Predictive Metrics – The Cleveland Browns Use Them, and Your Business Should, Too

by Dave Mustin

By now, most of us are familiar with "Moneyball," the 2011 movie based on the Michael Lewis book, "Moneyball: The Art of Winning an Unfair Game." That movie starred Brad Pitt as Oakland A's general manager Billy Beane and showcased how his unprecedented use of predictive metrics – aka, analytics – in baseball helped reshape the once-hapless A's into a playoff-caliber team.

More recently, the Cleveland Browns embraced analytics in 2015 as the foundation of its player acquisition and development philosophy. At this stage, it's still too early to gauge success, but if you're a Browns fan, you should take comfort in knowing that your beloved franchise has embraced a business tool – aka, analytics – that many successful businesses have used to their advantage for decades.

At their core, analytics are used to answer fundamental questions. In business, we refer to four types of analytics—and each of those, in turn, answers a question:

- Descriptive analytics – what happened?
- Diagnostic analytics – why did it happen?
- Predictive analytics – what will happen?
- Prescriptive analytics – how can we make it happen?

According to Gartner Research, analytics are used to "…describe statistical and mathematical data analysis that clusters, segments, scores and predicts what scenarios are most likely to happen." In business, analytics are brought to life through a four-stage conversion process:

Stage 1: Converting data to information (e.g., "Which widgets went out the door?")

Stage 2: Converting information to knowledge (e.g., "Did we get those widgets out the door *efficiently.*")

Stage 3: Converting knowledge to insight (e.g., "Did we get the *right* widgets out the door in ways that enable profitability, growth and competitiveness.")

Stage 4: Converting insight to action (e.g., "Here's our roadmap.")

Using benchmarking as a key analytic tool

Stages 1-4 may seem simple to you upon first reading; but a logical follow-up question would be, what tools drive this process? In that regard, no discussion of business analytics would be complete without putting benchmarking at the forefront of data and analytics processing. A benchmark is a standard point of reference against which things may be compared or assessed. Benchmarks enable you as a business or process owner to begin asking how and why, and then answering those questions with solid information, knowledge and key insights.

Consider an example. Let's say three contract manufacturers compete in the same market space. Company A has 40 employees and $24.5 million in revenue, meaning revenue per employee is $612,500. Company B, meanwhile, has 90 employees and $27.6 million in revenue, so its revenue per employee is $306,667. Finally, Company C has 75 employees and revenues of $15.2 million, which translates to $202,667 in revenue per employee. Which company operates most efficiently—and in all likelihood most profitably? The answer is Company A, if the analytical metric of revenue per employee is deemed a key metric. After all, the company generates nearly the highest amount of revenue of all three companies, and does so with the fewest employees. That, in turn, means less overhead costs—e.g., salaries, benefits, office expenses for that company—and if Companies B and C use the same analysis, it should point them toward potential cost-cutting and transformational initiatives. Ultimately Companies B and C have been informed that there is a more efficient way to get products to customers.

Benchmarks can also be used to measure business performance relative to all areas of the financial statements:

- **Income benchmarks**: Understanding how gross profit, operating expenses and operating profit all measure up to comparable companies (i.e., comparables), and why
- **Liability benchmarks**: Understanding whether debt and payables are lower than, in line with, or higher than comparables, and why
- **Asset benchmarks**: Understanding how cash and equivalents, inventory, fixed assets and total assets measure up to comparables, and why

Once data has been obtained, business and process owners that utilize analytics strategically will have a clearer picture of performance measures such as cash on hand, return on assets, payables and current liabilities, property, plant and equipment, gross profit and operating expenses. As a result, they can begin to make insightful decisions that, in turn, can enable them to shift from simply reporting to improving and maximizing.

Do you have questions about preserving and enhancing business profitability, enterprise transformation initiatives or other management consulting issues? Contact David Mustin at 440-449-6800 or **email David**.