How To Use Technology To Build An Effective Business Intelligence (BI)

With technological advances and mounting uncertainty in the business economy, how can business owners harness their biggest asset – information – effectively?

THE INFORMATION OVERLOAD

When times were good, small- and medium-businesses (SMBs) acquired information for the sole purpose of facilitating faster, timelier and better-informed decisions. However, with the advent of new Business Intelligence (BI) technology like BI 2.0, web semantics, and other options made available by BI vendors, there is now an abundance of available information. SMB owners have also arrived at a common consensus over the importance of quality, rather than quantity of information acquired. Together with technological advances and rising uncertainty in the business economy today, a fast pace of change sets in with new business demands and an ever-increasing amount of data that results in information overload. If agility is the secret for businesses to cope with these challenges, then BI would be the key towards attaining greater business competitiveness.

WHY BI?

BI enables an organization to achieve sustainable competitive edge by supplying the critical information required to make informed business decisions towards meeting business objectives. Information of any kind – organized, stored or delicately-managed – is the most prized asset for any astute business owner. However, the ability to gather this information on an available-on-demand service has proven difficult to facilitate. Here, BI systems assist in enabling businesses with a smooth and instantaneous flow of information at the touch of a button. Securely, too.

BI does not alter the information content in any way, but instead, enrich the timeliness of information delivery during business predicaments to ensure the right piece of data is presented and made available at the right time. On the liability fronts, time and monetary costs are also kept to a minimum as BI systems reduce significantly not only the distribution costs spent on information, but also, the time spent to retrieve it. With BI, businesses can now perform planning and forecasting accurately via the new ability to track changes, record accurately, and perform knee-jerk responses to any situational changes.

FROM LUXURY TO NECESSITY

Traditional BI technologies were intricately-designed to solve the ever-increasing demands of the unique and constantly-evolving needs of businesses. However, the days of the solitary excel spreadsheet tradition have met obsolescence. Standard reporting information retrieved from the data warehouse is no longer useful as shown clearly by the inefficiencies and error-prone nature of the counter-intuitive (and counter-productive) BI interfaces. The mandate for more accurate and in turn, better-informed and consistent information across operational functions has never been clearer. If the viability of the organization depended directly on the information available, then BI systems would no longer be a catalyst, but a standard benchmark for quality decisions.

BI vendors have also responded promptly with solutions that would help unify databases, application environments and desktop tools. System integrators now provide the necessary expertise for the integration of database storage infrastructure, application and desktop environments. High-quality information is now easily accessible – at a click.

BI IN DAY-TO-DAY PERSPECTIVE

Project Ingot" was a landmark initiative recently launched in Singapore where a member group of 11 non-profit organisations had BI systems successfully integrated into their day-to-day operations. For the Home Nursing Foundation (HNF), the Electronic Medical Record (EMR) system facilitated critical patient information and knowledge sharing amongst its nurses, and a new Financial Module helped better manage activity-based account and reporting (e.g. Recommended Accounting Practices or RAP6) as part of a new regulatory requirement by the national ministries.

GREATER TRANSPARENCY, MORE VISIBILITY

More importantly, another core Ingot feature is the management dashboard that allows stakeholders, including board members, management, and staff, to view and analyze critical business and healthcare and medical information – on demand. The system automates the way data is acquired, analyzed and presented, providing crucial, timely information for management to make better, well-informed decisions. HNF has employed the management dashboard as a means and function for tracking its expenses and fundraising operations.

For the National Kidney Foundation (NKF), it was committed to a complete overhaul and an implementation of a new fully-integrated Healthcare Enterprise System which eased the organization into the world of seamless operational capability. The new operational platforms ensured greater visibility and better corporate governance in its operational departments of Communications, Logistics, Clinical and Donor Management Systems.

As NKF's IT director Catherine Goh explained, "An important part of this project was to ensure that we had excellent visibility into the data from these new systems for operational analysis. We wanted to take our transactional data and present it in a way that could tell a powerful story. If data is presented properly, it can greatly enhance decision-making."

THE NEXT WAVE IN BUSINESS INTELLIGENCE

According to a recent report by industry experts Forrester, IBM's recently-announced plans to acquire SPSS, the renowned maker of specialized analytic software, will lead to a wave of further consolidation in the BI space.[1] Advanced analytics software goes beyond the reports and dashboard capabilities of traditional BI (business intelligence) tools, helping users answer questions about future events and explore "what-if" scenarios, as well as pull together and analyze unstructured information from a variety of sources.

IBM's acquisition of SPSS marks a tipping point in the advanced analytics industry, and is expected to trigger off a new wave of competitor response. The stage is set for the advancement of the next generation of BI such as free-form in-memory analytics, end-to-end BI life-cycle management, and guided search functionalities.

TRENDS IN BI

As mentioned earlier, BI enables the integration of desktop applications and office back-end database systems. This allows end users to access BI information as part of their day-to-day applications while operating in an optimal desktop environment. The following trends in BI will provide the blueprint on how business owners can use BI technology successfully to create a more BI effective system in the following ways:

Convergence: The demand for an integration of both the organization's existing BI system and its employees has become more critical as BI becomes more mission-critical.

Batch Data Warehousing: This will be significantly decreased, as the need for information exchange between the organization and its partners, customers, and other stakeholders becomes integral. Faster computers, more memory and better metadata (semantic models) will support better data comprehension and reduce the need for data integration.

BI Licensing: BI software sales and licensing are evolving. Open-source and On-Demand channels will exert natural pressure on traditional vendors to replace expensive, per-seat licenses.

Data Comprehension: Data integration is a painstaking process that is sifted through by people, and then the process is automated with a tool. New tools are emerging that can take over this tedious integration work, with the rise of Master Data Management (MDM) hubs that can further reduce the time-consuming work load.

[1] *Forrester: SAP, others will make analytic acquisitions, Chris Kanaracus, 26 Aug 2009 http://www.networksasia.net/content/forrester-sap-others-will-make-analytics-acquisitions*

BI 2.0: GOING BEYOND SPREADSHEETS

BI 2.0 has led to a new era of Business Intelligence beyond simple "reports" and "data". BI is extending beyond the boundaries of the organization to become more real-time, integrated and pro-active.[2] To grow out of the reporting niche and relying solely on fading tools such as data warehousing, business owners should now embrace the semantic process – including directed search – to enable users to perform searches without assistance, based on association amongst meanings and relationships amongst different terms. Relational databases, message queues, web logs and other services now take precedence towards the success of an effective BI mechanism.

THINKING OUT OF THE BOX

Evolving BI technology urges SMB owners to rethink analytics. By compartmentalizing security systems and performing more role-based BI-provisioning, the focus has now shifted from "data to people". By placing less emphasis on the BI process and more on the experience in itself, the focus should now be less on features, and more about how people can work effectively. By recognizing the reality in evolving BI technology such as believing in the exponential benefits of tools like social networking and collaboration, business owners can pave the way for their organizations' successful marriage with its respective BI systems, and utilize relevant information effectively in the crucial decision-making process.

[2] *Business Intelligence 2.0: Simpler, More Accessible, Inevitable, Neil Raden, 1 Feb 2007*
http://intelligent-enterprise.informationweek.com/showArticle.jhtml;jsessionid=OLMZSXAJ1ACWNQE1GHOSKHWATMY32JVN?articleID=197002610&pgno=2

Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel : 408 526-4000
800 553-NETS (6387)
Fax : 408 527-0883

Asia Pacific Headquarters
Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Europe Headquarters
Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: +31 0 800 020 0791
Fax: +31 0 20 357 1100

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at **www.cisco.com/go/offices.**