QlikView

QLIKVIEW ON MOBILE:

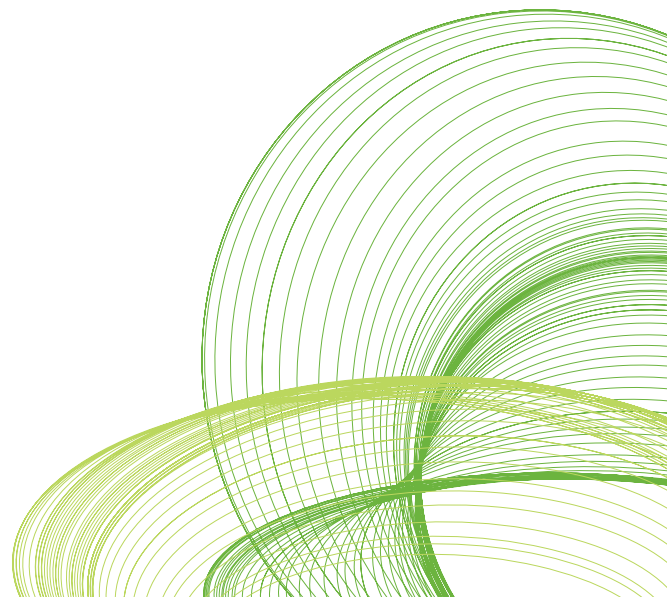## Beyond Reporting

A QlikView White Paper

December 2012

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QlikView

Table of Contents

QlikView on Mobile Means Discovery

This QlikView White Paper addresses the market for mobile BI (business intelligence) and QlikView's unique approach to delivering insight on the go. There is a fundamental difference between providing predefined reports and visualizations with limited data on mobile devices, and enabling true Business Discovery for mobile workers. This key distinction is articulated, along with supporting information that highlights the value mobile business discovery can offer when leveraged as an integral component to decision making. We will describe the unique capabilities that QlikView provides to enable Business Discovery on mobile devices, and emphasize the importance of the QlikView platform in making this possible.

Business Discovery on the Go

Business Discovery is what's next in BI. With QlikView, users pursue their own path to insight, make discoveries collaboratively, and arrive at a whole new level of decision-making. They make decisions based on multiple sources of insight: data, people, and the environment.

- **Business Discovery is the future of BI.** In the Gartner report, "Magic Quadrant for Business Intelligence Platforms,"[i] the analysts clearly delineated between traditional stack vendors and newer "data discovery" technologies, among which QlikView is the leader. This new approach is based on the premise of empowering the ordinary business user to explore and analyze live information through simple clicks, without limits, using dynamic, interactive apps. Business users are increasingly choosing data discovery technologies over traditional BI.[ii]

- **QlikView works the way the mind works.** Why are business users crazy about QlikView? With QlikView, people are not limited to predefined paths they must follow, or questions they must formulate ahead of time. People ask what they need to ask, and explore up, down, and sideways rather than only drilling down in predetermined ways. This allows users to answer not only their initial questions but also follow-up questions that arise, taking their own step-by-step path to insight. Business people need BI when they're on the move. Business decision makers at all levels in an organization need data at their fingertips, wherever they are. Tablets and other large form factor mobile devices promise to make business data ubiquitous. Unlike other BI solutions, which address the need for mobile solutions by delivering static reports and visualizations to mobile devices, mobile Business Discovery platforms provide an intuitive interface and an application infrastructure that is tailor-made for users to explore data and draw associations and insights wherever they happen to be working.

- **Static BI—even on mobile devices—is still static BI.** There is a dramatic contrast between Business Discovery and traditional report and query based architectures that offer limited, pre-defined views of information and require lengthy, complex deployments. Business Discovery, in contrast, offers business users of all skill levels the ability to get the information they need through dynamic apps, while affording IT the ability to maintain security and control.

REPORTING ALONE DOESN'T DRIVE VALUE ON MOBILE

The same contrast holds true with BI on mobile devices. The ability for a user to ask any number of questions and explore freely, against a full set of live data, is far more valuable than simply delivering pre-aggregated subsets of information or standalone visualizations. With traditional architectures:

- **Reports limit reaction.** Reporting and visualization based tools rely on extracting a small subset of data into a predefined set of views. This approach greatly limits a mobile user's ability to immediately react to their current situation. Although a few levels of drill-down or selection may be available, these interactions are pre-defined and don't offer users the option to explore the data freely.

- **Questions must be predicted.** A standalone visualization shows a single view of data. A report shows a static view of data. These tools can only help people answer pre-defined questions – questions someone thought of in advance. In other words: *old questions*. The report or visualization can be refreshed with updated data but it still just provides new answers to old questions. In QlikView, however, something as simple as a keyword search across a complete set of data can be a very powerful capability for mobile users with new questions on-the-go.

- **New questions require new reports.** The only option for answering questions that were not anticipated is to go back and build new reports or visualizations. Whether this is a BI report writer or even a business user attempting this on their own, it's still a time delayed step that's not available on-the-spot, when having the right information can really influence a decision.

Mobile users need answers, and they typically can't wait until they are back in the office to ask colleagues or request new reports. Immediate response to new questions and follow-up questions can make or break a deal or decision for a mobile worker. With reporting, it is often too late to capture these critical opportunities in the field.

REAL VALUE FOR THE REAL WORLD

The opportunity to generate value in a mobile setting goes far beyond static information delivery. With the right capabilities, business users can unlock significant potential and bring the full power of their information to the time and place where decisions are made.

Consider this scenario:

> A pharmaceutical marketing representative walks into her first physician group appointment at a clinic with an iPad in hand. She has done some initial preparation for detailing her company's new drug but isn't exactly sure what direction the meeting will take.
>
> In speaking with the physicians at the clinic, questions arise around several key questions. Who is prescribing this new drug? How well is the drug being accepted in the market? And what can we expect in terms of progress with our patients? The physicians want to know the implications of prescribing this new drug, and want insight into physician acceptance in the market, compared to other drugs used more prevalently during the last few years.
>
> Using QlikView on her iPad, the pharmaceutical rep is able to access a complete set of up-to-date sales figures, physician prescribing rates, and performance data from multiple sources. Because the rep has the full power of Business Discovery at her fingertips, she quickly makes a few selections to narrow down to a specific type of doctor in the region that is prescribing the medication instead of older drugs.
>
> Expanding the view to all regions, she notices that several of the more prominent physicians in the country have begun to increase prescriptions for the new drug. This prompts a question from the audience about a specific doctor, and the rep is able to immediately perform a keyword search, revealing that the doctor in question has written several scripts for the drug in the last three months. Last, she is able to drill into several examples and point out that the incidence rate for serious side effects is significantly lower than with older drugs.

In this example, the rep is able to take advantage of Business Discovery capabilities on mobile to search live information and immediately react. If this rep had a traditional reporting system, she would only be able to answer an initial question or two — and only if the report designers thought to include the right information beforehand.

THE POWER IS DRIVEN BY THE PLATFORM

QlikView is the leading Business Discovery platform. It enables users to make discoveries and understand the drivers and implications for those events more effectively than with any other mobile BI tool on the market. The power behind this capability comes from the QlikView platform. The following factors, when taken together, make QlikView stand out in the BI software market:

- **Patented core technology**
  At the heart of QlikView is our unique, patented engine, which generates views of information on the fly for non-technical users. This *does not require* development of reports or visualizations by those users – users just click and learn. Every time a user clicks, the QlikView engine instantly responds, updating every object in the app with a newly calculated set of data and visualizations specific to the user's selections.

- **The associative experience**
  Unlike traditional tools that only offer pre-defined drill paths and interactions, QlikView allows a user to start anywhere and go anywhere. The QlikView engine automatically manages all the relationships in the data and presents information to the user using a "green/white/gray" metaphor. Selections are highlighted in green, associated data is represented in white, and excluded (unassociated) data appear in gray. This instant feedback encourages users to think of new questions and continue on their path of exploration and discovery. They are given just enough guidance to lead them down a relevant path, without limiting them to a pre-defined one.

- **Collaboration and mobility**
  QlikView further drives flexibility and value by enabling users to incorporate people and place, in addition to data, into decision making. Users can communicate with each other in the context of their decision making through annotations, real-time collaborative sessions, and shared bookmarks. And full QlikView capabilities, including the associative experience and collaboration, are available on mobile devices. With QlikView, people can ask and answer their questions and follow-up questions, with their colleagues, wherever they are.

**TABLETS ARE THE IDEAL MOBILE DEVICE**

Fueled by the iPad, the rise of tablets as legitimate business devices presents a compelling opportunity to deliver mobile BI capabilities to a more mainstream audience. [iv] Tablets are ideal for rendering Business Discovery apps in a mobile setting. They're portable, always on, and touch capable, and have large enough displays to offer rich, interactive user experiences.

QlikView on Mobile—A Unified Architecture

Traditional BI architectures typically require new mobile reporting layers on top of already complex stacks. In contrast, QlikView offers a unified architecture for delivering cross-platform Business Discovery capabilities on mobile (see Figure 1). QlikView delivers data exploration capabilities across platforms. QlikView Server recognizes mobile devices and delivers touch-enabled apps for those devices as needed. There are no additional stack layers, data transfers, report customizations, or duplicate security models required.

Figure 1: QlikView has a unified mobile architecture
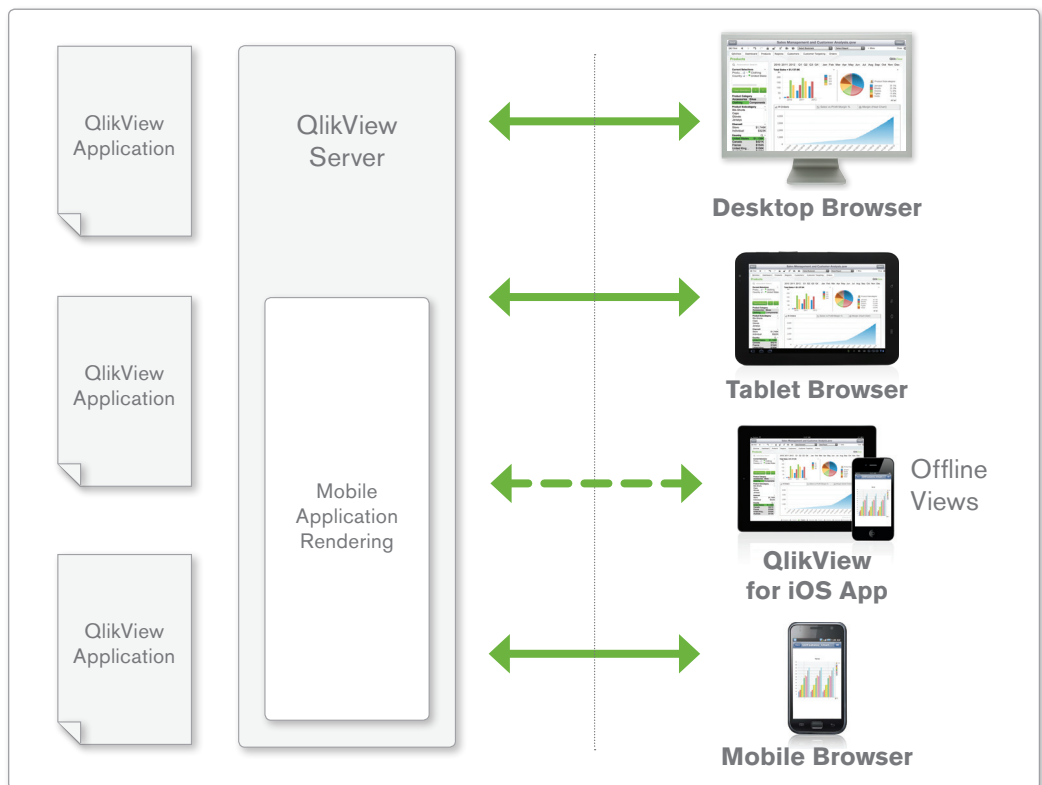
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With QlikView, mobile apps:

- **Are 'everywhere' apps.** A single QlikView application (.qvw file) can be hosted on QlikView Server and delivered across platforms with no additional configuration required.

- **Take advantage of server power.** True Business Discovery apps are too resource intensive to run standalone on today's mobile devices; the best solution is to utilize devices as the presentation layer for server-based analytics apps.

- **Do not require additional stack layers.** Mobile app rendering is built into QlikView Server. No additional components are required. QlikView apps are simply published to the server and will "just work" on mobile devices.

- **Do not require additional purchase.** Because mobile app delivery is just part of QlikView Server, there are no additional purchases required for mobile capabilities. Any QlikView license will just work.

ONE QLIKVIEW, ANY DEVICE

With QlikView, mobile access is no different than access to QlikView Server from any other client. The same apps are delivered with the same functionality on any platform. This allows users to benefit from a consistent experience across desktops, laptops, tablets, or smartphones. The power of the platform is anywhere, allowing for value to be generated anywhere.

RICH, ATTRACTIVE, HTML5 BASED INTERFACE

QlikView offers rich layouts, compelling visualizations, and a full set of touch interactions on mobile devices. By taking advantage of HTML5 technology, apps are automatically delivered with touch capabilities such as momentum-based scrolling, selection in charts and graphs, and multi-select. QlikView also supports device features like pinch to zoom, adjusting for screen orientation, and bookmarking QlikView apps for full-screen mode access from the home screen, resulting in a user experience on par with native apps.

QLIKVIEW FOR iOS APP – OFFLINE ACCESS AND THE BEST OF BOTH WORLDS

QlikView on Mobile operates in both a mobile browser setting and within the QlikView for iOS app. The QlikView for iOS app adds a disconnected mode for iPad that delivers your QlikView apps even when you're offline. Users can define views to take offline, through a combination of QlikView bookmarks and dimensions, and can download these views to the device. When offline, users can launch the saved QlikView apps, browse all the tabs and objects, and select from available views through a native menu interface.

This approach allows for a 'best of both worlds' experience. Full business discovery and data exploration is available when connected, and when disconnected, the same apps, rendered in the same manner, are available in offline mode with all tabs and objects browsable and a series of selectable downloaded views. And because users themselves can create the bookmarks which serve as the basis for offline views, reliance on report writers to predict their offline needs is reduced. Users get more information than reporting when offline, full business discovery when online, and the ability to define their own offline views.

SECURE AND MANAGEABLE

QlikView on Mobile leverages QlikView's enterprise-proven server architecture. It gives organizations a combination of control at the center and flexibility at the edges. Because management and security are server capabilities in QlikView, the same access to apps and data entitlements apply regardless of the device used. Developers benefit from a 'build once deploy anywhere' approach that reduces the burden associated with maintaining multiple versions of apps. And any data that does reside on a device, in the iOS app for example, is encrypted using the highest levels of available encryption for maximum protection.

Not Just Gorgeous, But Genius

There are many mobile BI tools on the market, and more are on the way. Many of these products are marketed based on one key attribute: they look great. But it's important to consider the real value that can be unlocked through mobile BI for both business groups and IT departments. Helping real people solve real problems requires more than just great looking reports or visualizations. With QlikView, Business Discovery is engaging, visually appealing, and valuable.

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Appendix

LINKS TO RELATED QLIKVIEW TECHNOLOGY WHITE PAPERS

Business Discovery: Powerful, User-Driven BI
http://www.qlikview.com/us/explore/resources/whitepapers/business-discovery-powerful-user-driven-bi

The Associative Experience: QlikView's Overwhelming Advantage
http://www.qlikview.com/us/explore/resources/whitepapers/the-associative-experience

What Makes QlikView Unique
http://www.qlikview.com/us/explore/resources/whitepapers/what-makes-qlikview-unique

QlikView on Mobile Data Sheet
http://www.qlikview.com/us//~/media/Files/resource-library/global-us/direct/datasheets/qlikview11/DS-QlikView-on-Mobile-EN.ashx

QlikView for iOS Data Sheet
http://www.qlikview.com/us//~/media/Files/resource-library/global-us/direct/datasheets/DS-QlikView-for-iOS-EN.ashx

QlikView on Mobile Web Site
http://www.qlikview.com/us/explore/products/qv-for-mobile

MOBILE DEMO APPS AND VIDEOS

Mobile Videos
http://www.qlikview.com/us/explore/products/qv-for-mobile

Mobile Demos
http://us.demo.qlikview.com/index.aspx

End Notes

[i] QlikTech came out as a Leader in this study. For more information, see the January 27, 2011 Gartner report, "Magic Quadrant for Business Intelligence Platforms."

[ii] According to Gartner, data discovery software will be a $1 billion market in its own right as soon as 2013. See the June, 2011 Gartner report, "Emerging Technology Analysis: Visualization-Based Data Discovery Tools."

[iii] You can ask questions in many ways using QlikView, all with the click of a mouse or a tap of the finger on a touchscreen device. See the post and video on the Business Discovery Blog, "Many Ways to Ask Questions with QlikView," at http://bit.ly/HKhogu.

[iv] "Predicts 2011: New Relationships Will Change BI and Analytics", Gartner Research, November 25th, 2010