10 Trends for BI
Discover the Future of Data
Last year, we moved beyond the “big data” buzz and actually started to do something with it, as more and more data moved into the hands of users who don’t have a traditional background in data science.

These users, known as information activists, wanted to go beyond merely consuming data and instead truly engage with it, using that data to spread new knowledge. Rather than relying on the experts, they sought out self-service business intelligence (BI) solutions, so they could make their own discoveries and craft engaging stories to inspire confident, data-driven decisions.

But, with the sheer amount of data constantly streaming in, information activists couldn’t keep up with all the prep and analysis required to transform raw data into real insights. Which brings us to the dawn of a new era.

Last year was the rise of information activism – what’s next on the horizon for BI?
The dawn of data literacy is upon us.

Today, with so much data out there – and more and more of it being generated all the time – it’s no surprise we’re approaching information overload. Rather than becoming more informed, people are getting more overwhelmed, finding it increasingly difficult to determine what’s accurate, what’s important, and what isn’t. This has led to what some are calling the “post-fact era” – a new age where data and facts lose their credibility, and where information that doesn’t support one’s existing beliefs is immediately disregarded. The result? Informed decisions go out the window.

There’s only one way to fight the post-fact era. We need to turn the tide on information overload and arm more people with the power of data.

**What is data literacy?**

To be truly data literate, you need to be able to:

- **Read data** – Understand different types of data, and the stories that data is telling.
- **Work with data** – Create, collect, clean, and manage data.
- **Analyze data** – Filter, sort, aggregate, compare, and otherwise manipulate data to help uncover useful insights from it.
- **Make arguments with data** – Use data to create compelling arguments and narratives that build understanding, change hearts and minds, and inspire action.

In this eBook, you’ll learn about each of these trends, and how they’ll shape the BI landscape today and tomorrow.
10 BI trends that will drive data literacy:

Fortunately, the BI trends currently in motion all point to an increasingly data literate world. Here are the 10 trends we think are next for BI:

1. Combining and associating data from disparate sources will lead to better insights.
2. Data viz will extend beyond analysis to the full information supply chain.
3. The adoption of cloud BI will reach its tipping point.
4. New BI smart features will augment intelligence, letting people focus on their strengths.
5. Blending the digital and physical will open new worlds of data.
6. Freemium BI will allow more people to explore data than ever.
7. Modern BI platforms will deliver self-service flexibility AND scalability, not either-or.
8. Embedded analytics will make data part of people’s everyday lives.
9. With strong ecosystems and collaborative networks, no data analyst is an island.
10. BI will branch out to hybrid platforms to do more.
Trend #1

Combining and associating data from disparate sources will lead to better insights.

Until recently, organizations mostly focused on collecting (some might say hoarding) as much data as possible. But without the ability to properly integrate and explore all of this data, much of it ended up going to waste.

Moving forward, businesses will increasingly bring together data from across their entire organization to create a single source of truth, exploring it as a whole to spot hidden connections. Data exploration will expand beyond restrictive linear models that limit discovery, and move to a more flexible associative model, where users can probe all the possible associations across all of their data.

And businesses won’t be limited to just internal data, either. Connecting data from both internal and external sources to one single, governed reference point – one that is immediately available for dynamic exploration at the speed of thought – will be critical for contextualizing, validating, and supplementing insights. Users will spend less time dealing with data errors and more time finding answers, easing the path to greater data literacy.

TREND #1 IN ACTION

Ryanair never misses a connection.

By consolidating data from across their entire organization, Ryanair increased operational efficiency, improved in-flight retail offerings, and optimized their supply chain.

WERE YOU PLANNING ON USING THAT DATA?

90% of the information in data lakes will be useless by the end of 2018.

60% of the data that organizations consider mission-critical will be external by 2020.
Trend #2

Data viz will extend beyond analysis to the full information supply chain.

In the past, data visualizations were generally used only to aid in the analysis of data. But moving forward, visualizations will be regularly used to add insight throughout the entire process of reading, working with, analyzing, and making arguments with data.

With more people (including non-experts) getting a better view of their data, particularly in areas that previously had little or no visibility, it will be that much easier to trust, understand and derive answers from that information – footholds on the path to greater data literacy.

What is the Information Supply Chain?

The Information Supply Chain is the full sequence of processes used to transform raw data into tangible insights – everything from collection and preparation to visual analysis and storytelling.

TREND #2 IN ACTION

O’Neill – Visualizing the future.

O’Neill uses visualizations to not only generate reports, but also to carry out in-depth visual analyses on a wide variety of data, including store locations, customer segments, climate data, and more.

GET THE WHOLE STORY >
Trend #3

The adoption of cloud BI will reach its tipping point.

Recent data from Gartner shows that the adoption of cloud-based BI solutions is finally reaching its tipping point, with more than half of businesses either already taking advantage of the cloud, or seriously considering it.

Cloud BI is particularly of interest to SMBs and small teams within enterprise organizations. With no infrastructure to set up, cloud analytics can be easier and faster to deploy than on-site BI solutions. With easy access to powerful analysis tools from anywhere, cloud BI also puts data directly into the hands of business users, so they can explore data and get answers fast. Plus, cloud solutions scale as teams grow, without the need for regular maintenance or extensive IT resources, making it ideal for organizations with changing needs.

Together, cloud analytics will make it easier for any business to access enterprise-grade analytics from anywhere, giving them new opportunities to engage with data and increase their overall data literacy.

CLOUD ANALYTICS ARE BECOMING THE NORM.

50% of companies will use some form of cloud-based BI in 2017.

Gartner, Magic Quadrant for Business Intelligence and Analytics Platforms, Rita L. Sallam, Cindi Howson, Carie J. Idoine, Thomas W. Oestreich, James Laurence Richardson, Joao Tapadinhas, 16 February 2017

TREND #3 IN ACTION

“The potential to provide automated visualization and reporting services to my clients, regardless of infrastructure or source system.”
- Founder, Small Business Computer Software Company

“The ability to scale up and deploy to a lot of users without on-premises installations.”
- IT Architect, IT Management & Services Company

SEE HOW THE CLOUD HELPED OTHER BUSINESSES >
Trend #4

New BI smart features will augment intelligence, letting people focus on their strengths.

Self-service analytics are becoming more sophisticated, incorporating advanced statistical models so that everyone can find insights, not just the data scientists who created the models.

And, with the addition of machine learning, non-data-experts can now speed time to insight even more. Features like automated data prep, smart pattern recognition, and auto-generated charts help take some of the burden off teams, so they can uncover answers faster and easier.

But these smart features are about augmented intelligence, not artificial intelligence. People – with their unique ability to think strategically, ask questions, and make non-linear connections – are still at the heart of the process; this technology simply allows us to focus on the sort of creative thinking and problem-solving we’re best at.

Together, these new models and smart features will make the path to data literacy that much smoother.

TREND #4 IN ACTION

Lennox keeps its cool with automation.

Lennox, a manufacturer of heating and cooling systems, saves countless hours of work each month by reusing reports and automating distribution around the globe.

GET THE WHOLE STORY >
Trend #5

Blending the digital and physical will open new worlds of data.

The growth of IoT, virtual reality, geospatial, and other connected device technologies means that huge new streams of data will soon be coming down the pike.

This data has the unique ability to help businesses better understand how these devices are used, and how they – and their users – interact with the physical world. But data analysts and the data literate will both need to figure out what to do with the influx of new data coming from these emerging technologies.

In addition, more consumers will soon be exposed to analytics – products like the Fitbit fitness tracker now offer web portals that provide users unprecedented access to their personal data, allowing them to first dip their toes into the world of data literacy.

Pokémon Go: Augmented Reality catches on.

Interest in the fusion of digital and physical worlds hit a new high point with the massive success of the Pokémon Go Augmented Reality (AR) game. The game inspired the collective imagination of the business world with the possibilities of connected devices, and innovators rushed to understand the game’s popularity in the hopes that its success could be replicated across other industries.

TREND #5 IN ACTION

Rentokil uses connected devices to squash risks.

The pest control experts at Rentokil analyzed data from more than 20,000 devices to deliver higher levels of proactive risk management against the threat of infestation.

GET THE WHOLE STORY >
Trend #6

Freemium BI will allow more people to explore data than ever.

As competition in the analytics industry heats up, more vendors will be offering low-cost or “freemium” self-service BI solutions as a way to bring potential customers onto their platforms.

This will be a boon for data literacy rates, as the barrier to entry is lower – or even eliminated – with self-service BI. People who would otherwise be priced out of the self-service market and forced to merely consume information will now be able to start their own personal journey toward data literacy by getting hands-on with data sooner.

TREND #6 IN ACTION

Polycom gets teams connected with analytics using a no-cost solution.

The telecommunications company Polycom empowered their marketing team to measure campaign effectiveness and drive sales by getting the team started with a freemium BI solution.

GET THE WHOLE STORY >
In the past, companies that wanted analytics had a choice to make: They could either have a flexible solution, where users throughout the organization could use data in any way that fit their needs; or they could have a scalable solution that was secured and controlled enough even for large enterprises to trust their data.

But now, with powerful modern BI platforms that combine self-service analytics with secure data governance, the tradeoff between flexibility and scalability will no longer be an issue. With self-service BI, everyone can freely explore their data, taking the burden off IT and putting data straight into the hands of those who need it. And with data governance, everyone is pulling from one trusted source of truth – so IT teams can rest easy, knowing they have the visibility and control they need.

Together, these robust BI platforms will make dispersing data discovery solutions a top priority, contributing to overall data literacy.
Trend #8

Embedded analytics will make data part of people’s everyday lives.

To differentiate and add new value to their products, software developers will be increasingly incorporating analytics into their applications to give both team members and consumers easy access to actionable insights.

By seamlessly embedding analytics into their products, developers are not only creating better user experiences backed by insight, they’re also making analytics available to less-skilled users who would otherwise not have access to data in the context of their day-to-day lives – helping increase both the relevance and overall level of data literacy among a wider population.

TREND #8 IN ACTION

Akindo Sushiro rolls embedded analytics into their business to better serve their customers.

Akindo Sushiro, the largest conveyor-belt sushi restaurant in Japan, embedded analytics into every plate for every roll in every restaurant, giving them the data they needed to help ensure product freshness, develop new menu items, and predict demand.
**Trend #9**

**With strong ecosystems and collaborative networks, no data analyst is an island.**

Although self-service analytics help individuals increase their own data literacy, they can also run the risk of inadvertently creating disconnected nodes of analysis, where individual discoveries are siloed off from the rest of the organization. In this environment, insights that could potentially deliver benefits across an organization are locked away in a single department, limiting their potential for more global transformation.

To put an end to silos and spread data-driven insights across entire organizations, companies will need to transform these nodes into networks, creating environments where every member of every team is able to connect on their data. To do so, they’ll need to bring together the following elements:

- Data from multiple, fragmented sources needs to be combined and properly governed to ensure it can be trusted.
- Ideas need to be captured, reused, and collaborated on to harness the insight, perspective, and experience of the entire organization.
- People need to be able to easily share their individual insights with all the people who would benefit from them.

By transforming these nodes into networks, organizations will benefit from higher-quality, more collaborative decisions and elevate the value of their analytical investments. The more people looking at the data, the better the insights, and the more data literate we all become.

**TREND #9 IN ACTION**

Wrightington, Wigan, and Leigh works together to cut ER wait times.

By displaying real-time ER data on monitors for the entire staff to see, healthcare network Wrightington, Wigan, and Leigh improved discharge levels, minimized readmissions, and significantly reduced delays in treatment.

**GET THE WHOLE STORY >**
The adoption of cloud BI will reach its tipping point.

As organizations increasingly look for mobility and flexibility in their data discovery platforms, so will their reliance on cloud-based BI. But that doesn’t mean that on-premises BI will be discarded. Due to the difficulty of moving enormous stores of data – known as data gravity – it’s likely that on-premises solutions will continue to be useful to many organizations for many years to come.

At the same time, it’s likely that a single cloud deployment won’t be enough for most organizations, as workloads and data likely won’t exist on the same platform. Instead, enterprises engaging in data analysis will need to draw a mix of resources, including on-premises, public, private, and edge computing.

With these hybrid solutions, data, workloads, and usage can now be hosted in a variety of different locations, across many platforms, providing greater flexibility in collection, parsing, and analysis, while still allowing for data to be centrally managed. More data to more people driving more ideas will directly contribute to an increase in data literacy, as end-users will be able to make better-informed decisions with a more diverse set of data.

TREND #10 IN ACTION

How can hybrid BI help?

“We get more business with the possibility of connecting to clients’ data and analyzing it on many different devices.”
- Partner Consultant, HR Consulting & Services Company

“We have the capability to manage clients by creating different streams, making governance easy.”
- IT Manager, Large Enterprise Health Care Company

“It’s flexible, easy to use, and can work simultaneously with different information sources.”
- Co-Founder, Retail Technology Company
Together, these 10 trends will lay the groundwork for greater data literacy, which in turn will help the continued rise of information activism. New platforms and new technologies will aid individuals on their path to data literacy, ushering in a new era where more people are more comfortable with data than ever.

By democratizing analytics, and better connecting people, data, and ideas, we’ll move that much closer to a culture that is more enlightened, more information-driven, and more fact-based. And that’s definitely a trend for the better.

Named a leader in BI by Gartner for seven years running, Qlik offers a complete portfolio of visual analytics solutions that are leading the way in BI trends and meeting the demands of a changing BI landscape.

An enterprise-grade platform designed for businesses of all sizes, Qlik is backed by the power of its unique associative model, which allows teams to freely explore connections across all of their data at the speed of thought. Users (including non-data scientists) can delve into massive amounts of data, from multiple sources, quickly and easily probing possible relationships as they follow their own path to insight.

And with self-service capabilities and unmatched governance, IT teams can finally give users the insights they need – without hassles or limitations. Nearly 39,000 customers rely on Qlik to unlock the hidden connections in their data, leading to smarter insights, more confident decisions, and ultimately, greater value for their business.
See the whole story that lives within your data.

qlik.com/whole-story