



Increasing the Value of Marketing Operations

With Predictive Analytics

By Creig Foster

A recent blog post by James Kobielus of Forrester Research advances the idea that business success depends on your company's capability to see likely future outcomes and take appropriate steps now to realize them. He goes on to say that predicting future scenarios successfully, laying plans and deploying the needed resources is critical in seizing opportunities, minimizing threats and mitigating risks. I fully support this view and believe that for a company to be successful these days it must use predictive analytics to its fullest extent.

So what is Predictive Analytics? From the all-knowing source, Wikipedia, "Predictive analytics encompasses a variety of techniques from statistics, data mining, and game theory that analyze current and historical facts to make predictions about future events." You might ask yourself what is the big deal; humans do this sort of thing all the time. Yes, but predictive analytics takes in huge amounts of data, analyzes complex interrelationships, and discerns patterns in the data that the human mind could not possibly see. Besides, the models can do their processing 24/7 without making a mistake.

Kobielus goes on to state that the "grand promise of predictive analytics – still largely unrealized in most companies – is that it will become ubiquitous, guiding all decisions, transactions, and applications." For a company (large or small) to become a truly predictive enterprise, I believe it will take more than an investment in the technology and people to accomplish this transition. It also takes a change in how a company thinks about its business.

Instead of a reactive response to challenges and opportunities as they are presented, I believe that a proactive and investigative approach to building the business is enabled by predictive analytics. Yes, I know we all plan with the best intentions of positive outcomes. What I am suggesting is using predictive analytics in making decisions about future directions and strategy. In other words, the use of predictive analytics should become part of the way a company thinks about its business and a cornerstone of the overall business strategy.

The advantage of the technology is that it gives solid quantification of possible outcomes and enables one to investigate different decisions and determine likely outcomes without taking the first step (modeling the scenario and seeing the results). Improving decision making with the near "crystal ball" capabilities of predictive analytics improves confidence and chances of success. Besides, decisions are being made based on facts from analyzing the data instead of gut instinct. How does a company become predictive? Kobielus states by "instrumenting" your company. The first step is to assess whether your analytical tools support a predictive environment. In other words, are you capable of doing the following?

- Building complex models of multiple linked business scenarios across different dimensions of your business.
- Incorporating multiple information types into models (historical data from transaction systems as well as unstructured content from call center logs, social media sites, etc.).



- Leveraging the widest and most sophisticated range of statistical and mathematical algorithms.
- Employing multiple discovery and assessment approaches including decisions trees, clustering, association rules, etc.
- Modeling multiple business scenarios across sales, marketing, customer service, manufacturing, supply chain, etc.

While I agree with the above requirements for the largest of companies, there is much to be gained from more focused efforts such as improving customer response to marketing campaigns, detecting fraudulent transactions, etc. For companies just starting to think about predictive analytics, the simpler the focus, the better the outcome will initially be. As a company grows into more advanced usage of the technology; namely, using models across all the dimensions of the business, deploying a data warehouse, and integrating predictive models into the company's transactional system, they will be come more of a predictive enterprise.

I spoke with Paul Maiste, President of Lityx (<http://www.lityx.com>), a company that provides many dimensions of marketing and predictive modeling expertise and platforms about this subject, and he agrees with this approach to evolving a company's predictive capabilities. He mentions that "there are many ways for small and medium-sized organizations to foray into predictive analytics on smaller budgets." He goes on to say "cloud-based and hosted analytics platforms are cost effective and simple ways to jump into the game, as well as leveraging open source tools such as R." In terms of a skill set needed for these types of efforts, Paul believes that "building internal skills can also be an expensive proposition, and there are many opportunities to leverage outsourced skills and consultants to help get your analytic thinking off the ground." Where might the technology be applied first for a company just getting started or involved at an early stage? The areas I like to recommend to marketing departments, for example, include the following:

- Predict customer future value and having that drive targeting decisions.
- Optimize individual customer communications (what is the best offer for which product, at what price, at what time, etc.).
- Predict best prospects for a campaign and execute targeting plans.
- Predict retention and manage retention efforts.
- Predict customer win-back potential.
- Predict best geographies for mass targeting (e.g., through mass media or newspapers).
- Optimize marketing budget within and across channels (e.g., optimizing which newspapers and zip codes within newspapers service areas to place advertising inserts).
- Optimize online banner ad placements.
- Customer segmentation both strategy and development of the segments.

While Kobielus may call these opportunities to use predictive analytics as a silo approach, I believe the improvement in sales and profits from these approaches will pay for more advanced uses of the technology. Besides, walking before running has always been a good strategy, at least in the short term. As you learn the techniques and experience the benefits, the bigger goal of applying these skills across multiple dimensions of the business can always be the goal as you approach becoming a predictive enterprise.

What do you think?

About the Author:



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