

Biz Voice

Companies must have info

Emergencies highlight demand, shortfalls.

Business intelligence can't be ignored as technology advances.

By **Pujan Roka**

As hurricane Irene slammed the East Coast, Wal-Mart started stacking up its inventory for most essential items – beer and Pop-Tarts.

Bottled water and batteries were some of the top selling items, but Wal-Mart has learned from its historical data analysis that beer and Pop-Tarts outsell all other items after hurricanes strike in the areas they operate in.

Wal-Mart uses state-of-the-art business intelligence computing technology to analyze business transactions.

Wal-Mart has been one of the pioneers in business intelligence from early on. It has been using this technology to analyze customer behaviors in real time and react to it in a timely manner.

Before the day ended on Sept. 11, 2001, Wal-Mart detected 1,700 percent increase in the demand for American flags, which alerted its suppliers to stack up inventory for the days that followed.

Consumers hardly notice business intelligence technology in action – like the one Wal-Mart uses, but businesses are in-



Pujan Roka is a technologist and author. He blogs at karmasootra.com.

creasingly using it to boost revenue and to retain customers.

Shortly after I started using on-demand streaming services like Netflix and Hulu, I received a notice from my Internet service provider asking whether I wanted to increase my Internet speed for an extra \$2 per month.

My provider had apparently noticed my Internet bandwidth stretched by streaming services and they wanted to check if I needed higher Internet speed.

My provider is most likely using business intelligence to understand customer behaviors, so they can recommend value-added services.

Understanding customer behaviors is very important to marketing departments. This is why more and more marketing managers are relying on business intelligence for customer acquisition and retention.

Coca-Cola uses its rewards program integrated with its business intelligence system. When customers participate in the rewards program, they share information on brands they consume and their email and mailing addresses, and this information helps Coca-Cola analyze consumption behaviors based on brand preference and

geographic locations.

The demand for intelligent data analysis has made business intelligence an indispensable asset of IT departments.

Earlier this year, IBM released its "Global CIO Study" that surveyed more than 3,000 chief information officers worldwide. Eighty-three percent of them picked business intelligence as the most important tool for business competitiveness.

There is enough evidence to suggest that the systems bolster business success.

One of the most noticeable (and profitable) uses of business intelligence is at Amazon.com. Its business intelligence system plows through a database of products and creates intelligent recommendations based on browsing and purchasing habits. This system has helped Amazon improve its sales year after year. Last quarter, Amazon reported a revenue of \$9.9 billion.

Harrah's Casino, which is one of the largest casino chains in the world, uses business intelligence in real time to boost sales. Harrah's' slot machines transmit in real time usage information to their system, which in turn creates digital color mapping for the floor managers to make on-the-spot decisions, so they can attract and engage customers on the slot machines.

Examples like these illustrate that business intelligence is becoming a basic necessity in today's competitive marketplace. Business health is very much dependent on understanding

customers' preferences and behaviors. The inability to do so can be costly.

Video rental company Blockbuster learned a costly lesson that culminated in bankruptcy in 2010. While it was playing catch up with Wal-Mart and Netflix in the DVD mail-rental business, Netflix had already deployed its business intelligence system to understand customer behaviors and to make intelligent movie recommendations. Many experts argue that it was Netflix's customer delight that led to its steady growth, whereas Blockbuster failed to understand its customers' frustration over expensive rental and late fees.

Some experts have also blamed the lack of business intelligence systems in the mortgage industry that led to the subprime credit crisis. Banks and lenders had no or little visibility of risks associated with mortgage loans, especially borrowers' credit-worthiness. Key performance indicators like the rate of loan defaults should have sent an early warning of the upcoming mortgage crisis.

To many small and medium businesses, business intelligence may sound expensive, as vendors like Oracle, Microsoft, SAP and SAS have created powerful brands around their products. There are inexpensive products like Pentaho and Tableau that are equally powerful as the other top brands.

A small investment in business intelligence today could be rewarding in the long run.