

The eyes have it

The business intelligence industry is being shaken up by data visualisation, a way of turning dull, lifeless analytics reports into bright, colourful charts and graphs that are easy for all workers to access and understand. **Steve Evans** reports.

here is no doubt that a good business intelligence (BI) tool can help a company understand a lot more about its business, but traditional analytics systems no longer reflect the way an organisation works. Today's workforce is mobile and needs information delivered in real-time. Not only that, it needs it delivered in a way that is quick and easy to understand.

There is evidence that many BI tools are not doing that. A recent survey by Tableau Software revealed that many executives fail to see the value analytics can bring to their business. The research found that 41% of respondents claimed to be indifferent to the analysis they got from their data, being neither satisfied nor dissatisfied. An additional 12% said they were actively dissatisfied or very dissatisfied with their data analysis. The 'not sure' group totalled 11%.

That leaves just 36% of workers either satisfied or very satisfied with the analysis they are getting from their BI initiative.

A similar survey from OlikTech revealed that a massive 93% of British workers believe they are dealing with data at work more than or at least as much as they were last year. However, only 28% have actually used this data to discover something new that could

benefit their business. Additionally, 35% said they would be willing to do more data analysis if the systems were easier to use.

Broken BI?

Why has the BI industry got into this state? Traditionally the generating of reports and analysis of data has been seen as an IT function because the tools needed to do that are technical and take time to learn. However, a new way of looking at and analysing data is bursting through. Led by the likes of OlikTech, Roambi, Tableau, Tibco's Spotfire and others, data visualisation is taking that job away from the IT department and handing the power to end users.

They are the ones using the data, which is why it makes sense that they are given the best opportunity to understand it, so information can be quickly analysed and acted on. This empowers workers and frees them from the clutches of big, clunky BI systems that may produce lots of relevant information but hide it in long rows of figures that become gobbledegook to many workers, particularly those not trained in the skill of data analysis.

Wouldn't it be so much easier if the user could just click on the information they want and see it displayed almost instantly in a graph or chart that is easy to read and understand? That is where data visualisation comes in.

"People are missing the opportunity to make the right decisions because the wrong people are in charge of the production of reports and analysis of data. This is a role typically undertaken by IT, but belongs with the business users," says Tom Brown, founder of The Information Lab. "IT had to do it and it took time to get reports; the need for the data has gone by the time you get the reports."

Data visualisation tends to be much more intuitive and automatic. For

example, if a user is searching through geographical data, many visualisation platforms, rather than asking if the user wants to see the results on a map, will just do it.

Similarly, because it is so focused on the mise-en-scène, great care is taken into exactly how the data is displayed. This can mean, for example, that some platforms will only sparingly use the colour red, as it is a highly emotive colour and draws attention to itself, making that particular data seem more important.

20% of people that could be using BI reports are doing. We bring a way to utilise current platforms and provide that information to the user in an immersive and useful way and increase the consumption of that data. We provide the data that already exists in a really engaging way," he added.

One company that says it is seeing the benefit of using data visualisation technology from OlikTech is food chain Eat. With around 100 stores across the country, mostly in London,

Data analysis is far more interactive, and visual, so it's far easier for the whole business to understand it. It's about moving beyond data crunching to actually doing something about it.

Driven by iPads

There are two main drivers for data visualisation at the moment: Big Data and the explosion of mobile use in the enterprise. The combination of having more information to analyse and more employees out and about means businesses simply cannot rely on slow-moving, dull-looking data analysis tools anymore. Workers with iPads in particular are seeing the benefit of data visualisation tools.

There is also, generally, not an issue with the processing power of mobile devices and whether they can actually crunch through the data sets. Some platforms use in-memory analytics and others, such as Roambi, don't touch the back-end infrastructure at all.

Roambi's technology converts reports from a company's existing infrastructure into visualisations. "Whatever back-end you have and have spent millions on, the issue you have is consumption of the reports," Ali Shirnia, VP and GM of Roambi EMEA told *CBR* recently.

"They are ugly, they are tabular, you cannot see them and distribute them to enough users. Gartner said that only

the company needs to be able to keep on top of everything happening in each of its stores.

"It can be a slog to get information out of data," says Rene Batsford, the company's head of IT. "There may be different sources and different versions. Now we can get a real-time view of stock levels and so on. Data analysis is far more interactive, and visual, so it's far easier for the whole business to understand it. It's about moving beyond data crunching to actually doing something with it."

The most interesting point Batsford makes is right at the end – "doing something" with all the data his company creates. That sums up why data visualisation is such a hot topic at the moment. It gives people the opportunity to make quick decisions as the analysis is right there in front of the end user.

Eye candy

But not everyone agrees that visualisation is the best way to extract value from data. Making sure the right data gets to the right people is more

Insight > Data visualisation



A Tableau Software survey revealed many execs fail to see the value analytics can bring to their business.

important than putting it into pretty charts and graphs, according to Pentaho CEO Quentin Gallivan.

He tells *CBR* that while making the data easy to understand and interpret from an end-user perspective is important, his company would rather focus on getting the right data to the right people. "The idea of visualisation is like eye candy," he says. "How visual do you want the data to be? It's not an arms race. Many customers want a simple way to look at data, but it's a question of eye candy versus what's actually being used.

"If there are lots of different data sources they will need to be integrated and that's a job for IT, where we sell to, and not the end-user," he adds. "You need all structured and unstructured data in one place to be able to get the right decision. The end-user doesn't care about that. Yes, the right data is important and you need to help IT to get it."

That final assertion is backed up by Bruno Saint-Cast, Tableau Software's VP for Europe. "Each time you add a level of data to the reports, you are adding risk. However, production data is often very clean, so if the reports are connected to that you should be okay. But blending [different sources] does

create risk, so that is where we'd suggest working with IT," he says.

The Information Lab's Tom Brown says power to the people is still the best way to go to ensure the quality of data. As he points out, the people using data day in, day out will be the ones who know it best: "Put the data in front of lots of people who know the business and let them surf through it. They'll know. The IT person writing the report will not."

The people pushing data visualisation in the BI space all concur that getting the information to the right people is key.

"We all agree that pictures are almost always your end destination of analytical work – you want to turn it into a picture so you can understand it. So why is that saved to the end? Why not start with it?" says Tableau Software CEO Christian Chabot. "The fact is people today who have data and understand it and have questions are reliant on a priesthood of people called business intelligence developers who know how to operate these convoluted systems."

Lipstick on a pig

Chabot goes on to suggest that the incumbents in the BI space – IBM, SAP, Microsoft, SAS and so on – offer tools that

are, in his words, heavy, complicated, slow-moving, development-intensive and extremely expensive. It makes sense, he says, to ensure that anyone who knows and understands the data can ask questions of it.

But that doesn't mean the older players are failing to see the potential of data visualisation in the analytics world. IBM recently launched Cognos Insight, which combines in-memory analytics with what Big Blue calls "intuitive" data visualisation capabilities, while Oracle and SAP have both made a push to look at new data exploration techniques.

Are the smaller, niche players that currently dominate data visualisation worried that once these more traditional companies are involved, their market share will simply erode? Not at all, says OlikTech CEO Lars Bjork, who tells *CBR* they may well end up suffering from the infamous 'innovator's dilemma'.

"I'm not so worried that they will get it right to the same degree we and others have done. I think they are facing the 'innovator's dilemma'. How do they have the guts to disrupt their own products, business model and go-to-market strategy today? That's a tough call. How do you change the whole organisation's behaviour from being service-intense and long-engagements to something that is more intuitive, closer to the business need and with no services at all?

"We've seen over and over again that they've tried but their attempts are a little bit more marginal from where they come from. They're trying to put new lipstick on the pig, but they are still selling the old pig."

Old pig or not, the big guys are joining the data visualisation party and that can only be a good thing. Offering workers the chance to analyse company data in real-time and with easy-to-understand graphics will help them make better decisions, faster.