

The background is a vibrant red curtain with vertical pleats. A large, semi-transparent white spotlight beam shines from the top right corner, illuminating a central white oval. Inside the oval, the title text is displayed in white, bold, uppercase letters.

**BUSINESS
INTELLIGENCE
for SMBs in 2020**

Part 3: Implications of Emerging Technologies and Trends for BI

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Audience: This paper is intended for small to mid-sized business leaders seeking information on the impact of Business Intelligence on their business in the emerging decade.

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Executive Summary

In the aftermath of the Great Recession, an economy that is growing but uncertain has led to greater caution and thrift among consumers. As a result, even as many small-to-mid-sized businesses (SMBs) plan for growth, they continue to look for ways to improve efficiency and cut costs.

SMBs increasingly realize that having the right information and the tools to analyze that information are critical to making business decisions that can drive growth and improve productivity. Today, more information than ever is available about companies' internal operations. This information is a by-product of companies' successful efforts to automate their operations.

Business intelligence (BI) solutions provide a way to harness this ever-increasing information in a way that allows companies to make better, smarter decisions of all types and ultimately outpace their competition. As a result, BI has emerged as one of the top IT priorities for SMBs.

As BI solutions have evolved, they have become less expensive and easier to implement and deploy. Indeed, BI vendors today, facing stagnant and oversaturated enterprise markets, are increasingly shifting their focus to serving the SMB market. This is good news for SMBs looking for BI solutions. Yet challenges remain in terms of information accessibility, ease of use, and implementation.

This series of white papers looks at how the BI industry will evolve over the next decade to address these challenges and how emerging technology is likely to enable vendors to further improve BI capabilities. In this series of three papers, the following areas will be covered:

1. High-level trends that have led to SMBs' increasing adoption of BI and how enterprise and accounting software applications will need to change to provide better access to information
2. How BI technology and capabilities are likely to evolve over the coming decade to better address SMB's information requirements
3. How trends and advances outside the BI sphere will impact BI technology

This paper is the first in this series.

What New Technologies and Trends Will Mean for BI

In the last two white papers in this series, we talked about how the need to use information from business applications to help make better decisions is driving increased demand for BI. You learned how business applications and security will need to change to improve access to that information, advances that are likely to address current deficiencies in BI solutions over the coming decade, and likely future enhancements.

In addition to advances in BI technology itself, many other trends will ultimately have an influence on how BI solutions will evolve over the coming decade. This paper will discuss some of the most critical changes and the potential impact they may have on BI. These advances include:

- The Internet
- Social media
- Mobility
- Software as a Service
- New tools
- Changes in user skillsets as a more technically savvy generation comes of age

The Internet

The Internet has had a profound impact on industries of all types. For example, the introduction of Voice over IP (VoIP) and IP-based video has profoundly impacted telecommunications service providers. Clearly, the Internet will have a similarly profound impact on BI.

While it's impossible to definitively predict the impact of the Internet on BI, it's easy to speculate how the Internet will affect BI over the next decade. The Internet made it possible for virtually everyone to access data on virtually any subject right from their desktop. Business users increasingly want to use this external data to expand on the information they gather internally about their own business to gain greater perspective. Over the next decade, new BI solutions may meet this demand by enabling SMBs to create mash-ups of internal and external data.

For example, an SMB might create a mash-up that combines data about its own operations, such as internal sales data, purchases, and debtors' days, with similar information on competitors traded on the NY Stock Exchange or with industry benchmarks. With this information, it will be much easier for a company to gauge how its performance measures up to its closest competitors or to industry best practices.

Social Media

Social media is ubiquitous today. Large numbers of people interact with each other through LinkedIn, Facebook, Twitter, and many other communities, not to mention email and instant messaging.

In the coming decade, all of these social media forums and communications tools are likely to converge with application interfaces to enable end users to interact with their applications and all of their social media forums from a single interface that they will work in all day, every day. This will eliminate the need for users to constantly exit the current interface and go to a separate interface and thereby make all types of communication easier.

One impact this will certainly have is to improve knowledge transfer. Currently, BI can be a highly technical application, and it can be difficult for end users to access the information they need to make the best business decisions. When social media becomes more integrally connected to BI applications, users will be able to access all manner of help right as they're using their BI solution, and someone will be available to help them immediately 24/7/365. With the point and click of a mouse, users will be able to go to skills transfer podcasts, educational videos on multiple web channels, virtual worlds designed for coherent groups of people looking for the same skills, focused blogs, industry and product wikis, and more. SMBs should be heartened that they can expect to have access to more subject experts, more learning material, more training resources, and, effectively, more skills for free.

Mobility

Application vendors of all types are upgrading their products to support mobile devices while platform vendors work furiously to spur mobility along. For example, Microsoft® is paying developers to build mobile applications for its Windows® Phone 7 operating system to narrow the lead held by rival products from Apple and Google. One can assume that in ten years there will be a preponderance of always-on, mobile, integrated applications.

This move to mobile applications raises an interesting challenge for BI. BI vendors have an opportunity to push considerable information to mobile platforms. Yet mobile platforms are not the best solution for viewing, for example, financial reports with comparative figures over multiple months in a spreadsheet layout format.

BI will need to find ways to present information in a concise, relevant, and reader-friendly manner. One way to accomplish this is through event-driven reporting that pushes only relevant information to a mobile device to give SMB end-users accurate and trusted updates on critical measures in their business. Another way for BI to take advantage of the mobile platform is to use technology such as RSS feeds to deliver only the highly targeted information that users request to their mobile devices.

Software as a Service

Another major development of the past decade has been software as a service (SaaS). With this business model, organizations subscribe to access to business applications over the Internet, rather than implementing and maintaining these applications on their own premises.

What will be the impact of the SaaS trend on BI?

As we mentioned in the previous white paper in this series, SaaS is an excellent solution to the problem of exponential information growth. Organizations have access to virtually unlimited storage using SaaS solutions over the cloud without having to purchase, implement, and maintain large numbers of storage devices internally.

BI in a SaaS environment also has the opportunity to provide a number of advantages to BI users. For one thing, just as e-commerce users currently have self-service access to information about the products that their companies allow them to purchase and their purchase history, BI applications in the cloud will provide users with self-service access to internal company data for use in reporting and analysis. To achieve this in a desktop environment would typically require some kind of client-server configuration, which is messy to administer and can cause inconsistent versions of data. In a SaaS environment an administrator will have clear visibility into who is running what reports and can easily provision more or fewer reports accordingly. The users will have a seamless experience without any need for desktop intervention and will get exactly the data they need presented to them as and when they need it in a format they want.

In addition, because the SaaS model gives vendors a great deal of information about how their customers are using their products (such as which users are using which modules), companies will have the opportunity to use that knowledge to target their BI applications even more precisely to their customers' requirements.

New BI Tools

Most SMBs today use spreadsheets as their primary tool for delivering BI. In the second paper in this series, you learned how spreadsheets have been fraught with inefficiencies as organizations struggle to get data from their various applications into the spreadsheet system. In that paper, it was noted that vendors are starting to deliver connectors that eliminate the current challenges of getting data from business applications into spreadsheets in an easy-to-use and timely manner.

But there is also likely to be a whole new generation of BI tools that may pry the market from the grip of Microsoft Excel® spreadsheets on the SMB BI market. Over the past decade, the Internet has created a new and ubiquitous platform for software developers. For example, Google has introduced free Google Apps, which large companies are starting to adopt. This competition is forcing Microsoft® to offer stripped-down, online versions of Office 2010 (although it is unlikely that Microsoft will offer a free version of Office to match Google). At the same time, Google is likely to continue to improve its features over the next decade and is expected to focus on the SMB so it won't have to manage high-maintenance enterprise agreements. This means that while Microsoft is likely to fight to retain its leadership position for spreadsheets in the mid-market space, real competition is entering the spreadsheet game.

Changing User Skillsets

Technology adoption—BI or otherwise—is highly dependent on the skills available at the vendor, business partner, and end-user level. The skill levels required to successfully take advantage of BI solutions have been changing over the past decade. BI solutions once demanded advanced skills to massage data into a meaningful form that could help users make decisions that drive performance in their business—and these skills come at a price. Over the last decade, as organizations have sought to democratize information, BI vendors have been driving to make more intuitive point-and-click solutions. As BI solutions continue to become easier to use, more end users in the SMB space will be able to use BI.

However, an open question remains over how the levels of BI complexity will match up with available user skillsets.

On one hand, as SMBs continue to recognize the value of information in informing business decisions, they may require increasingly complex analysis of information that will demand greater skillsets.

On the other hand, one can argue that more people will be available on the market with greater BI skillsets. After all, many young people have grown up with technology and are thus much more technically savvy than previous generations. At the same time, as the need for more complex analysis is more widely recognized, more training programs will be developed to train people in information architecture.

Yet another factor is that the pace of business will only grow more demanding. SMBs are likely to face more time constraints over the next decade that will reduce their appetite for BI complexity.

So what will be the upshot?

Will users ultimately skill themselves up or will vendors dumb the products down?

The answer is probably both.

SMBs can reasonably expect BI vendors to create both more intuitive BI applications and more user-friendly, easily accessible online campaigns to transfer skills to the end user. The proliferation of social media tools means that it will be increasingly easy to train users with online classes, podcasts, technical user communities, and much more, all easily available online. SMBs should be heartened that they can expect access to more intuitive products as well as more subject experts with better training.

Conclusion

BI will not be immune to market changes. BI solutions will be profoundly impacted by the Internet, social media, mobility, SaaS, new applications, and changing user skillsets.

Yet whatever direction technology takes, if data equals information equals knowledge equals wisdom, then knowledge and wisdom gaps are likely to remain. That's because the biggest gap has been and will continue to be the gap between knowing and doing. Future BI solutions will not help those who cannot act upon information. In other words, the human tasks of interpreting information, making decisions, and executing effectively on those decisions are more likely to be bigger obstacles to successful BI projects than the technical task of making the information available to the user. Seeing a problem and taking appropriate actions to remedy the problem are two separate things.

Nonetheless, it is impossible to dispute that BI offers SMBs the potential to produce a far better bottom line. Whether through optimizing sales and marketing campaigns, managing operational expenditure, or driving customer retention strategies, by 2020 BI will deliver much more for many more businesses.

About the Author

Gary Boddington is a cofounder and CEO of Alchemex Pty Ltd, a software vendor specializing in easy and affordable integrated Business Intelligence solutions in Microsoft Excel® for the SMB market. Alchemex partners with OEM partners to deliver fully integrated solutions. Although this white paper is intended to be objective, it is recommended that readers form their own conclusions and that the observations contained herein are used together with (but not in place of) the readers' own good judgment and research.

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About ALCHEMEX

ALCHEMEX is a leading developer, enabler, and support provider of affordable Excel-based Business Intelligence software for small to midsized enterprises. For nearly 20,000 registered users in Africa, Asia, Australasia, Europe, and North America, ALCHEMEX's reporting software delivers automated financial, payroll, and other decision-support reports and analyses in Microsoft Excel at the click of a button, directly from a company's accounting or payroll system.

ALCHEMEX integrates with leading accounting and payroll packages, pulling real-time data directly from the database, thereby eliminating manual report preparation and repetitive data extracts. ALCHEMEX provides complete automation of ready-to-use Excel reports for MYOB Account Right, MYOB Exonet, Sage Pastel Accounting Evolution, Sage Pastel Accounting Partner, Sage Pastel Accounting Xpress, Sage Pastel Payroll, Sage ERP Accpac, Sage ERP MAS 90 and 200, Sage ERP MAS 500, Sage50, Sage Simply Accounting, Sage Peachtree, SAP Business One, Sybiz Vision, SYSPRO, and Sage VIP Payroll.

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