Reporting vs. Business Intelligence
Comparing Standard Accounting Reports to Business Intelligence
Jim Hammond, President, RainMaker Software, Inc.

So what's all the excitement about? You already have a pretty good report writer built right into your Time and Billing system. Your vendor provides over 50 canned reports, each with selection options. Furthermore, you have someone on your staff who knows Crystal Report© Writer, so isn't this all you need? Maybe in your firm canned production reports for WIP, AR, billing-payment history and so forth are enough.

How many times have you wanted to create an important report from your system only to stop because it was going to take too long or the information just wasn't readily available? This is a common problem for time & billing software users because even modern systems are built as powerful transactional databases, not as analysis tools. They allow for complex transactions to occur but getting information out in a meaningful report format can be time consuming, challenging and costly. Consider this, even a mid-size firm will have millions of transactions to deal with for most reports. Today's law firms need analysis capabilities, not just the "flat-sheet" reporting to which they've grown accustomed. Simply stated, reports that provide statistics and raw data provide no intrinsic value. Firms need tools that provide meaningful "business intelligence" if management is to be able to use the information to support decisions and strategy.

Business Intelligence is a totally different concept than canned or customized reports. Below are some differences between the two.

Structured vs. Ad-hoc

Financial management systems come with numerous pre-program canned reports. The initial launch screen may provide the ability to select from such common items as date range, specific clients, matters or attorneys. Beyond this, the design and nature of the report is "hard-coded" into the system and outright changes to the report require custom programming from either within the firm or from an outside vendor. Therefore, you are limited by the vendor's design and choices.

BI is an ad-hoc way of easily selecting "exactly what you want" in the "exact format you want to see it in" type reporting tool. The user just clicks on the information, which goes into each column and row and the system builds a SQL query and inquiry within seconds. Of course, these reports can be saved in a library or continually modified as the user chooses. Since BI is not "canned" nearly every element of data in your system can be called upon for reporting. In addition, the BI system comes standard with pre-defined calculated running totals for a large selection of items. For example, the starting and ending balance each month for WIP, AR and hundreds of other financial elements is further indexed by client, matter, attorney, costs, fees, write-off's and so forth. BI provides a great degree of flexibility; you get what you want when you need it.

Relational Data Tables vs. Data Cube – Data Warehouse

Time and Billing systems are primarily designed to handle transactions, in what are called relational tables (i.e. relational database). This is ideal for the storage and processing of transactions, but very poor for the analysis of information. Each time a simple canned report is run the report must go look for the correct tables, build the data joins, scan thru each table looking for criteria that matches each and every requirement and then retrieve the detail. The detailed data must then be summarized by the canned selection, for example, by client, by attorney, by department and so forth. Getting a monthly write-off total might mean looping thru this process many times. It is very time consuming even for today's most powerful computers.

In the BI methodology, the vendor provides a well designed data warehouse, commonly referred to as a data cube. It is built for nothing more than precise, high-speed, data analysis. On regular intervals the detailed transactions from the financial systems are pumped into the data cube with time and date stamps. A process called "transformation" occurs whereby detailed transactions are then combined into a large selection of summaries. Each piece of information may be referenced by dozens of summaries. For example, the billing realization variance between attorney standard rate and effective billed rate are already summarized daily and monthly at the client level, matter level, attorney level, area of law and so forth. Therefore, when you need a piece of information the data cube, doesn't have to calculate all the components from individual detailed transaction tables, it just retrieves the answer from a single location. Since that data cube is highly optimized, the daily update of information from the time and billing system takes just a few minutes, for even a very large firm.

Report Formats vs. BI Options

Canned reports are always hard-coded to fit on a piece of paper. Some vendors have provided various "get-arounds" to download a standard report into a Microsoft Excel® spreadsheet and most of the time it's not very pretty. So what do most firms do? They re-key canned report information into dozens of spreadsheets for their desired analysis. Canned reports are, well, just so "canned." Their complex lack of flexibility is only acceptable for routine list-type reports such as an AR or WIP report. List type reports simply allow you to dig deeper and analyze information. What happens in your current system when you attempt to get a true snapshot of your AR from the 4th quarter 2002 then add to the report the billing attorney name and Q4 AR write-off's? In your time and billing system this is probably impossible without custom programming. By comparison in BI, this report would take less than 30 seconds to design and only a minute to produce the Microsoft Excel® report format.

With Business Intelligence, a user can easily select a report output design for any analysis; a Microsoft Excel® Spreadsheet is the most common native format. The report is then built into the spreadsheet and parsed out quite nicely into the correct size columns with all the sub-totals and totals requested. Certain BI reports are best shown in a PivotTable, where a user can easily drag around report items to change the view of the information without rebuilding a report for each option. Sometimes a vendor will provide Digital Scorecards with pre-configured views of information specifically designed for attorneys or partners in the firm. These Scorecards can provide hard-hitting information such as daily cash flow analysis, billing, payment and write-off information for a particular attorney.

Standard Accounting Reports	Business Intelligence
Relies on vendor to pre-design each canned report.	Complete ad-hoc flexibility, user may select any data element form a list of hundreds available. "Show me the advance costs AR beginning balance for January 2003."
Each report has a fixed number of optional options.	Unlimited number of options, complete control including includes and excludes.

	"Show me the monthly WIP change value for 2004, include fees only, and only for our litigation department."
No ability to add new data elements on the fly.	Just click on a data element and add it to a report. "Show me an analysis by phase and task codes, fees billed, fees paid and fees written off."
The data comes from transaction tables.	Data comes from a data cube built especially for analysis and reporting. "Show me all credits on hand ending balance for June 2005, only for our top 10 billed clients."
Slow performing, the more tables accessed the slower the report.	Split second reports, 1,000 pages of highly detailed analysis in less than 30 seconds. "Show me the variance between fees in AR billed value vs. the value at rate #1 (standard rate)."
Few summaries are available, summaries slow down the T&B system and become out of balance.	Data cubes automatically build summaries at all levels and they are highly reliable. A new data cube can easily be rebuilt from detailed time and billing transactions.
Expensive custom programming to make even simple changes.	Change reports in seconds and develop a library of your reports. Automatically send the report on a regular schedule as email attachments to key attorneys.
Inflexible, hard-copy formats.	Select formats from a variety of options including Microsoft Excel® Spreadsheets, PivotTables, and graphs. "Show me an AR Balance by a Client Key Word."

Summary

Law firms today need to manage their businesses much like their corporate counterparts. Managers need the ability to quickly analyze financial information ideally, through Business Intelligence software which is built to be the core repository of information allowing a firm to quickly, intuitively and precisely analyze financial performance and trends for clients, matters, professionals, offices, departments and areas of law.

About the Author

Jim Hammond, President of RainMaker Software Inc., has more than 24 years of law firm software experience. RainMaker provides mid-large law firms with proven, practical and progressive financial management, practice management and business intelligence software. He can be reached at jhammond@rainmakerlegal.com.

RainMaker Software, Inc. provides proven, practical and progressive Financial and Practice Management systems designed to help mid-to-large sized law firms and legal departments effectively and profitably manage and grow their business. With more than 36 years of legal-specific development experience, RainMaker has consistently delivered stable and feature-rich, yet easy to use solutions.

For more information regarding RainMaker's products, interested parties can contact the sales department at 1.800.341.4012 x3413 or via email at legalinfo@rainmakerlegal.com.