The BI & Analytics Survey 21

The voice of the BI and analytics community

Vendor Performance Summary

A summary of the headline results for

QlikView

BARC

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Introduction

This report is split into two main sections – The Analyst Verdict and The Customer Verdict - to give the reader a balanced overview of the product's capabilities, strengths and weaknesses from both a customer and analyst point of view.

The first section - The Analyst Verdict - is a product evaluation and vendor assessment reflecting the opinion of BARC's team of experienced BI analysts. It provides detail on the vendor and its strategy, as well as the technical and functional capabilities of the software.

The Customer Verdict is based on the results of The BI & Analytics Survey 21, the world's largest and most comprehensive survey of business intelligence end users, conducted in the spring and summer of 2020. In total, 2,591 people responded to the survey with 2,136 answering a series of detailed questions about their use of a named product. Altogether, 33 products (or groups of products) are analyzed in detail.

The BI & Analytics Survey 21 offers an unrivalled level of customer feedback on issues ranging from the purchase cycle right through to deployment. Products are assessed and compared across a broad range of 36 criteria (KPIs) - including critical measures such as business value, customer satisfaction, customer experience and competitiveness. The extent of adoption of a variety of trending technologies - including mobile BI, embedded BI and cloud BI – is also measured.

About BARC

BARC is a leading enterprise software industry analyst and consulting firm delivering information to more than 1,000 customers each year. Major companies, government agencies and financial institutions rely on BARC's expertise in software selection, consulting and IT strategy projects.

For over twenty years, BARC has specialized in core research areas including Data Management (DM), Business Intelligence (BI), Customer Relationship Management (CRM) and Enterprise Content Management (ECM).

BARC's expertise is underpinned by a continuous program of market research, analysis and a series of product comparison studies to maintain a detailed and up-to-date understanding of the most important software vendors and products, as well as the latest market trends and developments.

BARC research focuses on helping companies find the right software solutions to align with their business goals. It includes evaluations of the leading vendors and products using methodologies that enable our clients to easily draw comparisons and reach a software selection decision with confidence. BARC also publishes insights into market trends and developments and dispenses proven best practice advice.

BARC consulting can help you find the most reliable and cost-effective products to meet your specific requirements, guaranteeing a fast return on your investment. Neutrality and competency are the two cornerstones of BARC's approach to consulting. BARC also offers technical architecture reviews and coaching and advice on developing a software strategy for your organization, as well as helping software vendors with their product and market strategy.

The Analyst Verdict – QlikView April 2020

Product characterization

QlikView is a dashboard and 'associative' analysis product based on in-memory technology. Qlik was an early mover in visual analytics and data discovery with QlikView. It is positioned as a solution for building guided analytic apps targeted at business users, enabling them to analyze data without requiring developer support for a new dashboard or report.

Vendor

Vendor profile	Qlik
Vendor	Qlik
Product	QlikView
Offices	Worldwide
Employees	2,000+
Customers	48,000
Revenues (2019)	Not disclosed

Qlik, originally founded in 1993 in Lund, Sweden, moved its headquarters to the United States in 2005 after raising funds from several venture capital firms. QlikView, the company's only product at the time, was very aggressively marketed after the VC investment. This created attention and traction, and in 2010 Qlik went public on NASDAQ. In 2016, Qlik was acquired by a private equity company and delisted from the stock exchange.

Qlik was a one-product company until the general availability of Qlik Sense in 2014. Today, the vendor provides a portfolio of data management and analytics offerings. With this stack, Qlik focuses on helping customers manage their data, providing analytics to analyze the data and features to transport insights to end users. This product review describes QlikView.

Strategy

The vendor pursues a platform approach which aims to empower data usage by providing a platform for all visual analytics needs and helping to find innovative ideas by navigating data using an 'associative' model. Qlik's front-end products use a common data engine called QIX (Qlik Indexing Engine).

Qlik's platform consists of several components including Qlik Sense, Qlik Core for developers, QlikView and Qlik NPrinting, for enhanced printing and page-based layout. Qlik DataMarket is a marketplace for sourcing external data for analyses such as weather and currency information. In 2017 Qlik acquired Idevio, now called Qlik GeoAnalytics, to provide enhanced spatial analysis. The vendor has also strengthened its data management offering. Qlik Data Catalyst, formerly Podium Data, was acquired to broaden its feature set for data preparation and data catalogs. This was followed in 2019 by the acquisition of Attunity, a real-time data integration specialist.

The vendor's main front-end products are Qlik Sense and QlikView. QlikView was the vendor's first analytics product and the tool it became famous with. It is a dashboard and analysis product that

pioneered in-memory technology in BI to deliver exceptional performance for highly responsive analyses and interactive dashboards. It was the first tool marketed under the “data discovery” and “modern BI” terms to differentiate it from traditional BI suites. The solution was positioned as a self-service platform targeted at business users, enabling them to analyze data without having to consult developers for new reports, dashboards or analyses on new data. Qlik Sense is a visual analysis and dashboarding product providing immediate analysis results to users. It is powered by QIX and gives flexible access to data sets stored in memory. Based on the in-memory and ease-of-use heritage of QlikView, Qlik Sense is positioned as the strategic offering for new customers for most use cases. However, at least one QlikView release per year with product improvements ranging from technical to integration in its own portfolio will be provided. Qlik NPrinting is a report generation, distribution and scheduling application which can be used to compile page-oriented reports based on Qlik Sense or QlikView content.

The “land & expand” sales strategy and the business-user-oriented messaging are a decisive part of Qlik’s success. Its visual analytics products are clearly designed to appeal to business users, who can achieve results without waiting for assistance from IT. Qlik consistently emphasizes ease of use, rapid deployment, integration and high performance over more complex technical, architectural and administrative strengths.

Qlik addresses accounts of all sizes: from small business to enterprise standard deployments in large accounts. Nevertheless, a clear shift towards larger buying companies can be observed. The vendor has an extensive partner channel and it addresses mid-market accounts largely through these partners. Qlik has a web-based program for direct sales to small companies and addresses the large enterprise market jointly with large consultancy companies.

Architecture

QlikView was originally developed as a desktop solution with a Windows client (QlikView Desktop). It can still be used this way, and often is, but Qlik has moved away from the desktop to a web-based architecture (QlikView Server). QlikView applications (“apps”) can be hosted on the web as guided apps (e.g., dashboards or analytical applications) or delivered as complete apps with the data to users who use the local client to access server-based apps. The QlikView Publisher component is used to handle data reloads and the distribution of QlikView apps to users. Qlik NPrinting provides centralized report creation and distribution using data and visualizations from QlikView. The Qlik DataMarket offers data-as-a-service capabilities to facilitate the use of trusted external data.

QlikView apps contain both data and interactive visualizations, delivered in a single file. The tool offers two main clients: a Windows client and a web client. QlikView Desktop is used for data preparation (extract, transform, load) as well as for building applications. The web client is more restricted in terms of development compared to QlikView Desktop, but there is also some flexibility for business users to modify the apps and share changes with colleagues. In addition, QlikView provides an HTML5 mobile client for accessing applications from mobile devices, as well as a native iOS app for iPad that wraps the HTML5 mobile client (a so-called hybrid app) and enables users to create views of data to take offline.

Data extraction, transformation and loading (ETL) processes with QlikView are usually done using a proprietary scripting language. Qlik Sense is more user-friendly in this regard, with profiling and wizards for simpler data integration tasks, but complex transformation tasks still require scripting. These tasks are complemented by wizard interfaces and carried out in QlikView Desktop by IT or trained power users. Although integration is still ongoing, Attunity can be used for additional data integration and management tasks. Attunity products have been rebranded with new names such as Qlik Replicate, Qlik Compose and Qlik Enterprise Manager.

In QlikView, loaded data is automatically de-normalized, removing the complexity that normalization usually brings with it. The product adds most value when it comes to disjointed data, because it links up the data logically with reduced manual effort based on common field names and new data profiling features. Data is stored in a set of tables, which are connected by single columns with the same name. It is then compressed for efficiency and loaded into memory. For data sets too large to fit in-memory, QlikView offers a hybrid approach using a capability called Direct Discovery. This allows some data elements to not be loaded into the QlikView data model, but still be available for query purposes.

The data, the associative data model and visualizations are stored in QVW files in QlikView. In addition, the product supports QVD files, which are also used by Qlik Sense. Since QlikView 12, the product has used the same QIX engine as Qlik Sense. To leverage QlikView data models, these files can be loaded directly into Qlik Sense. Note that only the data and data models are reused. Visualizations must be recreated as they rely on different technology, but publishing content to Qlik Sense is constantly being enhanced to facilitate the migration.

Front-end functionality

QlikView Desktop is a single-mode tool without a separate design mode. This makes it a little difficult to distinguish between application design and analysis, although Qlik addressed this shortcoming with Qlik Sense. Each QlikView application is a set of charts, graphs, maps, list boxes and other objects organized into multiple tabs. QlikView keeps all objects in context across all the screens, so that dashboards can provide a highly aggregated view of the data with the ability to jump to detailed analysis in the same application. External content including other QlikView applications can also be called. The Bookmark function, which stores a data context and can contain user comments, adds additional power.

The main data display objects are interactive visualizations, including charts, graphs, tables and list boxes. QlikView offers a good selection of advanced chart types. It also has the ability to connect to third-party objects as so-called extension objects (any kind of visualization), which behave in the same way as native objects. Tables and pivot tables are also treated as a type of chart and share many properties with them. All in all, charts are highly interactive as the whole tool is optimized for an interactive user experience allowing business users to dig into details quickly and effortlessly. To support spatial analysis, Qlik delivers Qlik GeoAnalytics for QlikView (see Figure 1).

QlikView offers page formatting and formatted export. There are two main approaches for formatted printing output offered by QlikView: the built-in QlikView Report Editor or Qlik NPrinting. QlikView Report Editor allows users to create simple reports by dragging charts and tables into the Report Editor design sheet. This capability does not have the depth and completeness of typical formatted reporting tools. Qlik NPrinting offers Microsoft Office, pixel-perfect and web reports based on data and objects from QlikView and supports centralized scheduling and distribution of reports with recipient specific data. Qlik NPrinting is largely suited to technical users rather than business users.

QlikView provides an interactive and intuitive user interface for app consumers. Information is presented to the user using a “green/white/gray” concept. Selections are highlighted in green, associated data is represented in white, and excluded (unassociated) data appears in gray. QlikView also provides a strong search feature that not only indexes and finds metadata but also the content in all fields loaded.

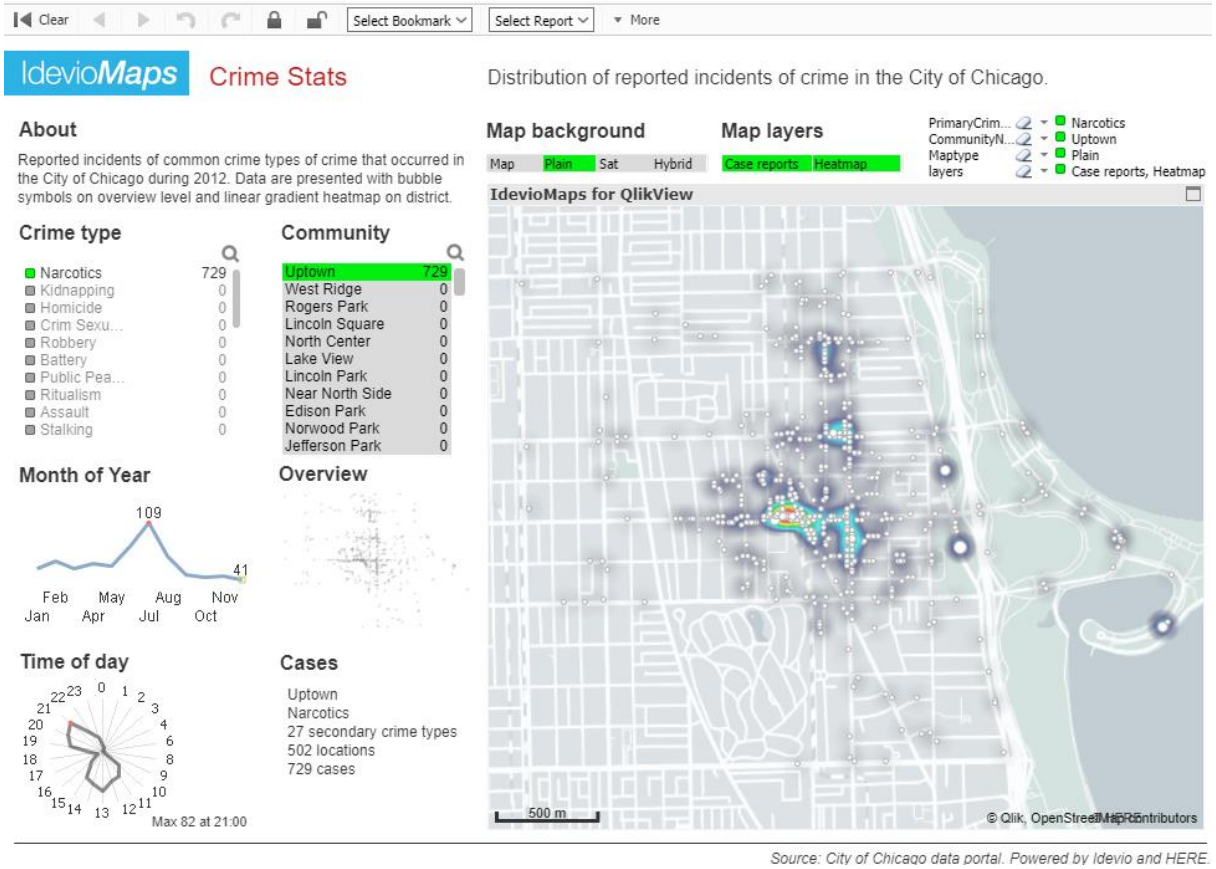


Figure 1: Qlik GeoAnalytics integrated in QlikView application

Overall product scores

Functional evaluation	
Criteria	**Score**
Formatted reporting	6
Dashboards	5
Ad hoc reporting	2
Analysis	5
Advanced analytics	1
Planning	N/A

10-point rating scale: 0 (not supported) to 10 (best)

Use case analysis	
Criteria	**Score**
Self-service analytics	★★☆☆☆
Data discovery & visualization	★★☆☆☆
Data preparation	★★☆☆☆
Deployment options	★★☆☆☆

5-point rating scale: 0 (not supported) to 5 (best)

Tool evaluation	
Criteria	**Score**
Maturity	★★★★★
Pace of development	★☆☆☆☆
Integration in overall analytics portfolio	★★☆☆☆

5-point rating scale: 0 (worst) to 5 (best supported)

Strengths and weaknesses	
Strengths	**Weaknesses**
• Easy-to-use navigation in data for end users through 'associative' queries and interactive visualizations • Responsive in-memory processing for large data volumes • Decent formatting and charting features • Fast implementation and application modification • Leading geo analysis using Qlik GeoAnalytics	• Data consistency issues between several models if master data and KPIs are not aligned • Limited separation of data and visualizations: QlikView QVW files can contain both • Complex data integration tasks require scripting • Few new features in QlikView as Qlik Sense is the vendor's primary analytics front end

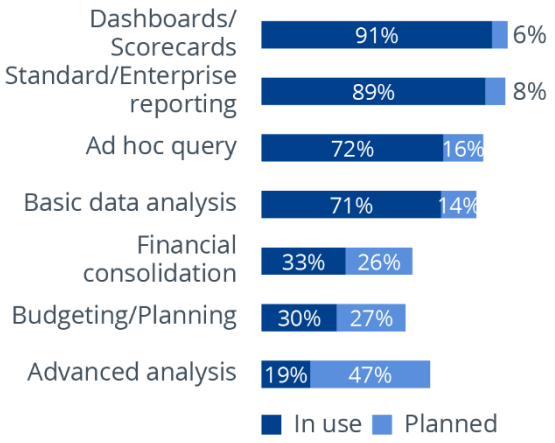
The Customer Verdict – QlikView

This year we had 114 responses from QlikView Cloud users. At the time of the survey, 92 percent of them were using version 12 and 8 percent version 11.

User and use case demographics

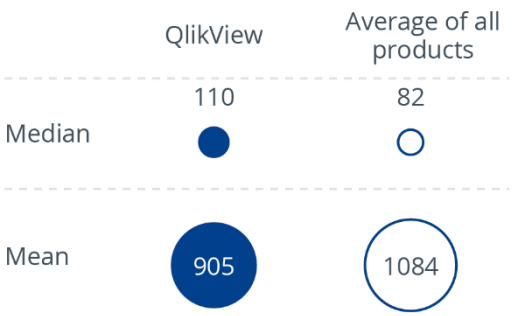
Current vs. planned use

n=111



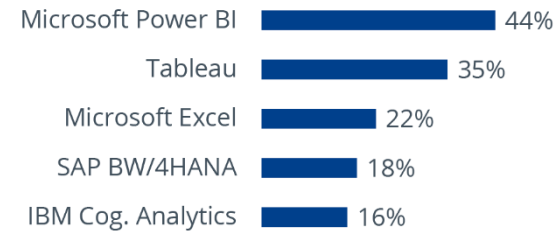
Number of users using QlikView

n=111



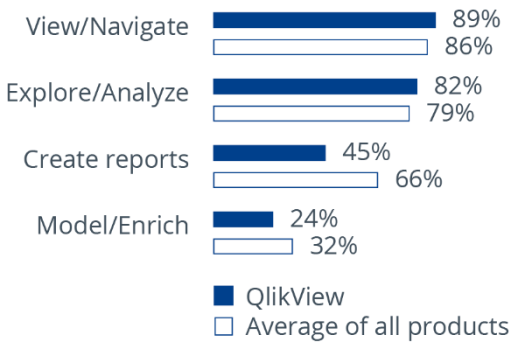
5 products most often evaluated in competition with QlikView

n=111



Tasks carried out with QlikView by business users

n=114

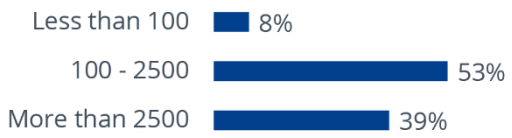


Percentage of employees using QlikView

n=111

Company size (employees)

n=114



In this year's survey, customers report using QlikView mainly for traditional BI topics such as dashboards and standard/enterprise reporting. In general, these usage scenarios are similar to those of Qlik's other analytics front end, Qlik Sense. 45 percent of business users create reports and 24 percent perform model/enrich tasks. Both these figures are below the survey average.

QlikView is mostly used in mid-sized and large companies by a relatively high proportion of users. A median of 110 users per customer work with QlikView. However, the mean value of 905 users indicates that there are currently many much larger deployments in production.

Peer groups

The BI & Analytics Survey 21 features a range of different types of BI tools so we use peer groups to help identify competing products. The groups are essential to allow fair and useful comparisons of products that are likely to compete.

The peer groups have been defined by BARC analysts using their experience and judgment, with segmentation based on two key factors:

- Usage scenario - functional peer groups are mainly data-driven and based on how customers say they use the product.
- Regional focus - is the vendor a large international vendor with a truly global presence or does it focus on a particular region? We also take into account the location of survey respondents.

QlikView features in the following peer groups:

- Dashboarding-focused products
- Self-service analytics-focused products
- Large international BI vendors

The KPIs

The BI & Analytics Survey 21 provides the reader with well-designed KPI dashboards packed with concise information, which can be absorbed at a glance. The KPIs all follow these simple rules:

- Only measures that have a clear good/bad trend are used as the basis for KPIs.
- KPIs may be based on one or more measures from The BI & Analytics Survey.
- Only products with samples of at least 20 - 30 (depending on the KPI) for each of the questions that feed into the KPI are included.
- For quantitative data, KPIs are converted to a scale of 1 to 10 (worst to best).
- A linear min-max transformation is applied, which preserves the order of, and the relative distance between, products' scores.

For more details on the KPIs, see the "Sample, KPIs & Methodology" document.

Why organizations buy QlikView

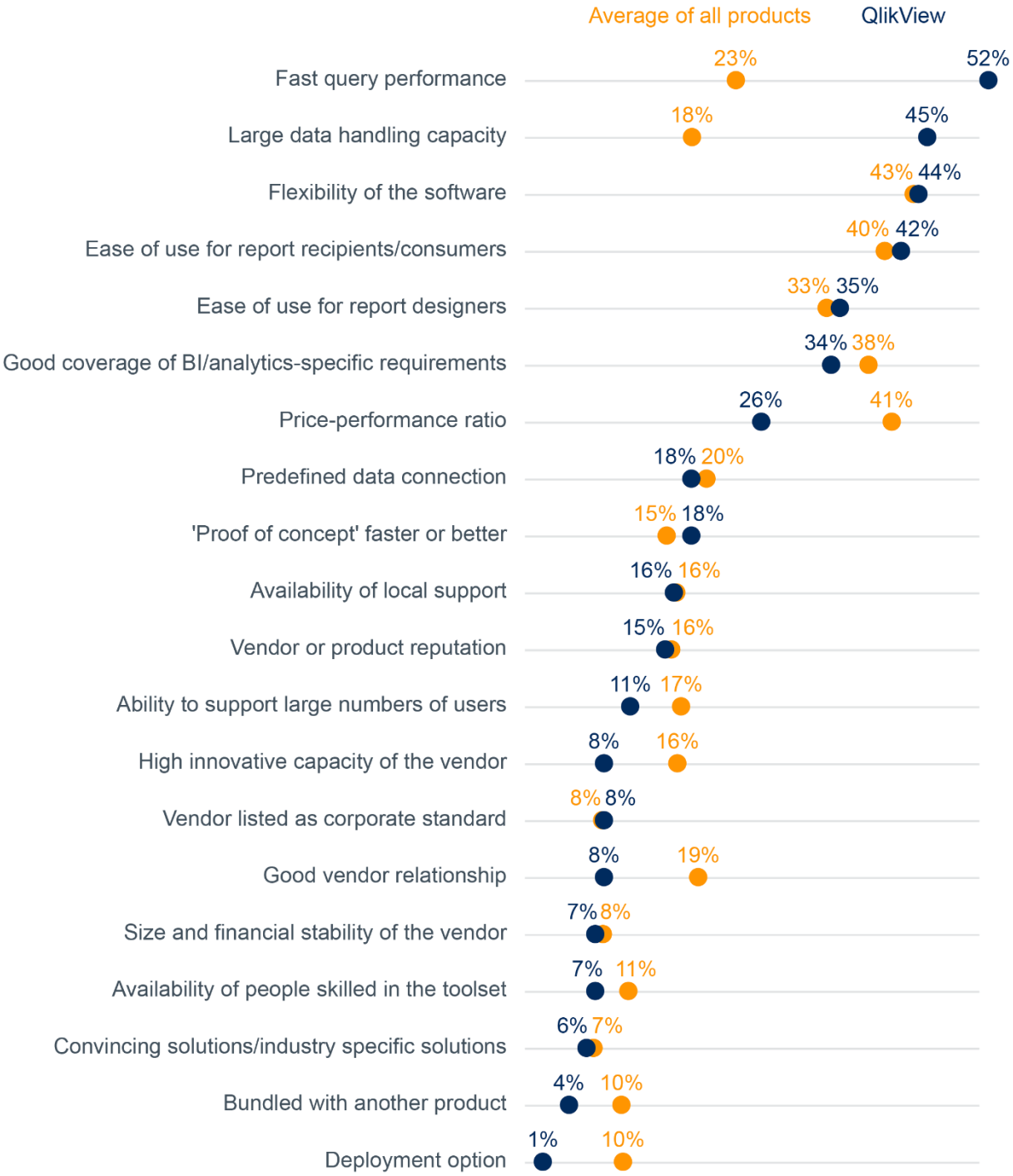


Figure 2: Reasons why QlikView is purchased vs. average of all products (n=99)

Problems encountered by QlikView users

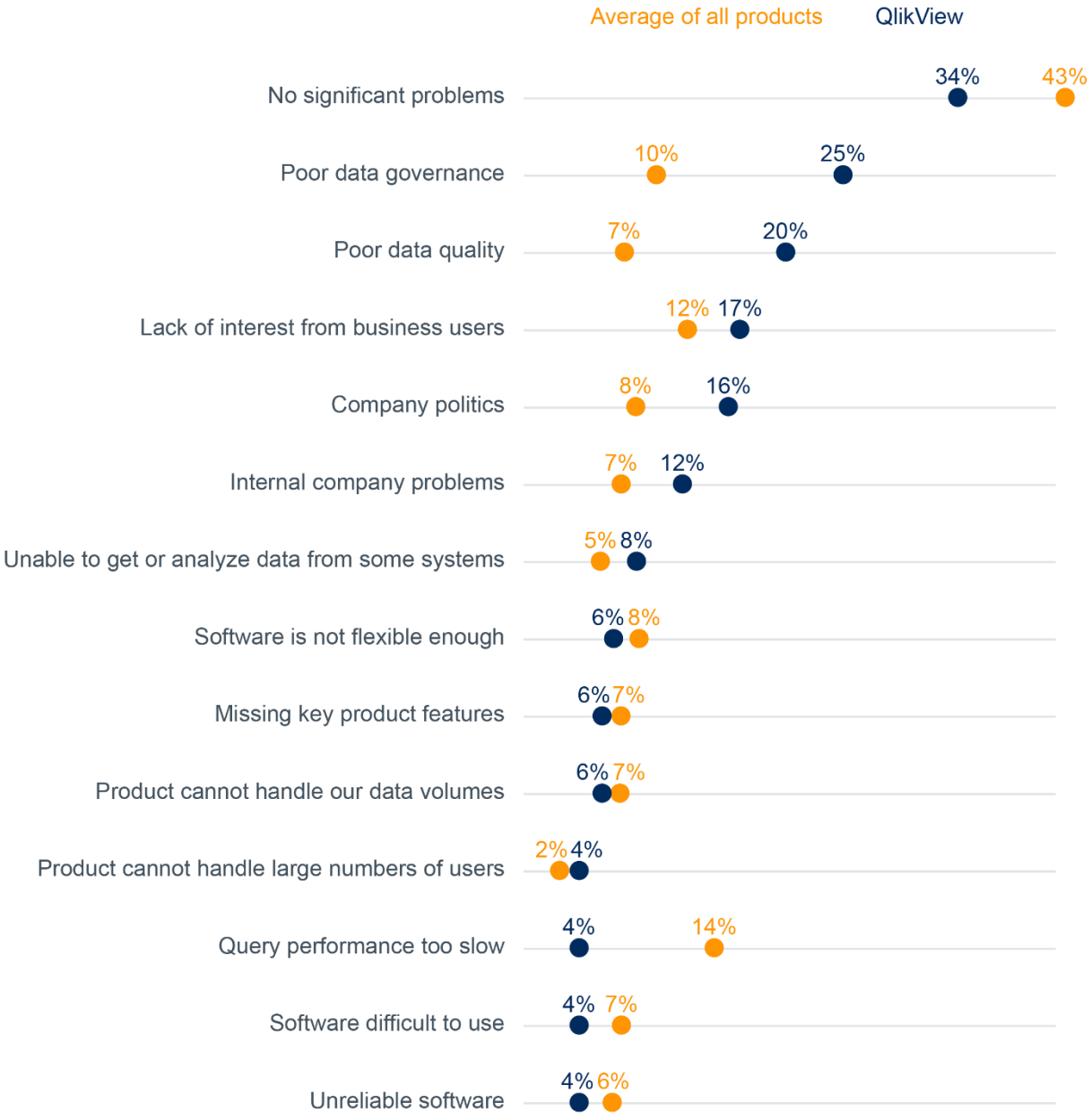


Figure 3: Problems for QlikView users vs. average of all products (n=104)

KPI results for QlikView in the 'Dashboarding-focused products' peer group

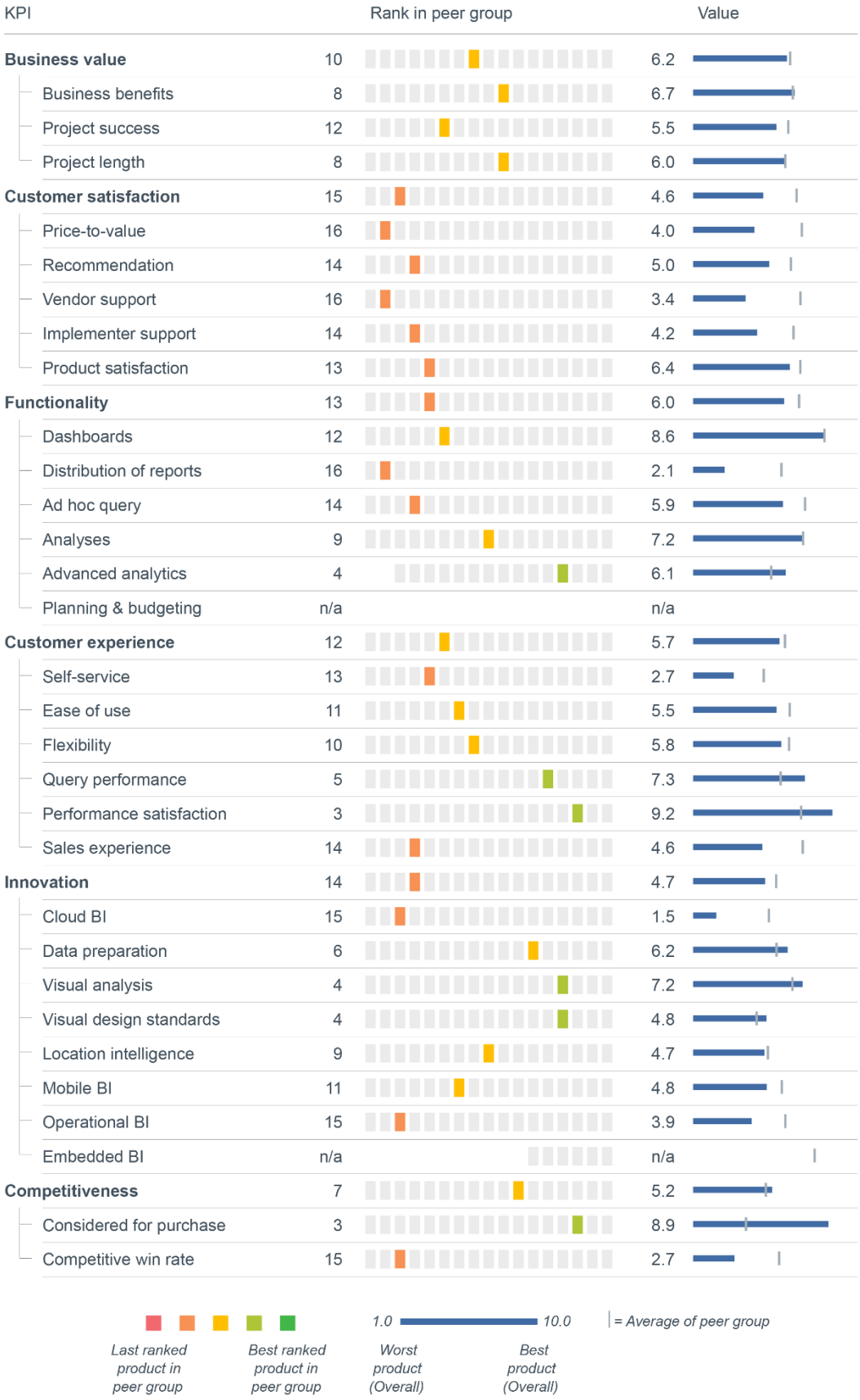


Figure 4: KPI results for QlikView in the 'Dashboarding-focused products' peer group

KPI results for QlikView in the 'Self-service analytics-focused products' peer group

KPI	Rank in peer group	Value
Business value	5	6.2
Business benefits	5	6.7
Project success	6	5.5
Project length	4	6.0
Customer satisfaction	9	4.6
Price-to-value	8	4.0
Recommendation	9	5.0
Vendor support	9	3.4
Implementer support	7	4.2
Product satisfaction	8	6.4
Functionality	7	6.0
Dashboards	7	8.6
Distribution of reports	8	2.1
Ad hoc query	9	5.9
Analyses	5	7.2
Advanced analytics	4	6.1
Planning & budgeting	n/a	n/a
Customer experience	8	5.7
Self-service	8	2.7
Ease of use	6	5.5
Flexibility	5	5.8
Query performance	3	7.3
Performance satisfaction	2	9.2
Sales experience	7	4.6
Innovation	9	4.7
Cloud BI	9	1.5
Data preparation	5	6.2
Visual analysis	4	7.2
Visual design standards	3	4.8
Location intelligence	8	4.7
Mobile BI	6	4.8
Operational BI	9	3.9
Embedded BI	n/a	n/a
Competitiveness	6	5.2
Considered for purchase	3	8.9
Competitive win rate	8	2.7

Figure 5: KPI results for QlikView in the 'Self-service analytics-focused products' peer group

KPI results for QlikView in the 'Large international BI vendors' peer group

KPI	Rank in peer group	Value
Business value	2	6.2
Business benefits	2	6.7
Project success	4	5.5
Project length	3	6.0
Customer satisfaction	8	4.6
Price-to-value	9	4.0
Recommendation	8	5.0
Vendor support	8	3.4
Implementer support	6	4.2
Product satisfaction	4	6.4
Functionality	7	6.0
Dashboards	3	8.6
Distribution of reports	12	2.1
Ad hoc query	12	5.9
Analyses	7	7.2
Advanced analytics	5	6.1
Planning & budgeting	n/a	n/a
Customer experience	7	5.7
Self-service	14	2.7
Ease of use	3	5.5
Flexibility	5	5.8
Query performance	3	7.3
Performance satisfaction	3	9.2
Sales experience	5	4.6
Innovation	8	4.7
Cloud BI	12	1.5
Data preparation	2	6.2
Visual analysis	4	7.2
Visual design standards	5	4.8
Location intelligence	9	4.7
Mobile BI	8	4.8
Operational BI	11	3.9
Embedded BI	n/a	n/a
Competitiveness	8	5.2
Considered for purchase	3	8.9
Competitive win rate	13	2.7

Figure 6: KPI results for QlikView in the 'Large international BI vendors' peer group

Customer Verdict – QlikView

Customer feedback summary for QlikView

Above-average customer feedback

- 52 percent of customers say they buy QlikView because of its fast query performance, and they are rarely disappointed. As a result, QlikView ranks among the leaders for 'Query performance' and 'Performance satisfaction' in all of its peer groups. This impressive result is made possible by Qlik's leading in-memory query engine, for which it became famous in the first place.
- As well as query performance, customers are also attracted by QlikView's large data handling capacity. This is the number two reason why the product is purchased, and it is cited by QlikView customers more than twice as frequently as the survey average. 'Large data handling capacity' has consistently been one of the reasons to buy associated with the highest benefits gleaned from analytics and BI over the years. With this in mind, it is not surprising that QlikView delivers greater 'Business value' and 'Business benefits' than its competitors in the 'Large international BI vendors' peer group.
- An above-average percentage of QlikView customers report having 'No significant problems' with the product, a clear indicator of its maturity and stability in productive deployments of all sizes. Directly software-related problems such as 'Unreliable software', 'Software difficult to use' and 'Query performance too slow' are ranked at the very bottom of the issues observed by QlikView users, and all of them are reported less often than average.
- QlikView achieves good results in the 'Visual analysis' KPI. Besides offering interactive associative (set-based) analysis, the product supports the creation of tailor-made interactive applications, which can be used by end users from business departments. These dashboards can incorporate drill paths to detailed data or other applications. All this functionality allows the implementation of users' individual data analysis needs in a guided fashion.
- The 'Considered for purchase' KPI shows how frequently a product is involved in software evaluations. It reflects the product's brand strength and market presence. QlikView is a solid, mature software and is well known in the analytics and BI space. It helped Qlik to grow into a large international company, and one that went on to substantially broaden its portfolio. QlikView is ranked third in all its peer groups in this KPI.

Below-average customer feedback

- The most frequently reported problems experienced by QlikView customers are 'Poor data governance' and 'Poor data quality'. QlikView relies on data sets stored in isolated files. This was inherited from its initial desktop-based approach to analytics and BI. While this approach delivers flexibility for data preparation and is the key to Qlik's performance, replicating data to multiple targets clearly poses a threat to consistency if not handled correctly. This shows why Qlik is continually investing in improving its data management capabilities to create a true and governed end-to-end platform.
- While many visual analysis-oriented tools are purchased to support business users through interactive analyses, the results often need to be distributed to a large number of users in all departments. QlikView customers do not rate the software highly on its capabilities for the 'Distribution of reports'. They expect options to export neatly formatted reports into various output formats and deliver personalized content triggered by alerts or schedules.

Customer Verdict – QlikView

- Poor results in the ‘Self-service’ KPI clearly show that QlikView has fallen behind the leading tools in a market segment it formed and shaped. Today, customers expect more intuitive and guided interfaces with little or no need for coding when creating analytics content. Data preparation with QlikView demands technical expertise, as does Qlik NPrinting.
- Another below-average result for QlikView comes in the ‘Ad hoc query’ KPI. The solution is best suited to creating predefined, guided applications which give end users flexible paths to navigate the data in a predefined environment. Business users expect simple access to a broad range of consistent and detailed data coupled with quick visualizations. QlikView leverages performance-optimized yet isolated data sets based on replicated data that cannot answer many business questions.
- While many buyers still consider purchasing QlikView, its ‘Competitive win rate’ is very low. The software is not being developed at the same rate as competing products, causing a gap in functionality, features and usability.

Customer quotes for QlikView

Favorable user reviews

- It is the most robust BI tool on the market.
- Powerful, almost intuitive programming, flexible interface, can dock anywhere. Fast results.*
- An awesome product that can bring insight into even small enterprises. We have used it since 2013 and are happy to continue with it.
- A very handy tool - Swiss army knife of BI.
- One of the best-of-class business discovery software tools on the market.

Critical user reviews

- Promises to be much easier than reality shows. But almost everything can be realized somehow. Good knowledge of scripting and modeling is indispensable in any demanding project.*
- Solid engine under the hood. Lots of customization possibilities, GUI experience could be better (so move to [Qlik] Sense instead, and lose some of the customization possibilities).

** Translated by BARC*

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