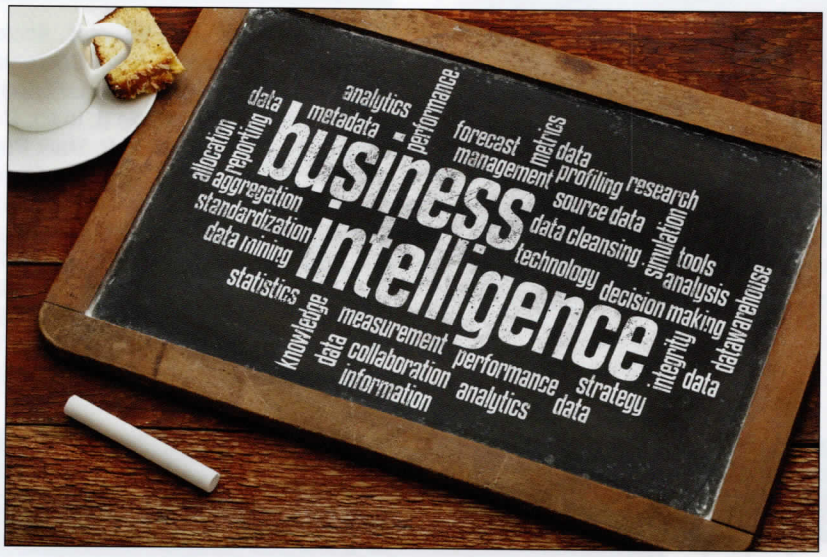
What is business intelligence?

And why should CPAs care?

By Jason Carney, CPA, PMP, CISA, JD, a technology-focused consulting professional and auditor

Business intelligence (BI) is becoming more and more prevalent and is helping CPAs do their jobs more effectively than ever before. This has not always been the case.

At best, the term "business intelligence" implied expensive consultingware that, while helpful, didn't always deliver on its promise to drive better business decisions. At worst, the term conjured up complex, highly technical and expensive "solutions" developed by IT specialists for IT specialists. In short, the technology sometimes seemed immature and expensive, and wasn't really within the purview of CPAs.



That's beginning to change. According to Gartner, an information technology research firm, BI is set to surge. In 2013, spending on BI software increased 8 percent and is expected to increase even more in 2014 and beyond. The continuing proliferation of data sources is driving the trend.

Don't be surprised if your employer or your clients begin to take notice. Don Sommer, a BI analyst for Gartner, says there will be a number of tipping points in 2014 that will accelerate adoption. BI-focused cloud solutions are making implementation cheaper and easier.

So, why should CPAs care?

The traditional role of the CPA has always been to explain the meaning and the context of the numbers, and business intelligence enables that. CPAs often own their organization's accounting systems and are experts in interpreting the data that comes out of them. But, many times, that isn't enough.

Minnesotan Paul Purrington is an expert in BI solutions and is the CEO of Superior Consulting Services. Echoing Gartner, Purrington believes that BI is set to take off.

"BI can be intimidating, but it is much less intimidating than in years past," he says.

According to Purrington, BI can now deliver results in weeks — not months, like previously — without as much in the way of expensive infrastructure as was needed in years past.

He believes that BI can help CPAs explain the numbers better because not everything is in the accounting system. "BI really shines when used to mix, match and report on data," Purrington says.

For example, forecasts are usually built on accounting data, but can be vastly more informative when married to unemployment figures, inflation, interest rates or other non-accounting data. Throw in other standard BI visualization features, such as dynamic charting, graphing and mapping, and a stodgy forecast can become something much more illuminating — and valuable. BI strives to transform data into business information and will provide new opportunities for data-literate CPAs.

Purrington believes that data literacy is a multi-faceted idea, but that it can be summed up in one sentence: Data literacy is "intimacy with the data that you are looking at." To get the most out of a BI investment, and to be a real player in a space that is set to grow rapidly, a CPA should be "a master of the business value of the data he or she uses, and should also be familiar with where the data is in the system." Purrington also outlines a test to help CPAs determine if they are as data literate as they need to be. He advises CPAs to ask whether they can answer the questions a C-level manager or a client might ask them using the data that is available. If not, CPAs should be able to articulate what is missing.

As adoption increases, corporate accountants won't be the only ones impacted by BI. External auditors are expected to show a more keen interest in BI tools as well. According to Michael Hoesing, a consultant with ACL and former IT audit director, "There is growing interest in the use of data warehouses to support and generate the financial statements and accrual estimates." BI tools won't just be used to support managers, but will also be used to support assurance and attest functions.

“CPAs are especially well-positioned to take advantage of the benefits that [BI] has to offer.”

What key ideas underpin business intelligence?

New technology invariably brings new jargon, and the latest wave of BI is no different. The current crop of tools is increasingly enabling self-service BI. **Self-service BI** gives users the ability to create their own analytics and view their own data without the intervention of the IT Department.

Companies can also authorize the creation of data warehouses and data marts to store BI and retrieve data. **Data warehouses** are used as a place to put all of the data from all of your organization's various systems. **Data marts** contain selected views of the data in the data warehouse that support a specific business process. In practice, the terms are sometimes interchangeable.

BI tools are used to create analytics. Sometimes special analytics, called key performance indicators (KPI) are created. **KPI** are the metrics deemed most important for a process or outcome. On an income statement, they might be things like net income, cost of goods sold or gross margin. But KPI aren't unique to financial statements — a KPI might also include number of units produced or deals closed per salesperson.

BI is progressively moving toward predictive as opposed to descriptive analytics. **Predictive analytics** are intended to give decision-makers a shot at understanding the future consequences of decisions, while **descriptive analytics** are more backward looking. A descriptive analytic might include the number and cost of units sold during a quarter. Credit scoring is an example of a predictive analytic.

BI has been steadily progressing and is set to become much more common. Many agree it isn't solely a province of the IT department anymore and that CPAs are especially well-positioned to take advantage of the benefits that it has to offer. ■

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Deploying business intelligence

What it takes for first-time users

By Charlie Gaddis, CPA, CMA, MBA, managing partner and founder of Beyond Intelligence

For the better part of 20 years, I have been using business intelligence (BI) in the financial management of companies. As an early adopter, I have seen the evolution of BI from software that fits on a 3 ½-inch floppy disk to the robust systems of today. When asked to put my thoughts together on what it takes to deploy BI today, I had to look beyond the pains of the past.

Financial analytic tools have evolved immensely since the advent of the personal computer. Analytics have gone from ledger paper that ruled for hundreds of years, to electronic spreadsheets like Excel in the '80s and pivot tables in the '90s. It is now time to bring your analytics into the new millennium with business intelligence.

In the early days of BI, systems were a little cryptic and not as stable as today. It took real skill to justify the time and investment required. Today, however, with the evolution of self-service business intelligence, BI is now a practical evolution of our analytics tool kit.

I will break down the three phases to deploying BI:

Software selection — look for two critical features

Choosing the right software can be challenging. In the last millennium, BI software was a major capital purchase. There was also a significant hardware cost to running these systems. Fortunately, today, vendors offer hosted BI on a software-as-a-service model, driving down the cost and making BI available to the mid-market.

When it comes to actual functionality, consultants will make nauseating lists of features for clients to review. For me, there are only two critical features I look for in a BI system: a strong Excel interface and the ability to "write" to the system. Every other feature is simply window dressing.

Strong Excel interface — This is a feature that is boasted by everyone, but few deliver. In the world of BI, Excel is viewed by some as an annoyance. Many vendors will try to entice you to abandon Excel in favor of their tool. I would encourage readers to avoid these vendors. One of the benefits of using BI is the ability to create meaningful analysis with ease. If they are asking you to learn a new system, it will not be easy. Do not be fooled by experts jumping around their system; a new system is always a time investment. You need to be proficient in order to get the benefit out of a BI system.