Resizing Big Data: How Modern Credit Teams Can Leverage Data for Innovation and Growth

By: Tracey Panek

Abstract

The transformation of finance leaders "from scorekeeper to strategic partner" is not new but the focus from C-suites is emphasizing strategic insights from credit professional more today than it ever has in the past. Gone are the days of localized spreadsheets, data driven analysis has moved in. This article will address "Big Data" form the "Credit Suite" with a focus on the following areas:

- *Why Big Data Matters*
- *The Changing Role of Credit and Finance*
- *Big Data's Impact on Credit and Finance*
- *The Data Quality Challenge*
- *Finance's Role in Leveraging Data for Growth*
- *The Value of Partnership Data*

Why Big Data Matters

The term "big data" is not new to the corporate lexicon. But, depending on the company, the benefits of big data may not yet have trickled down to every department and individual.

Big data became a buzzword some years ago[i] when the amount and types of data collected by companies began to expand across platforms, geographies and teams. This proliferation became an opportunity for enterprises to understand how to gain insight from all the information that software and systems collected — but that the companies were not using. The data was latent and, worse, disorganized, which meant that even if its value was recognized, the data couldn't be used until it was cleaned up.

Think about the difference between having tools neatly hanging in the garage, waiting to be used, versus piled together in boxes on a high shelf or haphazardly loaned out. You think the drill might be up there, but it could also be in the shed, and your neighbor has the ladder; you'll need to walk over there first and get the ladder back before you can even see if the drill is in the box. By then, you'll have spent a long time looking for the drill and collecting your ladder; and you still need to find out if it's the right tool for the job and then do the actual drilling. Data was similarly handled before the advent of big data and created similar challenges – lack of insight and no easy access to useful tools. Big data projects gave companies better access to the necessary tools to drill into all the information accumulated, and use it to help run a smarter business.

Any company that's been dismissive of big data as inapplicable to their process might just be underestimating its power — or intimidated by its complexity. In an IT setting, a discussion around big data involves algorithms and the programming framework, Hadoop – both needed to capture, process, and analyze the data. For the other corporate functions that leverage big data – take sales and marketing, for example, the discussion can be more pedestrian. Sales and marketing teams might invest in big data initiatives to better learn what their customers and prospects want by studying the analytics compiled over the course of a sale to uncover patterns of buyer behavior. They can then take that insight and reposition their business in response to their customers' needs to achieve their goals of driving growth and revenue. To get to that point, it takes effort and coordination from multiple teams, but the end result can be more than worth it.

Mining behavioral data (such as how long someone spends on a website) has helped companies design better products and create a better overall user experience to entice prospects into becoming loyal customers. For example, analyzing demographic data can tell you where your customers are and where you should focus next. When big data initiatives worked, they made websites easier to navigate (the result of companies accessing analytics to see that usage dropped for particular pages and acting on that information) and products could be brought to market more quickly (because quality data helped identify which features were must-haves and which could be added later). But when data-driven projects haven't worked, usually because the data was disorganized or mismanaged, they led to offers and advertisements for products we'll never need (think about an ad for geriatric medicine showing up in a twenty-something's social media feed). Similar missteps can be made by credit teams trying to use big data for the first time.

The Changing Role of Credit and Finance

Advances in technology have also impacted the role of finance. Finance leaders used to be resource stewards solely in charge of financial oversight, but they're no longer relegated to minimizing risk. While they once held the purse strings related to capital investments, that skillset and mindset has had to change as technology disrupts every facet of the modern business landscape. "Adapt or die" has become the mantra, and companies that can't shift to new approaches are losing out due to changing market forces. Out of necessity, finance leaders find themselves becoming strategic partners with other leaders to find new ways to win. It is no longer, "Sorry, there's no budget for that." It has become, "Let's find a way to stay competitive."

This transformation of finance leaders "from scorekeeper to strategic partner" is not new – accounting giant Ernst & Young acknowledged it back in 2010 in their survey *The DNA of the CFO*,[ii] when 35% of international CFOs described themselves as playing a leading role in developing corporate strategy. To be fair, these respondents noted their strategic contribution focused on "providing insight and analysis to support the CEO and ensuring that business decisions are grounded in sound financial criteria." So, CFOs weren't necessarily being consulted on the next social media craze, but being sought out for expertise in understanding how different business strategies will either make money or lose money was a huge change that is still making waves today.

When Ernst & Young revisited the study for an update in 2016, they found that CFOs are under even more pressure to balance their traditional accounting duties with long-term strategic initiatives.[iii] However, they identified four forces that are further complicating the new work environment: digital; data; risk and uncertainty; and stakeholder scrutiny and regulation. CFOs are now tasked with supporting their company's efforts to become digitally savvy; using data science to gain business intelligence; managing risk at the reputational, regulatory and cybersecurity level; and being accountable to key stakeholders and regulators.
As you can see, finance has evolved from managing risk (saying "no") to driving growth (saying "yes"). And insights from big data have been the foundation of that transformation.

Big Data's Impact on Credit and Finance

In the credit world, big data initiatives have been focused on financials. Credit departments share a primary goal of turning their company's sales into paid invoices in a timely manner, and an investment in data-inspired initiatives can help to achieve this goal. How companies go about this can be as varied as the tools in a garage. An organization that takes a more analog approach to credit and collections by maintaining spreadsheets and relying on phone calls to collect on past due accounts may not be tapping into all the benefits of big data. But a company that employs automated solutions to streamline basic transactions and billing processes, alert credit managers to portfolio changes, and use scoring models to determine creditworthiness is likely taking advantage of internal and external (third-party) analytics. At a high level, finance departments can leverage data and analytics to simplify their decision-making processes and streamline tasks that once had to be manually performed.

Analytics and insight are the keys to getting the most out of your company's information and data, just like that ladder you still need to get from next door will be key to actually creating a hole, once you find the drill. Finding the drill is akin to your raw data, such as the records of all account transactions. This data is not particularly useful by itself. It needs to be analyzed (enter the ladder) – this manifests itself as reporting, which is not a high-tech concept. Most every job function uses or should be using reports to glean any value from the raw data. Finally, insight is needed to inform the prediction made based on the analysis, which is in turn used to guide the decision-making process, create your hole and finish your home improvement project. In the credit world, one of the most helpful insights can be a customer's ability to pay.

As Lew Bader wrote in Order-to-Cash 101: Credit Analysis "…The best indicator of a customer's ability to pay comes from the Big Data that every company has in its financial systems. Within these systems there exists a wealth of historical information available for sophisticated analysis. Not just analysis to understand what has happened, but analysis that will identify trends that can lead to action…action that will drive future results. By combining all detailed historic customer information (invoices, payments, chargebacks and credits) data can be identified that will provide credit analysts with the ability to recognize trends that might otherwise go undetected. Consistent behavior from a customer is the best indicator of future behavior. Creating a behavioral risk profile for every customer will certainly help companies evaluate ongoing credit worthiness."[iv]

The Data Quality Challenge

The sheer volume of information that encapsulates any big data initiative can conceivably lead to data quality issues. Managing a large amount of internal and external data is difficult, and can get messy.

Of course, any data-related project can only be successful if the input is accurate and up-to-date. A credit department that has separate, disconnected accounts for customers that are part of the same corporate parent will have trouble unlocking any true value. Consider the holding company Berkshire Hathaway, which has almost 7,000 different locations in its family tree. Its holdings range from retail to real estate and insurance, and it would be a huge oversight not to understand its subsidiaries' relationships when evaluating credit risk.

The same goes for separate account entries for the same company – think 7-Eleven and 7-11, or IBM and International Business Machines. These disjointed data entries aren't just impacting finance – customer service, sales, and marketing all struggle with these issues. How many times have you called a company you do business with and they couldn't find your account because they had you listed under an incorrect name or phone number? Big data can be used to apply a consistent structure to clean up data errors and map entities accordingly. Standardizing your data structure to correct foundational problems is an early win for the ability to leverage new data assets. Until then, bad data can lead to bad decisions.

Finance's Role in Leveraging Data for Growth

It's true that more companies are using data and analytics to guide their decision-making process. According to *Analytics Accelerates into the Mainstream*, a study by Dun & Bradstreet and Forbes Insights, 70% of companies say at least half of their decisions are made based on analytics.[v] However, before you think these companies are using sophisticated predictive tools that cost a fortune, 40% admit their analytics consist of spreadsheets.

As for the finance department, 63% of CFOs said they leverage data and analytics to find opportunities to fund business growth, support long-term strategic planning, and contribute to revenue via sales acceleration. While these goals seem high-level, they report the analytics resulted in fewer credit defaults, a quicker turnaround time for credit applications, and even financial gains.

These KPIs are invaluable to improving and modernizing a credit department. And that's where big data becomes applicable to most every company. Big data doesn't have to be a major IT investment requiring data scientists, consulting firms and million-dollar contracts, but those are the stories that make the headlines. Many big data projects use a mix of both internal and external (third-party) data to obtain a wider scope of information to address the task at hand, and credit departments everywhere already rely on third-party data from the major bureaus to make credit decisions. Bankruptcies, judgements and lawsuits will all affect a credit decision, and this information usually comes from external sources. The natural next step is to advance that static data from a credit report into a functioning set of analytics and scoring models to better manage financial risk, improve cash flow, and ultimately enable growth.

The Value of Third-Party Data

Using the aforementioned approach to incorporate third-party data to inform analytics and scoring models, organizations can get a better grip on their collections process. Pre-mastered commercial content is critical to providing a more calculated credit decision, and a combination of analytics and scoring to weight decisions are the tools of the trade.

Let's look at some ways that credit departments can leverage third-party data to build a more effective collections operation:

- **Fewer Credit Defaults**
  A data-inspired finance and credit department takes advantage of third-party data that goes beyond commercial evaluation scores. Many organizations already consult credit reports to screen for risk when onboarding new customers. A dynamic organization incorporates automation, such as system-generated flags on delinquency predictors, to help identify and predict slow payers. The ability to identify high-risk accounts is a surefire way to have fewer credit defaults. In addition, when using predictive analytics, credit managers can create a set of rules and scorecards to make credit decisions and set account limits based on overall risk tolerance.

- **Quicker Turnaround Time for Credit Applications**
  Manual processes impede operational efficiency, and manually analyzing data can lead to incorrect risk assessments. Lengthy credit reviews can also bog down the sales cycle, but credit teams that use automation and analytics to quickly evaluate routine requests have more time to investigate the complex deals. Analytics can also help uncover trends to proactively address both risk and opportunity to reduce credit holds and prioritize collections. Armed with this information, credit managers can segment customers into categories of risk and opportunity and adjust their policies to reflect these segments, which can lead to faster credit decisions.

- **Financial Gains**
  Essentially, all corporate initiatives can be traced back to revenue growth (or at least the desire to stop loss), and an investment in data and analytics is no different. Improved quote-to-cash cycle, reduced days sales outstanding – these are the results of the ability to predict certain losses and delays that directly impact the bottom line. But an automated credit process that leverages data can also lead to more sales. Take, for example, the opportunity for credit to influence a cross sell and upsell opportunity. Credit managers can uncover score trends and current customer behavior to pre-identify low-risk customers that undersold, and pass that information onto sales to nurture.

Conclusion

"Big data" can mean a large-scale IT project, but it doesn't have to. Credit teams can leverage internal and external data and analytics to simplify their decision-making process and streamline once-manual tasks. For example, using automated solutions to receive alerts to portfolio changes and using scoring models to determine creditworthiness are two ways to leverage data for insight without having to make a major investment. Credit and finance professionals that are given access to the best tools – organized and ready to be used together in the garage – can enable growth and make a stronger impact on their company's bottom line.

[i] Survey Analysis: Big Data Adoption in 2013 Shows Substance Behind the Hype, Gartner, Sept. 12, 2013 or https://www.gartner.com/doc/2589121/survey-analysis-big-data-adoption
[ii] *The DNA of the CFO,* Ernst & Young, 2010 or http://www.ey.com/gl/en/issues/managing-finance/the-dna-of-the-cfo--an-ernst---young-study-of-what-makes-a-chief-financial-officer
[iii] *The DNA of the CFO,* Ernst & Young, 2016 or http://www.ey.com/Publication/vwLUAssets/EY-the-disruption-of-the-CFOs-DNA/$FILE/EY-the-disruption-of-the-CFOs-DNA.pdf
[iv] Order-to-Cash 101: Credit Analysis, Lew Bader, Sept. 15, 2015, **Shared Services & Outsourcing Network (SSON) or** https://www.ssonetwork.com/finance-accounting/articles/order-to-cash-101-credit-analysis
[v] Analytics Accelerates Into the Mainstream, Dun & Bradstreet/Forbes Insight, 2017 or http://www.dnb.com/content/dam/english/economic-and-industry-insight/dnb-forbes-analytics-accelerates-into-the-mainstream.pdf

Tracey Panek is a Content Marketing Manager for Dun & Bradstreet, where she supports the 176-year-old company's Finance, Credit, and Risk division.