

## Predictive Analytics – A case for early adoption.

There has been a lot of buzz lately about predictive analytics, wouldn't you say? Well, we think that this buzz is well deserved.

After reading this article, you'll get a better understanding of predictive analytics, and how it will make your marketing activities more "customer centric" focused. In addition, we hope to provide you with information on why it is important to become an early adopter and how you can get started in order to move the conversation into actions.

### **Definition**

First, let's get a working definition, of what predictive analytics is, from [SearchCRM](#).

*Predictive analytics is the branch of data mining concerned with the prediction of future probabilities and trends. The central element of predictive analytics is the predictor, a variable that can be measured for an individual or other entity to predict future behavior.*

### **Rationale**

Eric Siegel, who should be credited for driving the awareness of Predictive Analytics toward critical mass (founder of [Prediction Impact](#) and Predictive Analytics World Conference), wrote an interesting piece on the rationale for it – [“Seven reasons you need](#)

[predictive analytics today](#)". In his piece, he listed the seven following reasons a key strategic objective that you can gain from predictive analytics:

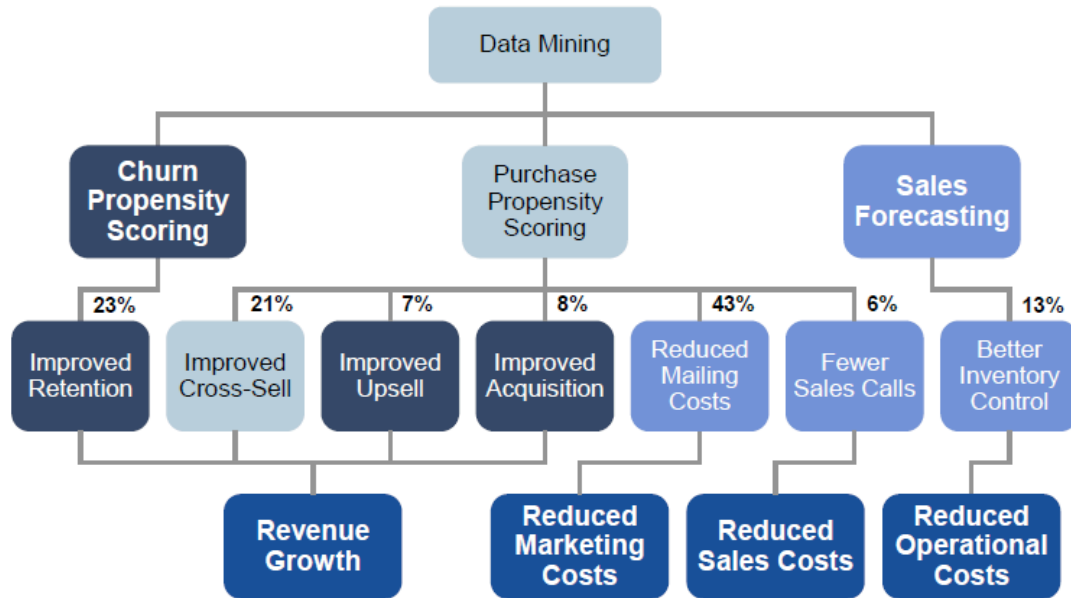
1. Compete - Secure a unique competitive advantage.
2. \*Grow - Increase sales and retain customers efficiently.
3. Enforce - Maintain integrity, and prevent fraud
4. \*Improve - Advance your core capacities (and we add your customer experience).
5. \*Satisfy - Meet customer and exceed customer expectations
6. \*Learn – harness the power of statistics to monitor and impact your customer.
7. Act – Use BI and Analytics as a means for action.

Indeed, most of the key reasons behind predictive analytics usage (\*) deals with customer experience. Through increasing offer relevance, improving services, and meet and exceeding customer expectations while obtaining operational gains, and defining a competitive advantage.

However, despite a surge in awareness in recent years, in practice it's a different story. Short of the [crumble index](#), [lunar cycles](#) and, dare I say, the almanac – most organizations have not adopted these techniques.

## **Impact**

Last year, [Gareth Hershel](#) from Gartner presented the findings of a study on Predictive Analytics (2010). He mentioned that the rise in rise in channels, products, and customer expectations have driven the needs for organization to market themselves more efficiently. In the study, he outlined how each technique benefited organizations:



Percent indicates frequency of this benefit claimed in projects using data mining across 140 different organizations.

**Gartner.**

As displayed above, the most compelling, and rewarding reasons, are to reduce mail cost (43%), decrease churn (23%) and improve cross-sell (21%). All of these interventions are key in improving your customer’s experience.

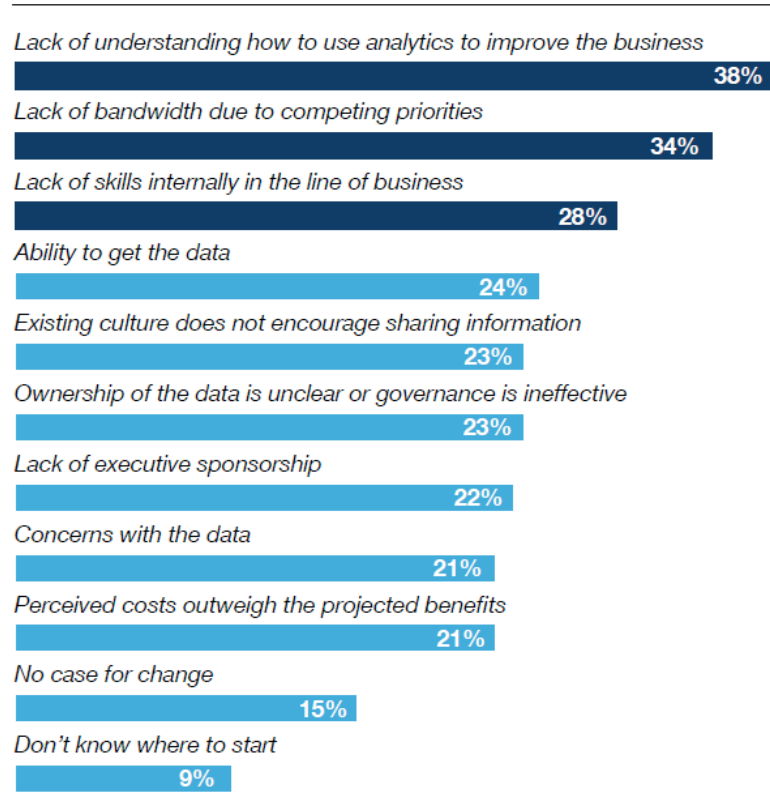
Unfortunately, despite the well-documented evidence of these advantages, most organization still lags behind in implementing them.

According to Herschel mainstream adoption for predictive analytics is still two to five years away. Back in 2010, Gartner predicted that only web analytics, algorithmic trading was two years away from adoption – and that has happened!

### **Mitigating Factors of adoptions**

The leading barriers of adoption are not from access to data or technology but from common issues encountered with most organization.

A recent IBM/MIT Study summarized barriers to adoptions within organization:



*Note: Respondents were asked "What are the primary obstacles to widespread adoption and use of information and analytics in your organization? Please select up to three."*

*Source: Analytics: The New Path to Value, a joint MIT Sloan Management Review and IBM Institute for Business Value study. Copyright © Massachusetts Institute of Technology 2010.*

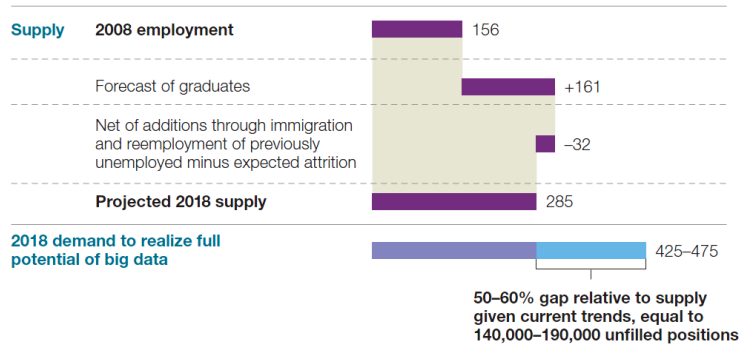
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The lack of understanding of how to use analytics to improve businesses, and the lack of bandwidth due to competing priorities were the two leading reason cited. In addition, lack of internal skills all came before any data or technology issues.

The shortage of expertise is one of particular interest: In a recent study McKinsey Global Institute reported that - *"The United States alone faces a shortage of 140,000 to 190,000 people with analytical and managerial expertise and 1.5 million managers and analysts with the skills to understand and make decisions..."* (McKinsey, 2011).

**Demand in the United States for people with deep expertise in data analysis could be greater than its projected supply in 2018.**

Deep analytical talent, thousands of FTEs<sup>1</sup>



<sup>1</sup>Deep analytical talent are people who have advanced training with statistics or machine learning. FTE = full-time equivalent. Source: Dun & Bradstreet; company interviews; US Bureau of Labor Statistics; US Census Bureau; McKinsey Global Institute analysis

**Early Adoption**

So, are early adopters of Predictive Analytics more likely to thrive and develop a competitive advantage? Absolutely - a recent study (a second) by MIT Sloan and IBM points to a “widening divide” in the competitive advantage created by analytics.

In the paper, three types of organizations were described (from less to most proficient) at integrating analytics; aspirational, experienced and transformed.

*Analytics sophistication*

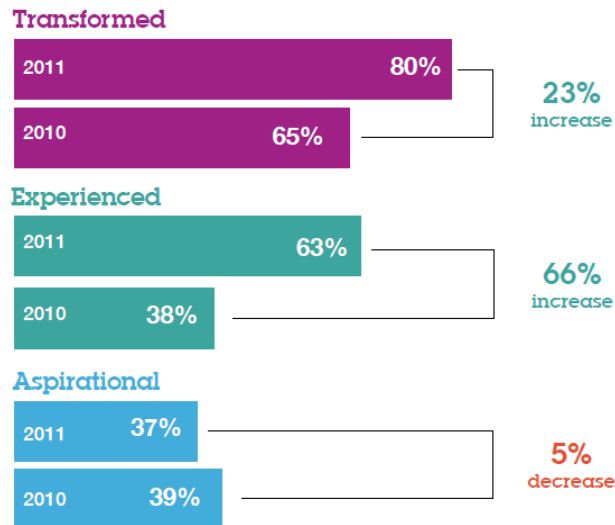
	Aspirational	Experienced	Transformed
<b>Percentage of total respondents</b>	32%	45%	24%
<b>Analytic use</b>	Basic user	Moderate user	Strong and sophisticated user
<b>Reliance on analytics</b>	To guide decision making in financial management and supply chain management	To guide future strategies, and increasing reliance on analytics to guide activities in marketing and operations	To guide decision making in day-to-day operations and future strategies across the organizations
<b>Information foundation</b>	Few standards are in place; structured, siloed data supports targeted activities	Enterprise data integration efforts are underway	Enterprise data creates integrated view of the business with a growing focus on unstructured data
<b>Analytics tools</b>	Primarily uses spreadsheets	Expanding portfolio of analytics tools	Comprehensive portfolio of tools to support advanced analytics modeling
<b>Analytics skills</b>	<i>Ad hoc</i> analysis is done at point-of-need; has difficulty hiring analytics talent	Analysts work in line-of-business units with growing focus on cross-training and hiring skills externally	Many are combining line-of-business units with centralized units that provide advanced skills and governance
<b>Culture</b>	Managers are focused on executing day-to-day activities	Open to new ideas but lacks top-line leadership and champions to support changes	Strong top-line mandate to use analytics supports a culture open to new ideas and champions who shepherd methodology and skills

Source: The New Intelligent Enterprise, a joint MIT Sloan Management Review and IBM Institute of Business Value analytics research partnership. Copyright © Massachusetts Institute of Technology 2011.

Figure 2: Analytics competencies can be assessed by analyzing key attributes as they relate to the organization, including leaders' reliance on fact-based decision making.

Results show that the more sophisticated organization progressed faster over time while those that are not tend to get left behind, as a rule this is common in marketing, no?

*Increasing competitive advantage*



Percentage of respondents who cited a competitive advantage using analytics year-over-year grouped by analytic sophistication levels.  
Source: The New Intelligent Enterprise, a joint MIT Sloan Management Review and IBM Institute of Business Value analytics research partnership. Copyright © Massachusetts Institute of Technology 2011.

*Figure 3: The ability of organizations to create a competitive advantage with analytics has surged in the past 12 months.*

These findings support what Davenport and Harris (2007) predicted a few years back in their book – Competing in Analytics. Without “Senior Management Commitment” and a distinctive capability competitive advantage is difficult to obtain.

### **Becoming an early adopter**

For those of you who have not used predictive analytics yet, it is not too late to get started! The idea is to get going and, gather momentum through small wins to gain executive sponsorship without a complete overhaul of “business as usual”.

We suggest that you start small with a simple project that can create a considerable impact. For instance, we mentioned earlier, reducing mailing cost (even via email),

decreasing churn or, increase cross-sell can have a tremendous impact on customer experience and your bottom line.

If you have not been exposed to predictive analytics in the past, a good place to start is through benchmarks. No one knows your business better than yourself; How much are you currently spending on mail? How many customers are leaving the organization? How many opportunities for cross-sell are missed? Once you understand your benchmarks, you can set some objectives and harness predictive analytics techniques as a means to an end.

From there, you can enlist or solicit assistance to build you a model for these activities. What the model does is create a starting point for you to understand the key drivers that can lead to a response (or a non-response). Then, you can test the model against your current efforts. If the results are favorable you can roll out using a larger scale.

In the end, the main idea is to learn more about your business, customers, and what make them tick! As a result, we suggest that you strive towards using help that is “tool agnostic”. What you want is an ally who has business and statistical knowledge; people that will work with you toward obtaining some tangible results.

Keep in mind, adoption is not quantify by scale of the project but rather on the impact on a given business process. Getting familiar with predictive analytic technique and getting some insights, goes along way toward becoming an early adopter.

Remember, analytics is a matter of tactics and strategy, which continually refine each other. Only in this form, can you create a sustainable competitive advantage.

## References

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