



SOCIAL BUSINESS DISCOVERY: OPTIMIZING DECISION MAKING

A QlikView White Paper

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qlikview.com

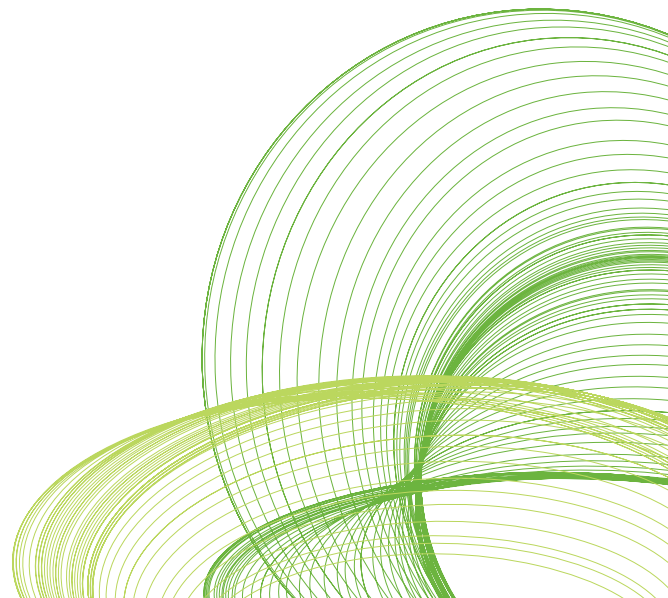


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People Are at the Heart of All Decisions

BI (business intelligence) software has long been touted as the route to insight and better business decisions. But powerful business insight comes not just from data, and not just from what one person sees and thinks. It comes from the combination of varied viewpoints and the conclusions and compromises people reach both formally and informally.

Traditional BI doesn't account for two important realities:

- **Decisions are social events.** We make decisions large and small by combining the data available to us (everything from movie times to sales results to stock prices) with the opinions, advice, experiences, expertise, and recommendations of people we trust. For example, a search engine can help you find hundreds of hotels in Beijing, but you need social input — such as reviews or recommendations — to decide on a hotel that suits your preferences, needs, and budget. At work, people arrive at pretty much all important decisions through discussion and collaboration.
- **Empowered consumers are bringing social sensibilities into the workplace.** Several consumer trends are driving a tectonic shift that's taking place in the BI software market: search, apps, mobility, and social networking.¹ Social networks like Twitter, Facebook, and LinkedIn are enabling hundreds of millions of people to share information, connect with each other, and develop robust relationships — with no technology background or training required. In their personal lives, people are using intuitive software to ask questions and share expertise, insights, and experiences with people in their networks—and they want the same opportunities at work.²

With traditional BI, though, users have to manually connect the dots between data-based insights and insights gleaned through interactions with peers and colleagues. Users are forced to switch tools and contexts (for example, using the ALT + tab key combination on a PC or pushing the home button on an iPad) and use email, enterprise collaboration platforms, consumer and enterprise social networks, text messaging, the telephone, and other tools to discuss what they are seeing in their BI applications. Organizations that can best connect the dots into a seamless, streamlined experience for users have the potential to introduce new levels of agility, responsiveness, and competitiveness into their business.

When we talk about social BI, we're talking about more than just repackaging of existing capabilities like emailing bookmarks, downloading to spreadsheets, or accessing BI content via a portal. Social Business Discovery means far more than just a bunch of technology options that the user has to pull together manually. We are talking about giving users choices as well as tools that fit the way they work and discover.

WHAT IS BUSINESS DISCOVERY?

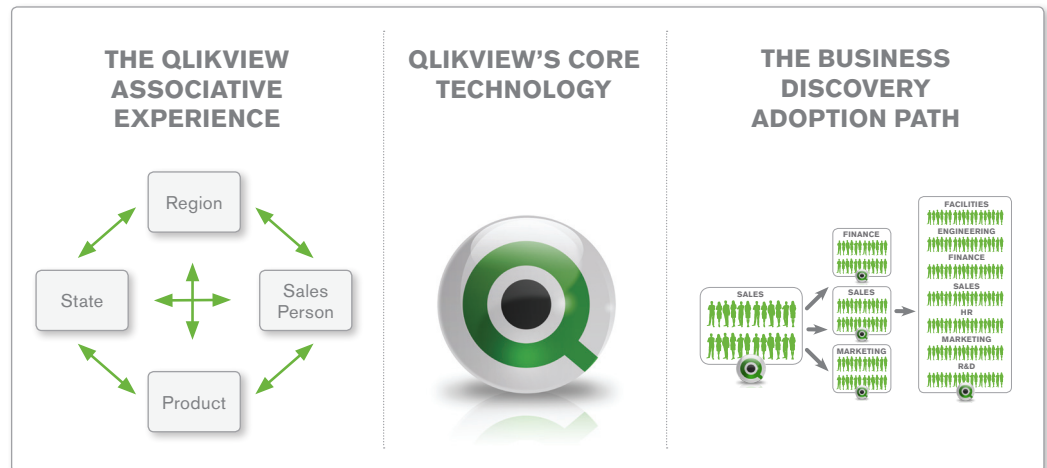
Business Discovery is user-driven BI that helps people make decisions based on multiple sources of insight: data, people, and place. Users can create and share knowledge and analysis in groups and across organizations. Business Discovery platforms help people ask and answer their own stream of questions and follow their own path to insight — on their own and in formal or informal groups. Business Discovery platforms deliver insight everywhere, an app model, mobility, remixability and reassembly, and a social and collaborative experience.

What Makes QlikView Unique?

QlikView is the leading Business Discovery platform.³ It enables users to explore live data, make discoveries, and uncover insights they can use to solve business problems in new ways. Business users can see hidden trends and make discoveries like with no other BI platform on the market. Three factors, when taken together, make QlikView unique (see Figure 1):

- **An associative experience for users.** With QlikView, business users conduct searches and interact with dynamic dashboards and analytics from any device. They drill up, down, and across data, asking and answering streams of questions on their own and in groups and teams. QlikView provides direct — and indirect — search. It illuminates the power of gray — the value of seeing not just the data that is associated with the user's selections, but the data that is not associated. The QlikView associative experience works the way the peoples' minds work, giving users access to unexpected business insights.
- **QlikView's core technology.** QlikView is an in-memory BI pioneer. In-memory is important for performance, but it takes a lot more to deliver a Business Discovery platform. As long as BI solutions are query- and cube-based, maintaining associations in the data requires hand coding — even if they use in-memory technology. It's what QlikView *does* with in-memory technology that makes a difference. QlikView has an inference engine that maintains associations in the data automatically. It calculates aggregations on the fly as needed for use by multiple people. It caches data in memory, compresses data down to 10% of its original size, and optimizes the power of the processor(s) for a super-fast user experience.
- **The Business Discovery adoption path.** QlikView penetrates organizations by solving significant business problems that traditional BI solutions can't address. Typically, it all starts with the free personal edition of QlikView (qlikview.com/download). New users install QlikView, get to work, and begin deriving value immediately. Their workgroup or team follows suit. Adoption spreads. As multiple departments bring in QlikView, IT gets involved to support a broad-scale deployment. With QlikView, IT professionals are not tasked with building a massive semantic layer, writing reports, and creating queries. Instead, IT assembles data, delivers relevant data to groups of users, enables self-service BI, and ensures security and scalability of the Business Discovery platform.

Figure 1: What Makes QlikView Unique?



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Collaboratively Create Analytic Apps

Often, the notion of self-service BI means users can grab data from its source (typically a single source) and work with it locally on their own – often in an Excel spreadsheet. But what if business users could gain new perspectives by connecting data sources that hadn't been connected before, creating new charts and visualizations, and discovering and adding to analysis someone else has started? How do they refine their ideas by sharing their work and collecting contributions from others?

With the QlikView Business Discovery platform, the very process of creating analytic apps is collaborative. BI app developers and business users can:

- **Build and share QlikView objects.** QlikView gives business users access to corporate dashboards and analytics, along with the power to create and share perspectives. If users have a perspective they gain through creation of a new object (e.g., chart, graph, map, or table) or sheet (tab) they can put this object or sheet on the QlikView Server and decide who to share it with. We call these collaboration objects. A BI app developer can then incorporate this object back into the core document design, if desired, for sharing with a broader set of users.
- **Author in-context notes and comments throughout the lifecycle.** From the very first prototype, which may be no more than a set of list boxes, to deployment to the full set of targeted users, and on through end of life, BI app developers and business users can post notes and respond to other peoples' notes. Right there in the context of the analytic app, developers and users can communicate about changes needed to the app's design, new or easier ways to view data, or additional data sources they might like to include.

WHAT IS SOCIAL BUSINESS DISCOVERY?

In QlikTech's vision of the future of Business Discovery, a social and collaborative experience is front and center. Using concepts from the consumer world, social Business Discovery enables business users to collaborate on discoveries and generate multiplicative insights. Users collaborate on creation of analytic apps and can define and answer their own questions in formal or informal groups. They communicate with each other in real time and asynchronously to collaboratively explore data, forge paths to discovery and insight, and arrive at decisions. They explore Business Discovery apps through a social lens to find the data and insights that are most relevant to them. With social Business Discovery, people can make unexpected discoveries that lead to better decisions and organizations can streamline the decision-making process.

- **Co-create in real time.** During the creation of a QlikView app, a BI app developer can start a real-time collaborative session with the business champion—or anyone else. While talking on the phone or Skype, for example, the two can work with the same QlikView session. When one user creates a new chart, the other sees it immediately and can move it around the sheet or modify it. One user might want to create a bar chart. The other might say, "Let's try this as a scatter chart and see what happens." They can create their charts and lay them out side by side on the screen. They can manipulate each other's charts as they discuss options and move forward through the rapid analytic app development process.

Communicate Questions, Answers, and Insights

With social Business Discovery, users can create and share knowledge and analysis in groups and across organizations. They can ask and answer their own stream of questions and follow their own path to insight — in formal or informal groups. Social Business Discovery facilitates communication among stakeholders in a decision and helps organizations unblock the flow of institutional knowledge.

SHARE ANALYSIS WITH BOOKMARKS

Bookmarking is the ability to share the state of a dashboard or app with others. With QlikView, the state of an app is determined by the selections the user has made (the filters applied). When users find something interesting in a QlikView app, they can bookmark the app and share that bookmark with others. When others click on the bookmark, they see the app in the state in which it was when the bookmark was created. The result is effectively an interactive, shared report a starting point for users to explore the data further. From a bookmark, users can review decision results and move to action.

DISCUSS AND RECORD OBSERVATIONS IN CONTEXT

Most BI applications are intended to give multiple people access to the data they need to get their jobs done. Yet the experience of using BI software is usually solitary. The trouble with this is that:

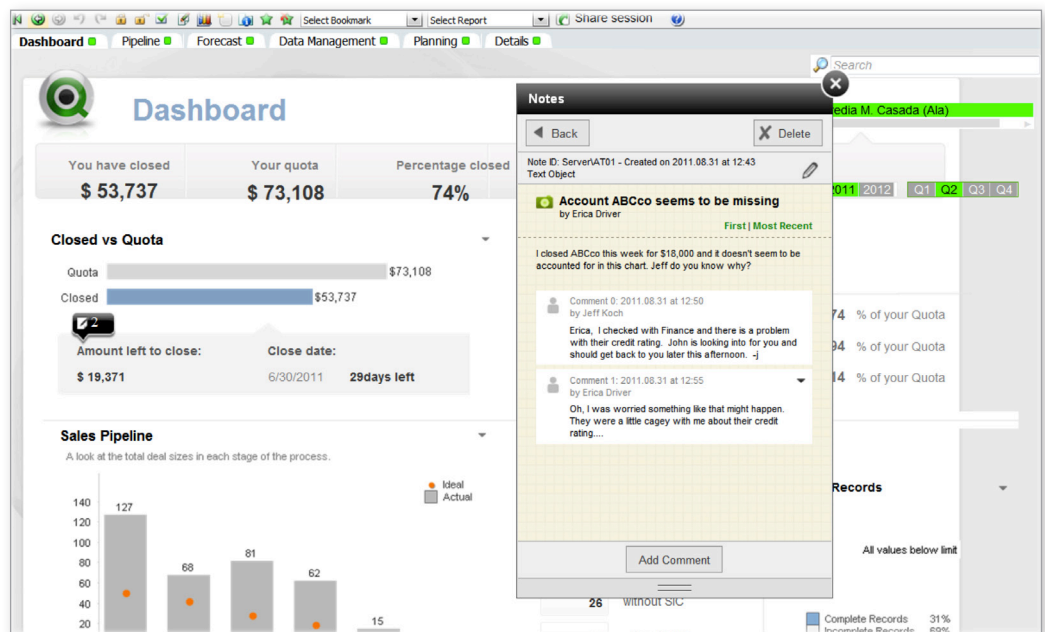
- **Collaboration shouldn't be inhibited.** With traditional BI, someone logs into an application, retrieves the data he or she needs, and closes the application again. When people need to collaborate about a business problem, they may talk about the data they see in the BI application, perhaps while displaying the application on a wall in a meeting room using a laptop plugged into a projector. Or a user may email a question about the data to someone else and then wait for an answer.

- **We need more ways of tapping into the wealth of institutional knowledge.**

BI users traditionally have no visibility into who else actively uses an application, or what questions or observations others may have had about the data. Multiple people may have had the same question, but each of them has to find an answer independently. They may arrive at a variety of different answers, depending on their roles or functions or who they ask. And, tragically, one user may have found a groundbreaking insight in the data – something that would have benefited numerous others – if only the others had known about it.

With QlikView, users can record their observations right there in the analytic app, for all to see – all who have security permissions, that is (see Figure 2). Others can reply with comments and a threaded discussion can emerge. Entire conversations about the data can take place right there inside the app. Users can capture snapshots of their selections (bookmarks) and include them in the discussion so others can quickly and easily get back to the same place in the analysis when reviewing a note or reply. A threaded discussion can later serve as a record of how a decision was made.

Figure 2: Qlikview Users Can Discuss and Record Observations in the Context of the Business Discovery App



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SHARE APPS IN REAL TIME FOR A FASTER PATH TO DECISION MAKING

Licensed QlikView users can invite others — even those who don't have licenses — to participate in live, interactive, shared sessions. All participants in a collaborative session interact with the same analytic app and can see others' interactions in real time. From their tablet or desktop or laptop computer, users can share selections and test scenarios together to better uncover insights, solve problems, and make decisions.

QlikView's collaborative sessions capability helps improve the quality of business decisions for geographically-distributed and mobile users who are working in teams to analyze information—or anyone who wants a faster path to insight, regardless of where they are. With a Business Discovery platform that provides real-time collaborative sessions, organizations can encourage collaboration, more effectively support users, and enable people to come to decisions more quickly and effectively — thereby increasing productivity.

LEVERAGE EXISTING SOCIAL NETWORKS

Collaboration knows no borders. A typical business user may have multiple interactive tools open on their desktop and mobile devices at any one time, including Facebook, Google+, LinkedIn, Salesforce Chatter, Twitter, and Yammer. With social Business Discovery, users can take bookmarks from their BI platform and flick them back and forth among social and business networks, with no fear of breaching security policies. With this freedom, users can notify one another immediately using their network of choice when they're ready to start, continue, or conclude a dialog in advance of an approaching decision. Integration of Business Discovery apps with enterprise social software helps build out the context around data and provides another means of creating a lasting record of the factors that went into a decision.

As an example of enterprise social software integration, we have demonstrated a QlikView extension for Chatter so users can collaborate on data and analytics in their context of choice: within QlikView, or within Chatter (see Figure 3). Chatter feeds, comments, and more are embedded right into QlikView apps and dashboards. Users can participate in discussions about the data, sharing insights and collaboratively moving toward decisions. Chatter also pushes important updates to QlikView users so they can quickly respond to questions and participate in conversations.

Figure 3: Qlikview Extension for Salesforce Chatter



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PRESENT ANALYTIC CONTENT USING FAMILIAR PRODUCTIVITY TOOLS

While we increasingly hear about people displaying their QlikView apps during presentations at work, more than 100 million people around the globe are accustomed to creating business documents and presentations with Microsoft Word and PowerPoint. With a QlikView plug-in, users can run QlikView inside Microsoft Office applications. Users can bring a QlikView app into a PowerPoint presentation, for example, to share during a meeting. Even while in the context of the PowerPoint, the QlikView app is fully interactive.

Explore Relevant Apps and Insights Through a Social Lens

Traditional BI typically deals with large pools of data culled from data warehouses. This requires IT to organize, segment, and deliver that data to requestors. With social Business Discovery, "data wranglers" can make data accessible and interactive for a select number of individuals, workgroups, or departments. Business users can segment data on their own according to their business need. This is critical because the conversation around the data is only as useful as the data itself.

Social Business Discovery brings to the workplace the same familiar social gestures people use informally every day for photos, music, purchases, and other online activities. With social Business Discovery, users can quickly and easily organize, explore, and discover analytic apps that they have security rights to access. They can find apps that are highly relevant to them and the people they trust. They do this with powerful search as well as social capabilities such as "likes," favorites, and tags. They can see which apps trusted colleagues have commented on. They can "follow" people who contribute to valued apps.

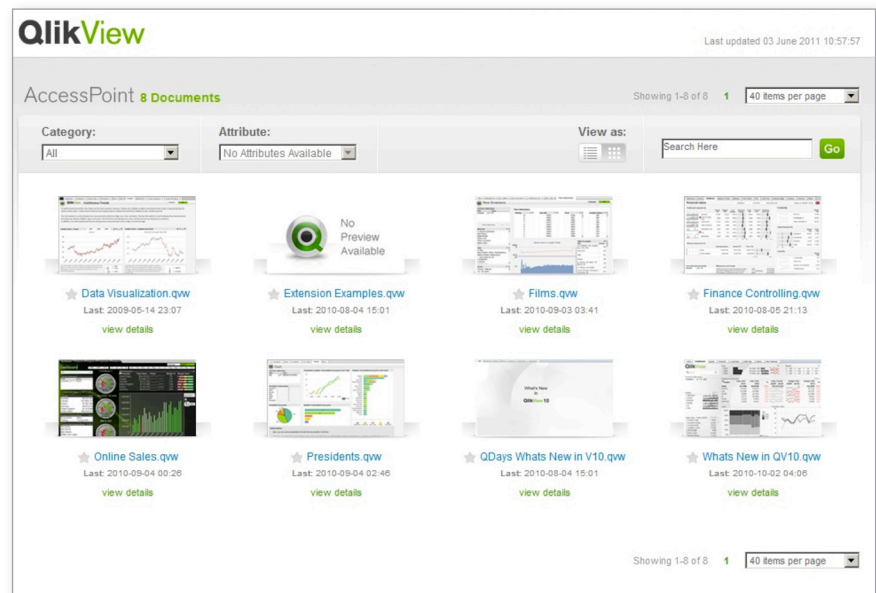
HOW WOULD YOU PUT SOCIAL BUSINESS DISCOVERY TO WORK?

- When working in teams to analyze information, would it help improve the quality of business decisions if people could jointly interact with Business Discovery apps together in real time sharing selections and testing scenarios to better uncover insights and solve problems?
- When making decisions, would it help teams come to the right decisions more quickly if people could share insights through notes and snapshots directly in the context of Business Discovery apps, and permit others to comment on them — and could later go back and look at these annotations to determine how decisions were made?

While social Business Discovery is still in a nascent stage, QlikView is on its way to enabling users to discover apps through a social lens with:

- **A user-friendly portal experience.** QlikView's AccessPoint portal provides a user-friendly experience for people who access QlikView apps via QlikView Server (see Figure 4). AccessPoint is fast and easy to use, with a modern design. Users only see the apps that they have security rights to access. Administrators can assign characteristics, attributes, and a searchable description to documents to make them easier for users to find and organize. Business users can easily search for and “favorite” apps and sort them in a detailed view.
- **Integration with enterprise portals.** QlikView integrates with Microsoft Office SharePoint Server, which enables business users to embed entire QlikView apps — or, with the QlikView web part for use with Microsoft SharePoint add-on, individual QlikView objects such as charts, list boxes, and graphs — into SharePoint portals and collaboration sites. QlikView apps and objects can display alongside other related decision-making inputs such as documentation, traditional BI applications, or CRM or supply chain applications. This integration helps organizations increase the return on their investment in SharePoint by improving collaborative decision making and helping to preserve a record of how decisions were made.

Figure 4: AccessPoint Has a Clean, Friendly Look and Feel



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QlikView Lives in a Big, Social World

One of the questions we sometimes get is, “By integrating with third-party social and collaboration platforms, aren't you taking the spotlight off QlikView's built-in social and collaboration capabilities?” Our answer is a solid “no.” We see QlikView as an open, social platform that fits into a big, broad world of other social and collaborative technologies.

Our position is that the QlikView Business Discovery platform should be available to users in whatever context users want it. Some people—or people at some times—want access to social and collaboration tools right there in their decision app, in the moment when they have an observation. At other times, they may want to access a decision app while someone brings up a point during a discussion taking place in a team workspace or on the enterprise social network.

There's no one-and-only answer — no one-size-fits-all approach to delivering Business Discovery apps that enable users to create, communicate, and explore in just the right context. Some organizations — or parts of organizations — will choose to deploy Business Discovery platforms that have embedded social and collaboration capabilities. For others, the approach will be to deliver BI capabilities to users in a broader social or collaborative context. Either way, QlikView offers a way forward to optimized decisions and better-run organizations.

Appendix

RELATED QLIKVIEW WHITE PAPERS AND TECH BRIEFS

What Makes QlikView Unique, August 2011

<http://qlik.to/pftOZn>

Business Discovery: Powerful, User-Driven BI, July 2011

<http://qlik.to/qbA9wv>

The Associative Experience: QlikView's Overwhelming Advantage, October 2010

<http://qlik.to/eC8aKP>

RELATED QLIKVIEW BLOG ARTICLES

"QlikView + Salesforce Chatter = Collaborative Decision Making," August 31, 2011

<http://qlik.to/qkBFHZ>

"Analyze the Tweetstream with QlikView," August 24, 2011

<http://qlik.to/oVJlkC>

"Business Discovery Frees IT to Focus on its Core Competencies," August 22, 2011

<http://qlik.to/pbd4fl>

"Donald Farmer's Take on Business Discovery," July 26, 2011

<http://qlik.to/pHflon>

"QlikView Supports Multiple Approaches to Social BI," June 24, 2011

<http://qlik.to/k6IR5q>

"Social BI: How Do People Work, and What Tools Are Available?" June 22, 2011

<http://qlik.to/mz7lkl>

"What's the Right Context for Delivery of Social BI?" June 20, 2011

<http://qlik.to/mPdzsL>

End Notes

- ¹ People's expectations of business software have changed dramatically during the last decade. Applications from Google and Apple invite users to click on an icon, interact with a simple, friendly interface and become instantly productive. The search bar, status box, "like" button, and multitouch screen have transformed the way people explore, consume, and share information. See the July, 2011 QlikView White Paper, "Business Discovery: Powerful, User-Driven BI" (<http://qlik.to/qbA9wv>).
- ² According to Gartner, business social networking systems prove popular with users who are already familiar with consumer tools such as Facebook and Google+, and who would like similar enterprise networking tools appropriate for internal confidential conversations. See the August 25, 2011 report, "Magic Quadrant for Social Software in the Workplace" (available only to Gartner subscribers).
- ³ QlikTech is the only vendor among those Gartner categorizes as "data discovery vendors" to make it into the Leaders quadrant in the 2011 Magic Quadrant for BI Platforms. See the January 27, 2011 Gartner report, "Magic Quadrant for Business Intelligence Platforms." You can download the report in its entirety here: <http://qlik.to/eUtiXT>.
- ⁴ On July 21, 2011, Microsoft announced in its year-end earnings release that the company has sold more than 100 million licenses of Microsoft Office to date (<http://qlik.to/nLLM66>).