TOP BUSINESS APPLICATIONS OF ANALYTICS

A white paper looking at five high-impact real-world business applications of analytics

MICHAEL CARMAN
CONSULTING

TOP BUSINESS APPLICATIONS OF ANALYTICS

Real results … maximising cross-sales … targeted customer retention

Introduction

Too often, discussion of analytics focuses either on general claims about its ability to boost competitiveness or customer loyalty (spruiked by academics and some of the large consultancy houses) or the specifics of IT investments and software (spruiked by software vendors).

Neither of these captures the real, hard-hitting benefits of what analytics can accomplish. After the conceptual discussion at 30,000 feet, and the specifics of (very expensive!) IT system investments the question remains: Why do all this?

This white paper addresses that question in concrete terms: it sets out my top five real-world analytics applications in business. All are actual, on-the-ground applications which are documented: there are no theoretical examples or mere hypotheticals.

Let's dive in to see how businesses are using analytics to drive real results …
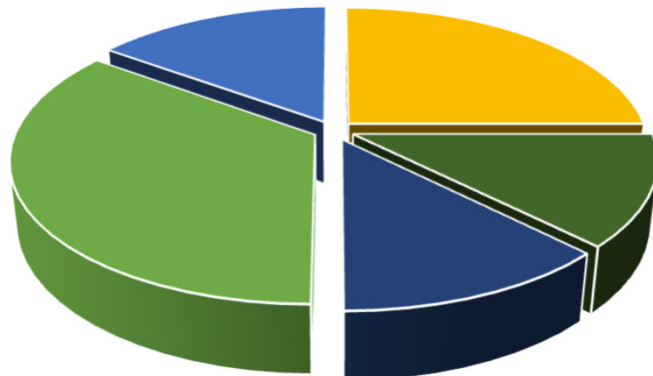
1. Amazon's 'Customers who bought this also bought …'

This is possibly the analytics application with the widest exposure: everyone is familiar with this application even if they don't know that analytics underpins it. Amazon's recommender system runs while you are browsing or buying; it matches your preferences with items or the preferences of people with similar browsing or buying histories, and then suggests those items to you for purchase.

While the actual algorithm used by Amazon is proprietary, the principles and techniques (correlation analysis, collaborative filtering) are well canvassed and can be adapted and used by businesses to enhance customer experience and maximise cross-sell and up-sell opportunities.

2. Keeping the most valuable customers

US credit card company Capital One has the critical business function of customer retention down to a fine art.

If a customer calls to close their account because they've received a better offer from a competitor company, Cap One's system directs the call to a 'retention specialist.' This specialist, who knows that most customers simply want a better deal, can offer the customer a lower interest rate.

But here's the analytics twist: before this happens, in the background Cap One's systems run a real-time analysis of the customer's value to the company: customers worth keeping are directed to a specialist; those who the company is happy to part ways with are directed to a voice response unit and can close their accounts using their Touch-Tone phone.

A highly efficient operational measure grounded in solid analysis.

TOP BUSINESS APPLICATIONS OF ANALYTICS

Pricing for profitability … vital patient alerts … sweet emergency supplies

3. Analysis-based pricing

Casino operator Caesar's Entertainment (formerly Harrah's) use of analytics is even more hard-nosed than Cap One's.

Former CEO Gary Loveman is a poster-boy of the analytics world for his massive analytically-based Total Rewards loyalty scheme. (Loyalty schemes are all about gathering purchase information so that cross-sell and 'next best action' offers can be made.)

But Loveman was also a devotee of pricing experiments and analyses. Let me quote the man himself:

> To take perhaps the easiest and biggest opportunity in my tenure, we found that a ten-basis point movement of slot pricing toward the estimated demand curve for a given game could enhance our profitability by an eight figure amount and be unobservable to the guest.

Such is the effectiveness of an analytically based approach to pricing.

4. Data-based health care

While this paper focuses on businesses, one not-for-profit organisation – US health provider Intermountain Healthcare – deserves mention as a pioneer and leader in the application of analytically-driven services.

One of its applications is an analytics tool which runs at 9.15 every morning in the cardiovascular unit in each of its 22 hospitals and takes readings from patients' vital signs. An email alert informs clinicians of those patients at risk of heart failure and their likelihood of readmission or death. This helps Intermountain adapt its patient care pathways, perhaps assigning patients to palliative care, or providing home care.

Impressive. And analysis-based.

5. Stocking inventories ahead of an emergency

Analytically inclined retailers create models that predict what demand for a particular product will be at a particular time of year.

US retailer Wal-Mart took that even further. In 2004, as Hurricane Ivan approached Florida, Wal-Mart knew from analysis what to stock the shelves of hurricane-affected stores with: Strawberry Pop-Tarts.

By analysing years of sales data from just prior to other hurricanes, Wal-Mart figured out that people in hurricane-affected areas want food that doesn't require refrigeration or cooking: Pop-Tarts fitted that bill.

This is a classic case of real analytic smarts: business savvy applied in a way that meets the needs of people in critical situations.

_____

These examples show what can be accomplished using analytics. To see what it can deliver for your business, phone Michael Carman on 0414 383 374 or email info@mcarmanconsulting.com
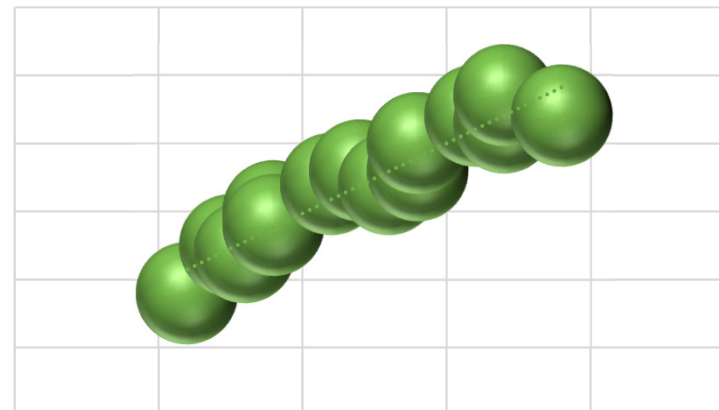
TOP BUSINESS APPLICATIONS OF ANALYTICS

References

Fishman, Charles (1999) 'This is a Marketing Revolution' www.fastcompany.com/36975/marketing-revolution retrieved 27 April 2015.

Fitzgerald, Michael (2015) 'When Health Care Gets a Heathy Dose of Data' *MIT Sloan Management Review Case Study* June.

Freeman, Mike (2006) 'Data Company Helps Wal-Mart, Casinos, Airlines Analyse Customers' www.sandiegouniontribune.com/uniontrib/20060224/news_1b24terada ta.html retrieved 11 August 2015.

Loveman, Gary (2007) Foreword in *Competing on Analytics* by Thomas H. Davenport and Jeanne G. Harris, Harvard Business School Press.

PC Plus (2012) 'How Recommendation Algorithms Know What You'll Like' www.techradar.com/au/news/internet/how-recommendation-algorithms-know-what-you-ll-like-1078924 retrieved 27 July 2015.

Contact

Michael Carman

m: 0414 383 374

e: info@mcarmanconsulting.com

w: www.mcarmanconsulting.com

MICHAEL CARMAN
CONSULTING