E-Guide

Using Business Intelligence Effectively to Grow Your Business
With the recent emergence of BI and analytics tools designed to be more appealing to the SMB palate, many mid-market companies no longer have to consider business intelligence (BI) software to be out of their reach. In order to let business intelligence effectively grow your business, companies have to keep BI systems up to date as business needs change and new requirements emerge. All members of the team (include those as the top) need to be able to thrive on advanced data analytics technology and fact-based decision making. In this E-Guide, readers will receive tips and best practices on using business intelligence to effectively grow their business.

Midmarket business intelligence planning: assessing technology options

By: Beth Stackpole, Contributor

Many midmarket companies have long considered business intelligence (BI) software to be out of their reach. In the past, that was due partly to the complexity and specialized nature of BI tools, especially since small and medium-sized businesses (SMBs) often don’t have the luxury of staffing dedicated BI teams to oversee the deployment and management of BI systems.

There was also the matter of the relatively high cost of BI platforms. All of that is starting to change, however, thanks to the introduction of new flavors of BI and analytics tools designed to be more appealing to the SMB palate. For example, most of the mainstream BI vendors have introduced variations of their products with revamped user interfaces, wizards, dashboards, portals and self-service technologies aimed at making the tools easier for non-experts to use.
In addition, BI technology is now available in several other forms that might be easier and less expensive for SMBs to digest, according to industry analysts. That includes Software as a Service (SaaS) BI offerings that let customers avoid having to invest in the hardware and manpower required to run a BI infrastructure; open source BI tools that offer a potentially less costly way to gain access not just to the technology but also to a community of BI experts and peers; and BI and data warehouse appliances that bundle hardware and software into a single package.

Now that BI is more accessible, one of the big issues for SMBs as part of the business intelligence planning process is choosing between the various options and picking the one that best meets their needs. As with anything, there are tradeoffs, analysts said. For example, the scaled-down applications offered by BI vendors might not have all the features an SMB needs. On the other hand, buying a midmarket BI package from a vendor whose data management tools you already use could create economies of scale on both licensing and training.

**SaaS BI considerations for business intelligence planning purposes**

SaaS BI tools can be used to quickly get started on projects without significant upfront costs in either time or resources. And given that many SMBs are already using SaaS versions of products such as CRM and ERP applications, the security and implementation hurdles common to SaaS deployments likely have been addressed to their satisfaction, said David Menninger, a vice president and research director at San Ramon, Calif.-based Ventana Research Inc.

"The cloud is the great equalizer in terms of minimizing investment risk," Menninger said. "Companies can now buy BI products and services in chunks on a monthly [subscription] basis, instead of having to do a big-bang [project]."

But, he added, scalability issues surrounding the features of SaaS BI technologies and their ability to support large data sets are some of the concerns that SMBs should consider when evaluating the SaaS approach as an option.
For companies that still aren't fully comfortable with the security aspects of cloud computing, data warehouse and BI appliances could be a possible alternative since they promise turnkey operation but still give organizations control over the installation and management of a core business asset, according to Menninger and other analysts.

**Weighing open source's ups, downs in the BI planning process**

Open source BI also can be less expensive than traditional BI offerings, but it may not be the right choice for companies that aren't willing to roll up their sleeves and dig into the technology, said William McKnight, president of McKnight Consulting Group LLC, a Plano, Texas-based consulting firm that specializes in data warehousing, BI and master data management.

He added that SMBs considering the open source approach while developing a BI project plan need to assess whether the commercial versions of open source BI tools have the features they need — and if not, whether they have in-house developers with the proper skill sets or they can afford to hire outside development help. They should also be clear about the level of support offered by open source vendors and what it will cost them.

"Companies need to understand that there are ups and down with open source," McKnight said.

In the end, Menninger suggested that SMBs pursuing business intelligence strategies use cloud-based BI implementations as the measuring stick to compare the other options against, since cloud technologies typically deliver the fastest path to deployment. And that may be the ultimate selling point in building a BI business case and winning approval for a project, he noted.

"The question is, can you do better with some other approach in terms of project timelines and capabilities," Menninger said. "You have to think in time frames of weeks, not months, because you have to realize a return on investment faster than that. Small organizations have to be nimble — they can't tie up money and resources for a significant period of time without delivering results."
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Beth Stackpole is a freelance writer who has been covering the intersection of technology and business for 25-plus years for a variety of trade and business publications and websites.

Sustainable practices for updating SMB business intelligence processes
By: Alan R. Earls, Contributor

According to analysts, one of the biggest challenges on business intelligence projects is keeping BI systems up to date as business needs change and new requirements emerge. Their message is straightforward: Since organizations are constantly evolving, business intelligence processes and capabilities must do so, too.

“You need to have a sustainment model,” said Jeanne Johnson, global head of consulting firm KPMG LLP’s BI group. BI systems must be aligned and integrated with new businesses and business processes, Johnson said -- and that’s where a key difference between midmarket organizations and larger enterprises can emerge, she added.

In Johnson’s view, many large organizations have difficulty with the concept of creating a flexible and agile BI architecture, whereas small and medium-sized businesses (SMBs), less burdened by bureaucracy, often are better able to get their arms around the need for flexibility and incorporate it into their BI project management procedures.

To meet the goal of being able to support business changes within BI processes, though, midmarket companies should strive to compile high-quality master data and relevant metadata components, Johnson advised.

Her list of BI best practices also includes avoiding the tendency to overreach on functionality that could be hard to maintain going forward. “In this kind of process, I think ‘less is more’ is a good design principle,” she said. Focusing
on key BI capabilities that can be reliably supported and sustained will produce wins -- and success usually breeds more success, Johnson noted.

**Business intelligence processes: more than just a project**
Offering a similar kind of watchword, Gartner Inc. analyst John Hagerty said it’s crucial to remember that a BI initiative isn’t just a single project -- it’s a program. “By definition, that means it goes on for a long period of time,” he pointed out.

Hagerty said that in talking to clients about BI project management issues and best practices, the importance of having a BI competency center (BICC) or other centralized BI team has been shown time and again. “I’ve seen the business side pushing for a bigger role and their own BI budget, and I’ve seen IT fighting back, but the point was that they had to come together and meet in the middle within the BICC,” he explained.

Keeping BI processes sustainable and up to date can also be a matter of “going viral,” according to Hagerty. Echoing Johnson’s comments, he said that one of the surest ways to garner broad support and ongoing funding for a BI deployment is to have visible successes. “If you start BI in one area, like sales and marketing, before too long other functions will come out of the woodwork looking for help with their own projects and their own requirements,” he said.

John Lucker, a principal at Deloitte Consulting LLC and leader of the firm’s advanced analytics and modeling practice, said that to avoid potential business intelligence problems as a midmarket BI project moves forward, there needs to be an understanding that you’re on the equivalent of a treadmill -- and you can’t just get off when you feel like it.

**Staying in the loop on improving BI processes**
That requires having a requirements-gathering and BI development structure for both short-term and long-term needs, Lucker added. “You’re not creating a maintenance process but something more like a continuous improvement process,” he said. “You need to keep looping back to see if what you’re delivering is fresh and relevant.”
For Claudia Imhoff, president of consulting firm Intelligent Solutions Inc., the sustainability demands also have implications for the choice of a BI delivery model. “You need to think carefully about what elements to outsource and what elements to keep within your organization,” Imhoff said, pointing to possible options such as using Software as a Service BI applications that can be easier to deploy and upgrade than traditional BI tools are.

It isn’t always easy to keep up the effort demanded by BI programs, Lucker acknowledged. “This stuff is hard, and companies can get organizationally exhausted,” he said.

Preventing that isn’t just a matter of technical or business skills -- a sustainable midmarket BI strategy also calls for some evangelists who can champion enhancements to BI processes on ongoing basis, according to Lucker. “They need to be looking constantly for new ways to leverage insights -- because if they don’t, your competitors will,” he said.

ABOUT THE AUTHOR

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Creating an advanced data analytics business culture: Tips and advice

The quickest, and potentially most successful, way to create an internal business culture that thrives on advanced data analytics technology and fact-based decision making is to start at the top of an organization, according to some IT professionals and industry analysts.

Just ask Bill Robinette, manager of business intelligence (BI) systems at Advance Auto Parts, a Roanoke, Va.-based retailer with about $5 billion in annual revenue. Two years ago, Robinette bore witness to the fact that a change in senior management can clear the way for the development of a
At a recent event held in Cambridge, Mass., by The Data Warehousing Institute (TDWI), Robinette said that when he joined Advance in 2006, business decisions were typically based on data stored in spreadsheets and Excel-generated cubes.

“Basically, we were running the business on gut feel,” he said, adding that more sophisticated BI and analytics investments were a tough sell because company higher-ups were mainly focused on redesigning Advance’s retail stores.

**Going from ‘gut feel’ to an analytics business culture**

Things changed in early 2008, when a former Best Buy executive took over as Advance’s CEO and put a priority on improving the mix of parts in different stores based on local demand. Instead of the previous one-size-fits-all approach to merchandise planning, the company now uses data mining and predictive analytics tools to help automatically set plans for populating individual stores with parts, Robinette said.

In addition, an analytics business culture has been firmly established within the retailer, he said. “My big cultural challenge now is that I have people who want [analytics] and I can’t deliver it fast enough.”

Operational improvements enabled by the analytics tools have helped to solidify those tools’ place in the company. For example, in the past, about 20% of the parts stocked in stores didn’t sell within a year. Advance has used analytics to lower that figure to 4% – a reduction that is “worth millions of dollars to our bottom line,” Robinette said. The company also uses performance metrics generated via its analytics applications to set growth targets for store managers and foster internal competition among stores.

Analysts say that Advance’s experience with analytics technology is becoming more common these days. A technology-savvy CEO, often someone brought in to replace the previous top executive, pushes a
company to use advanced data analytics software and methodologies to generate deep data insights that can support better business decisions.

To help an analytics initiative succeed, senior executives need to drive an internal emphasis on optimizing business performance through quantitative measurements, TDWI analyst Wayne Eckerson said. They also have to put the company’s money where their mouths are by funding and prioritizing analytics projects, he added.

**Analytics software doesn’t equal an analytics business culture**

But new analytics software and high-level executive support – while a good start – aren’t enough to foster and maintain an analytics business culture. Companies also need to make sure that their employees have the ability to make the right decisions based on information gleaned from analytics technology, said Dan Vesset, an analyst at Framingham, Mass.-based IDC.

“I think that was part of the problem, for instance, with the financial crisis,” Vesset said. “The systems correctly identified risks, but the humans overrode those signals because they were incented to do so.”

A recent IDC survey of 1,100 organizations found that analytics programs tend to work best when employees are truly willing to let their actions be influenced by the technology. The survey also found that companies with successful analytics programs tend to be more successful in general. “The more analytically oriented a company was, the more competitive they were in their industry,” Vesset said.

He added that education and training are two of the keys to creating a long-lasting data analytics business culture. But that means more than simply teaching employees how to press buttons, click icons and read data on executive dashboards, he cautioned.

“We don’t just mean training on the tools but also training on analytics techniques,” Vesset said. “There is a lack of people who are knowledgeable on the different ways of analyzing data.”
Employees should also be educated about the meaning of data as it pertains to their company’s specific key performance indicators and performance metrics, he advised, while noting that such training is currently lacking at most companies.

**Using an analytics group to help create an analytics business culture**

Another potential way to help foster an analytics business culture within an organization is to set up a dedicated data analytics group, according to Eckerson, who put cultural issues at the top of a list of analytics challenges during a presentation at the TDWI event in Cambridge.

While most companies haven’t gone that far yet, he said, an analytics group with its own director could develop an analytics strategy and project plan, promote the use of analytics within the company, train data analysts on analytics tools and concepts, and work with the IT, BI and data warehousing teams on deployment projects.

One more point to keep in mind: Don’t go overboard on the use of analytics tools. For example, Advance Auto Parts tied information gleaned from analytics software into a performance dashboard application that was rolled out last year. The dashboard gives store employees a quick view of key performance metrics – a capability that Robinette said reinforces the importance and value of analytics without requiring front-line workers to delve deeply into it themselves.

“We didn’t want to turn our store managers and associates into data analysts,” he said. “We want them out front in the stores, selling products.”
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