

Using Big Data Beyond Credit Applications

By: Kerri Byron

As originally published in the Credit Research Foundation 4Q 2017 Credit & Financial Management Review

Abstract

If there were a list of most used terms in business, “big data” would have surely topped it this year. Everyone has heard the buzz word and likely read an article or two on the topic, yet many still don’t fully understand exactly what big data is or that it can be used in a variety of business applications. Specifically in the credit industry, there is enormous potential for big data to change the way decisions are made and predict the next move of businesses before they even know what it might be. But outside of just credit scoring lives an untapped capacity to turn raw data into actionable insights, empowering businesses of all sizes and among all industries to increase efficiency through a combination of intelligent data sets and highly effective technology platforms.

Having the right technology in place is crucial, but the technology can only be as strong as the quality of the data sets associated with it. In order for there to be strong, complete, relevant data, businesses need to continuously improve those data sets by contributing information on the companies they work with. A data set comprised of 100 contributors is great, but a data set comprised of 1,000 contributors is much greater. The methodology behind good data is simple; the power of the data set will grow as the size of the data set increases. Of course this must happen consistently, requiring every business to be on board.

As databases are growing, technology is advancing and the capabilities of the pair can fuel any business for economical growth. The democratization of analytics through technology opens doors for every business to win, in B2B credit and beyond.

Transforming Raw Data into Actionable Insights

Big data is really any set of extremely large data that can be analyzed by various modeling attributes to disclose actionable insights. Those insights may be patterns, trends, common characteristics, traits, or something else that helps define the data set. By applying a statistical model to a set of big data, businesses can identify patterns found in groups of companies that share common outcomes. Such outcomes could be customer profitability, loan performance, trade credit payment behavior, response to a promotional offer, etc. There are an infinite number of variables which can be applied to sets of big data in order to draw necessary insights for business decisions.

The concept of data is tracking people and determining where they are, capturing information on a business and knowing where they are. Data is like an ameba, where a large set of data can be taken and broken up into multiple dashboards for view, or one specific concept can be drilled further into than the others. Location data has gone from a generalized area code to an extremely specific IP address which can pinpoint exactly where someone is.

For most companies, having a statistician on-staff is not top priority, which is why technology is so valuable. Using statistical technology platforms allows any business to benefit from analytics and quickly narrow down the variables that are significant to their unique business growth. What once took hours of manual processing can now be completed and analyzed in real-time, welcoming the opportunity for analyzed data sets to be a component in nearly every single decision that a business makes. A strong set of data combined with the most powerful technological tools on the market sets any business up for breakthrough. As big data sets are explored, businesses may find that the results point to the need for change. For a business to function at its maximum potential, priorities need to be placed on where the market is responding. Whether it be a few minor tweaks or a complete course correction, big data may be the secret to unlocking a new stream of revenue, as long as the entire organization is open to change.

There is no point in having large sets of data if they aren't being acted upon. As a manual process, analysis of customers is tedious and time consuming. With data-based solutions, businesses can cut costs, increase customer retention, improve marketing campaigns, gain new business insights and decrease the risk of financial loss. Once a business has the information it needs to understand its customers, it can focus on the most targeted markets for maximum growth.

Predicting Future Customer Behavior

We used to define businesses by determining what they were. Now it has become more about what they do. The population of what a group of businesses were used to determine how marketers would market to them, but now we market based on what a customer does; what they buy/what they are likely to buy.

One of the most exciting components of big data is its ability to predict future customer behavior. This tactic is extremely popular in sales and marketing departments, as it is a considerable method to drive revenue. Until recently, traditional sales and marketing methods focused solely on historical trends rather than developing decisions based on predictive insights. Within both the B2B and B2C worlds, customers can be defined by their behaviors. Whether it be an individual or a business, big data provides clues backed by in-depth statistical analysis as to the direction of the customer's next move. In other words, businesses and individuals that share common characteristics are also likely to share a common outcome. If the outcome is desirable, then you have your target market.

By looking at the time period when customers bought and all of the behaviors leading up to that point, businesses can identify how soon they may buy again, as well as other companies sharing similar characteristics who are also likely to buy. This information provides a quantifiable estimate of which prospects in a business's pipeline will ultimately make a purchase. It is essentially scoring a customer based on their target profile.

Predictive analytics empower organizations to identify customers that have a high propensity to buy in order to achieve maximum profitability. For example, an increase in the shipping spend of a business over the past six to twelve months signals that a business is shipping more product and thus is likely to purchase more materials in order to fulfill the increase in shipping requirements. In the credit world, this could support an increase in credit line. In the sales and marketing world, this could support a new product up-sell. The data set may also show that the company is hiring more employees, and may soon open an additional location. The importance of identifying all of these behaviors is recognizing that they are all related and support some type of trend.

As big data indicates trends of growth or decline, organizations can draw predictive conclusions as to whether that customer's demand is increasing or decreasing, and how they should respond.

Searching For and Finding Hidden Customer Trends Through Data Mining

If you want to understand a business, take a look at its behavior. Since the beginning of B2B partnerships, companies have looked for data to answer two main questions about their customers; what do you do and how big are you? Before there was any recorded data to answer these questions, it was a manual process; sit outside of a business and pay attention to who is coming and going. Are there high volumes of customers coming in and out? Are there trucks dropping off office supplies and delivering products? Or is most of the company's money being

spent on fancy landscaping? What a company spends money on speaks volumes about its growth and direction. It is a direct correlation to where its priorities lie.

Over time, as this data was recorded, collected and bundled together, businesses could be categorized by industry, size, revenue, location, and more. As this data has developed and evolved over the years, it has become big data. Companies are now able to search for and identify trends within a group of customers, prospects, and look-a-likes. Once significant factors are identified among a group of companies, a statistical algorithm can be created to describe common characteristics. These characteristics, which may have previously gone unnoticed, now serve as clues or explanations as to why a business is behaving a certain way. Two businesses that may look similar may behave very differently. It started as common sense without computers, but now technology enables us to gather large amounts of information like shipping location and frequency. That's big data and it has a purpose dating back to what creditors originally searched for manually.

The whole point of running a business is to find and keep your best customers. We have sales and we have credit; two very different concepts that go hand in hand. A business must find its customers and make sure they are good ones. Analytically, businesses must understand who their best customers are and, more importantly, what they're doing. It's all about their behavior, not just who they are. The things that set them apart from what may have originally been thought to be a target customer is growth and what they're buying. Growth helps distinguish the "right" customers from the "best" customers. From there, a business can also identify look-a-likes through similar characteristics such as what they are ordering, when they are ordering, whether or not they are paying on time, etc. Now you have a bulk of data to prioritize which customers should be getting the most attention.

Being able to identify hidden customer trends through data mining gives businesses a competitive edge that can increase profitability, customer loyalty and retention rates. Just like banks use credit cards to evaluate consumer behavior, businesses can use purchase behavior to evaluate other businesses. Big data is the cutting edge in business competition and growth.

Data mining and database marketing go hand in hand. By examining customer patterns and identifying the traits of similarity among them, you can create custom portfolio scoring and thus recommend products that will market themselves, or even build custom products (or service packages). Businesses can outperform their peers by being the first to identify and act upon customer trends, preferences and intentions.

Identifying Your Best and Worst Customers at Any Company

There is no universal standard for the perfect customer. Every business has different needs whether it be size, location, revenue, number of divisions, years in business, etc. There are many factors that go into determining the credit worthiness of a customer at your particular business. Big data enables companies to explore the different combinations of characteristics that make up their best and worst customers, and those combinations become increasingly accurate as the size of the data set grows. The larger a data set is, the more narrow and precise customer

segmentation can be. Rather than dumping customers into 3 or so categories, subcategories and extensions of those subcategories can be created for a more granular understanding of who the target customer really is, and who it is not. Thus, products and services can be precisely tailored to those who are deserving.

Technological advances have played a tremendous role in enabling widespread access to more sophisticated analytics about businesses. As numbers grow and new or updated information about businesses is added to a particular data set, the funnel widens in conjunction with the availability for people and software to sort through the information and find the traits which identify their best and worst customers. Not only does the data make it possible for businesses to identify and reach their target customer, but it also enables businesses to develop new products and enhance existing ones in order to better meet the customers' wants and needs. With this give-and-take approach, both businesses and customers benefit as there is greater availability matching greater demand.

Avoiding Risk and Severe Delinquency

Identifying customer patterns and trends through big data allows business to proactively avoid risk and severe delinquency by proactively making decisions as soon as patterns are detected, rather than being blindsided when a customer becomes delinquent. Sophisticated analytics can predict the likelihood of risk, significantly improving decision-making ability and overall functionality. On a regular basis, businesses should use analytical software tools to review their current portfolio and fill in any holes. Having the most up to date and accurate information on other companies and customers is essential.

The powerful combination of data and the technology that backs it belongs at the pulse of every business. It should be integrated into key decisions being made by sales departments, marketing teams, credit and risk analysts, supply chain management, customer experience associates, and other key roles. In order to expand big data out of just the credit department, those in management and leadership roles must be fully committed to the analysis of all information available, setting attainable goals for the outcome of the data across the entire organization. Having goals set in advance of delving into the data will ensure that the desired outcomes are being met, whether that is new customer acquisition, increasing efficiency while cutting costs, identifying opportunities for new strategy development, or just improving overall business performance.

Both in and outside of the B2B credit world, big data is a big deal. As businesses move forward, the competitive benefits become more obvious. A broader knowledge of the concept means that businesses can capture more data to create better data sets and use that data effectively at scale.

Kerri Byron is a Marketing and Public Relations Professional at Cortera, Inc. Learn more at www.cortera.com.