

Whitepaper

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# The Biggest BI Trends for 2018

## Introduction

Data analytics tools are getting smarter and more streamlined all the time. Who would have thought a decade ago that the BI platforms of today would have tools that can talk to you, mimicking natural spoken language? That a machine can learn from its own mistakes? That complex problem-solving tasks we once thought only a human brain could unpick are now performed by automation?

It's a fast-evolving world out there. Sisense (technology partner of LogicBay) keeps a collective watch on the pulse of the most vital developments. In this whitepaper, we'll share with you our top observations for the coming year, giving you a comprehensive overview of developments that will shape the BI landscape in 2018.

## Augmented Analytics

### What Is It?

Augmented analytics is a [set of approaches](#) for [automating data analysis](#) and business intelligence functions.

It draws on machine learning, artificial intelligence, and natural-language generation to automate data preparation, as well as insight discovery and sharing. Importantly, it allows business users and other non-data scientists within the organization to access these features.

## What Is The Trend?

Using new technologies to interact with data in more natural ways and bring analytics into our familiar environments.

## How Important Is It?

Gartner believes that this will be “[the next wave of disruption](#)” in the data analytics space, becoming a “dominant driver” by 2020.

## How Can It Help Me?

*“Augmented data discovery has the potential to shift organizations' analytic maturity, as the performance of root-cause analysis, predictive analysis, and prescriptive analysis will no longer rely exclusively on data scientists.”*

*- Gartner*

Augmented analytics is going to be huge because it makes faster, better quality insights more attainable by more people. Users of the BI platform will cut down how long it takes them to explore data and generate insights and will be able to dedicate a far greater proportion of their time to *acting* on those insights. It also levels the playing field for smaller companies to get world-class BI without a huge data science team.

[Take the sports industry](#), for example. Augmented analytics have become more and more important here ever since Billy Bean revolutionized the drafting process by introducing data analytics into the process; today on-field sensors collect live data during games, players increasingly use

wearable technology to track on-pitch performance for off-pitch analysis, and complex analytics has spread into every part of the game.

## Collaborative / Cooperative BI

### What Is It?

Collaborative BI means merging BI platforms and [collaboration tools](#) to improve the way teams make data-driven decisions. There's a strong focus on problem-solving, constructive communication and brainstorming ideas.

This can be applied to an organization's entire reporting and analytics platform, making it easier to share information and ideas, cutting down time wasted on duplicate effort, and helping teams to reach decisions faster.

### What is the Trend?

Collaborating between the business departments and IT as self-service analytics and data democratization become more mainstream.

### How Important Is It?

*"In 2017, collaborative analytics will take center stage as governed data becomes more accessible and cloud technology enables easy sharing."*

- [The Australian Business Review](#)

From shareable dashboards to built-in chat features, collaboration is set to take center stage in the way BI platforms evolve in the coming years. What's more, organizations that embrace this will reap the rewards, [according to Gartner](#):

*“By 2020, organizations that offer users access to a curated catalog of internal and external data will derive twice as much business value from analytics investments as those that do not.”*

- Gartner

## How Can It Help Me?

Knowing what your colleagues are working on, harnessing the full knowledge and skill base of your organization to tackle a tricky issue and gathering multiple perspectives on a problem can only be a good thing.

Sharing insights and projects across the whole enterprise encourages transparency, brings IT and business teams closer together, and keeps everyone pulling in the same direction.

Here at Sisense, we are already experimenting with bots that naturally fit a user's everyday workflow. The Sisense Bot is powered by advanced natural language technology and backed by Sisense's high-performance analytics engine. This is a faster, more intuitive way of understanding and engaging with data through text-based questions and plain text responses in individual or group messaging apps like Slack and Skype. You can [join our Beta program](#) here.

# Creating a Data-Driven Culture

## What Is It?

Creating a data-driven culture is all about enabling end users - those who do not come from data mining and analysis backgrounds - to directly query data, generate reports and draw conclusions unaided. This is what the democratization of data is all about.

## What Is The Trend?

Leveraging data as a strategic asset and making data-driven decisions for all tasks and projects.

## How Important Is It?

This is a very hot topic. According to [a report by New Vantage Partners](#), over 85% of respondents said they had begun efforts to create a data-driven culture. Getting it right is tough though; only 37% reported having success so far.

## How Can it Help Me?

By establishing a way for business users to generate their own reports and insights, you reduce pressure on IT to handle every query, speeding up the time it takes to get answers while freeing up the tech team for bigger projects. Even more importantly, you encourage a culture where people act based on context and evidence, encouraging accountability and improving the quality of your organization's decision-making.

A great example of how effective the switch can be is our client [Premium Retail Services](#) (PRS), which analyzes the performance of in-store product placement for brands like Logitech and Motorola. By switching to Sisense BI, the team was able to bypass IT bottlenecks and get instant, 100% up-to-date store data to help them improve their responsiveness and performance (and saved £100K in labor costs in the process).

What's more, adding web-based or browser viewing of vital analytics means you can open up insights to more people both within your organization and outside of it, whether they are clients, partners or even the broader public. Sophisticated web-hosted BI gives users direct access to dashboards and raw data that they can query and manipulate to answer crucial questions for themselves.

## Embedded Analytics

### What Is It?

Embedded analytics is the [integration of analytics](#) within business applications. It provides relevant information and analytical tools designed for the task at hand.

It lets you add powerful customized analytics and dashboard reporting to your SaaS products or applications so your users can work smarter and more efficiently in the applications they use every day.

### What Is The Trend?

Creating a uniqueness in a SaaS product or app that will act as a major differentiator from the competition.

## How Important Is It?

[Forrester predicts](#) that within the next 3-5 years, embedded BI that is “contextual, actionable, and prescriptive” will subsume agile BI, becoming the new norm.

## How Can It Help Me?

*Application Development & Delivery leaders have always recognized that business intelligence (BI) is most valuable when it is pervasive, contextual, and actionable. A new generation of embedded BI technologies gives AD&D pros unprecedented power to weave not just interactive but also actionable reporting and analytics into the fabric of apps and business processes. The new embedded BI tools, thus, close the loop between analysis and action within discrete apps.*

- Forrester

Embedded BI gives every customer (even non-technical ones) the ability to swiftly visualize and analyze complicated data, and is the ideal way to give your product or service a strong competitive advantage. It's all part of creating a genuinely data-driven culture in your organization.

Embedded analytics also plays a key role in UX design. As everything becomes centered around creating a better and better customer experience, great UX is increasingly vital; and tools that allow users to get the answers they want [without leaving the interface](#) will become increasingly valuable.

It also opens up opportunities to develop new products and features for your own clients. [Take our client Anaqua](#), who successfully white labeled Sisense BI into Intellectual Property Software, allowing customers to directly access dashboards, run analytics and create reports on their IP assets by themselves.

## Predictive Analytics

### What Is It?

Put simply, predictive analytics is a method of referencing current datasets against patterns evident in historical data to try and figure out the likelihood of something happening in the future.

Increasingly, [AI algorithms are being used to interpret the results](#) and provide recommendations for next steps, helping businesses to better plan for the future.

### What Is The Trend?

Looking at the past to discover insights that will predict the future and eventual outcomes.

### How Important Is It?

[According to Dresner](#), 70% of Marketing & Sales and Executive Management teams say that predictive analytics are either important, very important or critical to their business areas. The research organizations also place it 7th in its exhaustive list of key strategic technologies and initiatives for BI (after reporting, dashboards, advanced visualization, self-service, data warehousing and data discovery).

## How Can It Help Me?

Some common uses of predictive analytics include:

- ❑ Analyzing purchase decisions on [e-commerce websites](#) to make personalized product recommendations based on past behavior;
- ❑ Combating cyber crime by identifying breach attempts and predicting where hackers might try to exploit weaknesses;
- ❑ Assisting with resource planning and stock management by creating accurate demand predictions for different products at different times of year;
- ❑ Detecting fraud, by using past purchase behavior to identify suspicious activity.

Predictive analytics alone isn't a silver bullet, though: to build it into a successful BI strategy you need to focus on business outcomes. Start with the questions you want to be answered, or the strategic goals of your predictive analytics project, and then select predictive analytics tools that will help you get there - not the other way around.

## Cloud BI

### What Is It?

By shifting data storage and/or certain analytics processes and applications online, BI Cloud solutions reduce the total cost of ownership and help to democratize BI by making it more accessible to smaller enterprises and individual departments.

## What Is The Trend?

Making analytics and dashboards available to everyone, everywhere, no matter when they need it.

## How Important Is It?

[Research collated by Forbes](#) shows that 78% of organizations surveyed in 2017 said that they planned to use the Cloud for BI and analytics in the coming year.

Within this, the most commonly cited purposes were dashboard-based reporting (76%), ad-hoc analysis and exploration (57%) and dashboard authoring (55%). Respondents also said that they were particularly interested in adding Cloud-hosted advanced and predictive analytics (53%), operational planning and forecasting (44%), strategic planning and simulation (44%) functions.

What's more, back in 2013, a whopping 90% of survey respondents [told predictive analytics expert James Taylor](#) they were planning to deploy predictive analytics in the cloud at some stage in the future. Now that developments in the technology are making this easier for organizations of all sizes to do just that, the trend is set to explode.

## How Can It Help Me?

Switching to Cloud BI can improve data security and foster better collaboration both inside and outside your organization.

As we've seen, collaborative analytics will be crucial in the coming years, and deploying this in the cloud makes it easier for employees to work

together on projects, build on each other's work, highlight concerns and cross-check colleagues' contributions. It also enables better idea-sharing and informed intelligent decision-making.

The Cloud can also enhance predictive analytics. If you're able to tap into data stored in the cloud, or even run the actual calculations on cloud-hosted servers, this frees you from the limitations posed by your on-premises hardware. Suddenly you can connect up more, bigger data sources - and this, in turn, creates the capacity for more and more accurate predictive analytics.

*Note: Moving to the cloud [will not be the right fit for every business](#), nor is not vital for high-functioning predictive analytics. If you're unsure whether the Cloud is right for you, [check out this free on-demand webinar](#).*