop capabilities and access to shared resources in libraries. Users can build new visualizations on tablet and hybrid devices with all the power of the Qlik engine at their disposal. This frees people to not only analyze and explore existing visuals, but to test new ideas in mobile environments.



## Responsive design

Qlik Sense automatically and intelligently optimizes the entire user experience for the device being used. It features smart visualizations arranged on an adaptive grid that adjust to the form factor that is displaying them. This includes not only re-sizing, but also re-scaling the level of detail and data within the visualizations themselves. Qlik Sense is smart enough to know when to switch to summary and detail level visualization techniques based on the available real estate.

With responsive design, users have the freedom to work in any environment without constraint, always getting the optimal experience. They can seamlessly access their apps on any device, and can transition across devices to pick up analysis where they left off. In addition, content creators no longer have to worry about whether their apps are optimized for the variety of devices that might want to access them, resulting in significant reductions to maintenance overhead and complexity.





### **Gesture-based touch UI**

Qlik® Sense features a new, gesture-based touch user interface and interaction model. Qlik Sense was built from the ground up for touch, in addition to mouse and keyboard interaction. There are no limits to what you can do with touch or how the experience performs. Qlik Sense supports advanced gestures — including tap, hold-tap, swipe, pinch, and lasso. The entire user experience is optimized for touch interaction, including navigation and selection gestures in objects, tiles, menus, and more.



### **Small devices mode**

Qlik Sense provides an enhanced, consumption-only mode for exploration and discovery on small devices. When handheld devices are detected, the user interface automatically presents visualizations and objects in an optimized fashion, with the ability to navigate vertically, tap to maximize objects, interact, and explore. Small devices mode allows for analysis in a more intuitive manner on handhelds, and does not require any additional customization of apps.

### **About Qlik®**

Qlik (NASDAQ: QLIK) is a leader in data discovery delivering intuitive solutions for self-service data visualization and guided analytics. Approximately 33,000 customers rely on Qlik solutions to gain meaning out of information from varied sources, exploring the hidden relationships within data that lead to insights that ignite good ideas. Headquartered in Radnor, Pennsylvania, Qlik has offices around the world with more than 1700 partners covering more than 100 countries.

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