

## Big Data can produce a lot of value – but only if you know how to claim it.

Big Data has tremendous potential. But its value doesn't come from the collection of information; that's just the starting point. The real value of Big Data comes from your ability to use that stored information to uncover new insights – and then present those ideas to promote better business decisions.

Modern BI solutions can increase that value exponentially by lowering the barrier to entry with user-friendly solutions. This allows more people within your organization – not just the data scientists – to access, analyze and collaborate on your data.

## How does making Big Data accessible to your team drive value?

- ✓ It provides more detailed insights into key aspects of your business to drive better, more confident decisions.
- ✓ It fosters a culture of curiosity, where people are encouraged to experiment with ideas and validate them through data analysis.

When you make Big Data available to everyone, the next big idea that transforms your business can come from anyone – not just data scientists.

#### What is Big Data, anyway?

Big Data is data that's too large or complex to be easily managed with standard databases and software.
But since every company has different requirements and capabilities, it's a subjective term. What's "big" to one organization might be "average" to another.

# Want to get more value from your Big Data investment?

#### Here are 10 ways you can make a change:



1. Choose the right method for accessing Big Data.



2. Search for a solution that intelligently combines data.



3. Give your entire organization access to Big Data.



4. Make it easy for users to find the data they need.



**5.** Drive collaboration to drive innovation.



Use an agile analytics environment that can meet the needs of every user.



7. Provide access to analytics solutions anywhere, on any device.



8. Implement a scalable solution that grows with your changing needs



 Make sure that your BI platform can easily adapt to future technologies.



10. Work with data integration technology that supports a DataOps approach.

## Choose the right method for accessing Big Data.

When it comes to how you access and analyze your data, there's no one-size-fits-all approach. Different companies have different needs, use cases and infrastructure configurations.

The method – or combination of methods – you use will depend upon the user requirements you need to meet, weighed against the trade-offs you're willing to accept.

What to consider when choosing the means for accessing your data.

- 1. How many rows of data will you need to support?
  Millions? Billions?
- 2. Will your data need to be accessible to nontechnical users?
- 3. Will you run analyses only on your entire data set or also on select segments?
- 4. Will you need to support a smooth, highly interactive experience for users?
- 5. Which is more important to you: flexibility or performance?

# 2. Search for a solution that intelligently combines data.

Identifying and collecting the data you need from a wide variety of sources can be a challenge. But what really matters is whether you can integrate all that data together – no matter where it comes from or how it's formatted – and discover all the possible connections within it. In most cases, combining data "eats Big Data for breakfast." Companies that can synthesize fragmented and varied data sources will gain an advantage.

Look for BI solutions that use an associative model, which lets you explore all the connections within all your data. That way, your users will always have access to a complete view of your business, so they can make better, more informed decisions.

### See the whole story with an associative model.

Unlike traditional data models – which limit what data you can see, how that data should be connected, and what queries you can perform – an associative model identifies every relationship across all your data. This allows every user not just the data scientists to quickly and easily explore as they see fit, using interactive selections and keyword searches to uncover unexpected connections.

# 3. Give your entire organization access to Big Data

When Big Data first emerged, its massive potential could be realized only by a select few – mostly data scientists and analysts. Non-specialists just didn't have the knowledge, tools or experience to explore Big Data in a meaningful way.

Things have changed. Now it's imperative to make Big Data accessible to your business users – the people closest to your business, who know which questions to ask and who understand which insights will have the most impact.

The right BI solution can get you there, giving users access to the data they need while keeping governance and management in the hands of IT. With self-service BI, team members can use interactive dashboards to freely explore their data and gain insights, improving business processes and encouraging innovation throughout your organization.

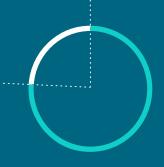
### What's driving the shift toward self-service analytics?

In a recent report, Forbes Insights surveyed 449 senior IT and business professionals to find out why they decided to move to a self-service model:



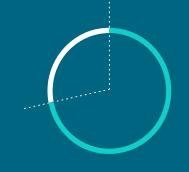
**62%** 

wanted more open access to data.



76%

wanted more timely analysis.



71%

wanted better-quality data and analysis.

# 4. Make it easy for users to find the data they need.

Business managers are increasingly expected to support their decision-making processes with hard evidence. But most don't have the tools or the skills they need to find answers within a massive, ever-growing data repository.

To help business users find these answers – and get more ROI from Big Data – you need to make it easy for them to explore their data. You can do it by providing BI solutions that:



Allow users to intuitively dive into data, without relying on IT to run queries and generate reports



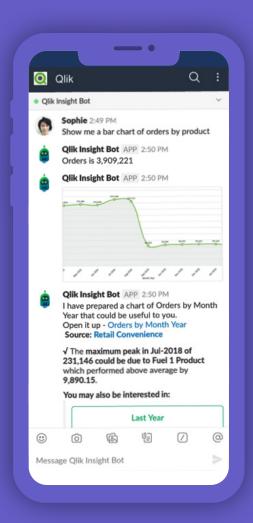
Offer natural language search capabilities that make it easy to locate information



Uncover relationships across disparate sources of data – and even discover the unexpected ways data *isn't* related



Present findings in clear, concise data visualizations



### What is natural language search, and how can it help?

With natural language search, users can perform queries using everyday, conversational language. It's extremely helpful for people who lack data expertise and may not know the technical terms needed to locate precise information within the database.

# 5. Drive collaboration to drive innovation.

If you can't share insights with your wider organization, you're missing out on the opportunity to expand on an initial idea and make it better. Worse, the people who don't hear about the discovery may end up repeating similar data explorations, resulting in a loss of productivity.

And it's not enough to simply share data. You have to share data in a way that doesn't invite chaos or undermine trust. Consider adopting an enterprise-grade BI solution – one that delivers both the freedom of self-service analytics (allowing every user to explore and share data) and comprehensive governance (controlling who has access to information, so everyone is working from a single source of truth).

With the right balance, you can harness the collective wisdom of your entire organization, combining the expertise of multiple teams and individuals to spread new ideas, foster discussion and drive innovation.

TIP: MAKE SURE YOUR BI SOLUTION IS PROPERLY GOVERNED.

Data governance ensures that access to data and analytics features is properly managed across your organization. Without the appropriate level of governance, errors, variations and redundancies can occur, causing delays and disruptions as users struggle to verify the truth in the data.

# 6. Use an agile analytics environment that can meet the needs of every user.

Keeping pace with a deluge of new information is no small challenge. The onslaught can make it difficult for business users to dig in, explore and get the answers they need in time to matter.

To keep up, you'll need to foster an agile analytics environment, where your IT team can quickly and incrementally build upon your BI solution to respond to the changing needs of business users.

For instance, as users become more comfortable with data, you may want to progress them from guided analytics to self-service BI, enabling them to explore more data on their own and drill into details faster. With an agile framework, it's easy to do exactly that, with no significant cost or development time.



### Using Big Data to boost sales and feed hungry customers.

Staying on top of your data means better service for your customers – and a better bottom line for you.

Learn how providing greater access to billions of records enabled a large pizza chain to improve everything from informal conversations to critical decisions.

**VIEW THE WEBINAR** 

7. Provide access to analytics solutions anywhere, on any device.

Whether on a train, at the airport or in a client meeting, today's teams expect remote access to their work. To meet these expectations, you need the ability to deliver analytics solutions in a variety of formats – anywhere and everywhere, with all the features your users expect.

In addition to providing direct access through a cloud-based or online portal, consider embedding analytics within company applications using open APIs. By delivering powerful analytics within the context of your users' everyday workflows, you can ensure that everyone will always have access to the information they need, right when they need it.

Embedding analytics provides a seamless user experience.

Self-service BI has brought the power of analytics to the masses. But for some users, gaining access to additional applications can be a challenge. That's why some products and organizations embed analytics directly into the familiar environments and applications that their users work with daily.

# 8. Implement a scalable solution that grows with your changing needs.

As a rule, Big Data keeps getting bigger. But no matter how much your data repository expands, your users will expect a smooth experience, without long wait times or interruptions. And most tools struggle to keep up.

To ensure that users can keep exploring data the way they want, adopt a BI platform that scales with your needs, delivering superior performance even as data volumes grow and apps become more complex. Your platform should employ multiple tools and methodologies so you can deliver an interactive, dynamic experience, no matter how much data you accrue.

Recent breakthroughs in indexing, caching and preparing very large and distributed data sets will help.

#### Don't forget performance.

As companies of all sizes increase their adoption of hyperscale data centers, performance will rise in the selection criteria for Big Data solutions. And performance becomes even more important in an IoT world, where more and more workloads will run locally or at the edge to avoid latency. In fact, architectures will soon be driven by where performance will be the most efficient.



# 9. Make sure that your BI platform can easily adapt to future technologies.

The technology to manage and explore Big Data is rapidly changing, providing better and faster ways to gain insights. But integrating the latest technologies into existing analytics platforms can be challenging – and sometimes impossible.

A truly modern BI platform will be able to quickly and easily integrate with new technologies. For example, open APIs can make introducing new capabilities to your existing solution as simple as adding a few lines of code.

Having an online community that's focused on custom development is also important. There, developers can help you stay current, and relevant, by easily collaborating with others to ensure that your product or solution keeps pace with the latest advances in technology.

#### What are open APIs?

An open API is a publicly available interface that developers can use to integrate third-party solutions into their own solution. Essentially, it enables two different applications to easily interact with each other. BI solutions that offer open APIs allow businesses to easily plug in to multiple solutions to perform specific functions that no standalone solution could do by itself.

# 10. Work with data integration technology that supports a DataOps approach.

You can accelerate the discovery and availability of real-time, analytics-ready data by having your Big Data repository be part of a data integration platform that automates data streaming, refinement, cataloging and publishing.

As organizations shift to modern BI and data management platforms, you should take a hard look at your legacy integration technology to make sure that it can support both Big Data and the key DataOps principles of quickly delivering business-ready data to accelerate time to insight.

#### **What is DataOps?**

Borrowing methods from DevOps – which combines software development (Dev) and IT operations (Ops) to improve the velocity, quality, predictability and scale of software development and deployment – DataOps seeks to bring similar improvements to data analytics by focusing on the practices, processes and technologies for building and enhancing data pipelines to quickly meet business needs.

## Big Data, big potential.

Big Data can transform your business. But to unlock its true power, you need to know how to fully use it. The right BI solution can help maximize your Big Data ROI by:



Providing a complete view of your business and the external forces that impact it



Facilitating better, data-driven decisions in every area of operations



Letting more users access and explore data, from anywhere at any time



Fostering a culture of inquiry, collaboration and innovation across your entire organization



Scaling as your business grows

## Why choose Qlik?

Go further, faster with true end-to-end data integration and data analytics solutions and the expertise you need to build a data-driven enterprise.

With our modern data analytics platform, you can:

- **☑** Empower everyone to explore with our unique Associative Engine
- ▼ Enhance data literacy through AI and natural language interaction
- Deploy with the convenience of SaaS and the choice of multi-cloud and on-premise

With Qlik, you can empower your analytics users to follow their curiosity, explore their data freely, and make transformative discoveries.

To start your free trial of Qlik Sense, or to learn more, click below.

**Start Free Trial** 

**Learn More** 



Qlik's vision is a data-literate world, where everyone can use data and analytics to improve decision-making and solve their most challenging problems. Qlik provides an end-to-end, real-time data integration and analytics platform to close the gaps between data, insights and action. By transforming data into active intelligence, businesses can drive better decisions, improve revenue and profitability, and optimize customer relationships. Qlik does business in more than 100 countries and serves over 50,000 customers around the world.

