

My Thoughts on the Next Generation in BI

The other day, I was thinking about BI and its adoption rate by the business. For the past couple decades, business intelligence has been one of the top enterprise initiatives, often one of the top three. Still, though there have been innovations in technology, the way companies use data hasn't changed much. I sense that is about to change in a big way, which made me wonder whether organizations are ready.

To try to satisfy their BI initiatives, companies have spent huge sums of money on servers, database software, and reporting and analytical tools. Most every company has some sort of BI system, probably multiple systems, and most are no longer completely reliant on IT for access to data. That led me to wonder why BI adoption hardly goes beyond the business analyst. A few reasons come to mind:

Cultural Behavior

It's human nature to be protective of our domain. And, when we get access to our domain's data, such as supply chain or marketing data, we want to may not want others to see it and know how we are really doing. It may open the kimono and it might not be pretty. For others, knowledge is power. They feel an increased level of importance by being the one to provide this highly-valued information.

Technology Shortcomings

Much has been written about the problems that businesses face with their BI solutions. IT doesn't move fast enough, so shadow IT teams create rogue solutions within individual business functions. It's difficult to get access to data from certain legacy or operational systems. End user tools are too complicated for all but the very tech-savvy business analyst. And, the list goes on.

The next generation of business intelligence will require a higher reliance on data-driven decisions and collaboration. That means data must be available and easily accessible by everyone in the company. Companies that fail to address the behavioral or technical issues will quickly fall behind those that do. It will become the new competitive differentiator.

Everyone in the company, not just the business analyst, needs to have access to the data they need, across domains, when they need it. Some may only need to see reports that show what happened. Others will want to see what is happening now, in real time. And still others will benefit from seeing what is predicted to happen. We already do this at Pyramid.

Data becomes information when it can be used to drive the business. Let me provide an example of enabling an hourly employee with cross-domain data. Imagine an algorithm that combines customer demographic (marketing) and behavioral data (sales) with inventory data (supply chain) and third-party, external weather data to predict potential stock outs that will impact certain customers. The customer service rep can be proactive to call and get orders in sooner or offer the customer alternatives.

Now, what really excites me is the idea of artificial intelligence and machine learning. It may be the thing that actually defines the next generation in BI. Whereas we once automated processes, we are now automating automation. This whole notion that, without human intervention, data can change the way technology performs seems futuristic. Think precision drug delivery that automatically shifts in response to a patient's particular reaction.

In turning my thoughts back to today and how companies actually use the BI systems they have invested in, I believe those investments will reap a much greater return when they enable every employee and every process, not just the tech-savvy analyst. That will also set the stage for the coming new era in business intelligence.