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BI = Business Intelligence = Better Information for the New Age Managers

Managers of progressive companies are always on the lookout for better information. Companies often have so much information but their managers have so little time to analyse it. In fact, our ability to record information over recent years has greatly outstripped our ability to unlock its true value. This is where the class of software products known as Business Intelligence (BI) can help.

Information Adequacy

A large bank which has many branches in the Asia-Pacific region recently commissioned an information adequacy study. IT was concerned that information was not readily available to make good decisions. This was despite the fact that almost 80 analysts were supporting the reporting requirements of its retail, business and institutional banking operations. Information adequacy measures whether the information managers receive is reliable, accurate, timely, consistent, relevant, accessible, customised, cost effective, easy to use and integrated. The study revealed an Information Adequacy Index of 47%. The solution was obvious. The only tools the analysts used were simple spreadsheets and clumsy report writers even though the bank had invested millions of dollars in front-office and back-office transaction systems. An off-the-shelf Business Intelligence tool would have solved many of the bank's information adequacy problems.

What is BI?

Ultimately, BI is a way to empower managers to get on with the job of improving business performance through ready analysis of important management information. Specifically, BI is a set of tools that draw data from transaction systems and data warehouses and enables companies:

- To generate strategic, operational and regulatory reports quickly and easily. Visualisation of performance is through the use of graphical displays, dashboards and scorecards. BI supports popular reporting frameworks such as the Balanced Scorecard and Six-Sigma Scorecard.

- To provide alerts to better monitor corporate, business unit and individual employee performance by email when the performance of key business metrics departs from an acceptable range. In particular, monitoring risk indicators is a key function of BI applications.

- To perform "slice and dice" analyses on data to support data exploration. For example, if you were the operations manager, you might want to explore production statistics over the last few months to see which production team performed the best. Having analysed the data you could then bring all teams together to discuss best practice. Technically, this "slice and dice" capability is know as cube analysis, datamarts or OLAP (On-Line Application Processing).

- Related to "slice and dice" analyses, the ability to undertake ad hoc queries and analysis and encourage a culture where managers routinely examine financial and non-financial data to look for opportunities to improve business operations. Management decisions become more supported by data analysis and less reliant on "gut feel" alone.

- To develop the ability to perform statistical analysis and data mining for purposes of correlation analysis, trend analysis, financial analysis, forecasts and projections. For example, suppose you were the sales manager and you wanted to predict within a level of statistical confidence, how much each of your major customers would spend and what products they would buy over the next six months. You would need the forecasting features of BI products.

- To support corporate management processes including budgeting, planning, reporting, risk and initiative management. These processes rely on access to good information. BI is an invaluable tool to organise the presentation and analysis of data from transaction systems.

BI "Helps Managers Manage".

Many telecommunications companies have call centres. Call centre operators typically work with transaction-level information, including customer names and addresses, billing information, and product codes and descriptions. This information is stored in a transaction system. Supervisors might access the system to help operators deal with a customer issue. The call centre manager however would have different needs. While occasionally he or she would need transaction histories, the main management requirement would be for information on operational performance, such as average response time to calls, abandonment rates, number of calls and customer satisfaction by shift, by day, by hour of the day and by call centre operator. A BI product would provide the information readily and visually and help the call centre manager do what he or she is paid to do - plan, control and improve business performance.

What Are the Business Benefits of BI?

Companies always want to improve customer and shareholder value. To do this is a modern competitive environment we need to think about the information in our corporate databases in a different way. Instead of treating data solely as a means of knowing what happened in the past at the transaction level, typically the role of financial statements, we must learn to think about data as a corporate asset. When this asset is analysed and presented with insight and business savvy, significant corporate benefits will emerge. There are at least three major business benefits that Business Intelligence products offer:

- ***Increased profitability***. In many companies, the 80/20 rule applies. Twenty percent of customers contribute eighty percent of total revenue. Identifying these customers is easy from the sales analysis. Yet more sophisticated customer profitability analysis through a BI application will often show that the same 20% of customers contribute 200% of the overall profitability. For the remaining 80%, the cost of servicing those customers is higher the revenues received. BI, unlike a simple sales analysis, can help companies identify their most profitable customers and build relationship-based marketing efforts to grow high net-worth customers. At the same time, BI analysis will enable companies to identify and shift their low-net worth customers to more efficient and profitable channels.

- ***Decreased Costs***. Because BI can quickly analyse the performance of front-line operations, it helps identify where productivity and cost improvements are possible. For example, by analysing supply chain performance, managers can decide whether they should put their efforts into reducing procurement, warehousing or delivery costs. BI allows companies to prioritise where their efforts are likely to achieve the greatest payoff.

- ***Improved Customer Management.*** Aggregated customer information that is provided through BI analysis will help companies identify cross-selling and up-selling opportunities. By providing more of what the customer wants, these opportunities will increase customer and brand loyalty. Many industry commentators claim that no CRM (Customer Relationship Management) system is complete without BI analytics to improve sales performance.

Does My Company Need BI?

The survey below provides a ready diagnostic to determine if your company needs a Business Intelligence application. If your managers disagree or strongly disagree on any item, you should consult a BI vendor and seek further information on the capabilities of BI products.

	Strongly Agree	Agree	Disagree	Strongly Disagree
Managers receive monthly reports highlighting planned versus actual.	❍	❍	❍	❍
Managers regularly monitor operational metrics to assess the health of key business processes	❍	❍	❍	❍
Performance data is presented in such a way that trends and forecasts are easily observable.	❍	❍	❍	❍
The company utilises performance dashboards and scorecards at every level to highlight performance expectations.	❍	❍	❍	❍
Managers have ready access to the right information and analytics to support ad hoc decisions	❍	❍	❍	❍
Managers receive enough information to support complex decisions	❍	❍	❍	❍
Managers have ready access to integrated information across functions, processes and geographies.	❍	❍	❍	❍

When it comes to implementing a BI solution, companies are frequently faced with the dilemma of purchasing a packaged BI application or undertake a significant internal development effort. While in-house BI front-end applications are often preferable to packaged BI applications because they allow for customised dashboards and less costly access to data sources, few companies are willing to undertake a major programming effort to develop their own custom BI application.