

# Fuel Spend Analytics With Fast, Accurate & Flexible Data Insight



## INTRODUCTION

As global enterprises continue to face increasing complexity and market volatility, procurement professionals are turning to data-driven analytics and insights to help manage uncertainty, gain a better understanding of suppliers and third parties, and fuel growth. They need faster access to more intelligence to understand what they're buying, so they can maximize cost savings and reduce their risk. The speed, accuracy, and scope of spending analyses are critical to managing the business and spurring growth. To do so, Chief Procurement Officers (CPOs) will need to evolve their thinking and find innovative solutions to their biggest challenges, and implementing digital solutions will be a crucial component.

Spend analysis solutions have been available for close to two decades, and the ability to manually harmonize data sources early on was considered revolutionary. Data quality and governance issues still vexed professionals, because these processes were time consuming and labor intensive. However, some early adopters began to achieve cost savings with these first-generation solutions, which gave them a peek into the possible.

Second-generation solutions then evolved to include greater visibility into spending. Data refresh cycles accelerated, advancements in extraction tools occurred, and matching technologies improved, with better data quality as the outcome. Business intelligence solutions replaced custom reporting, and more cross-functional users had access to the data.

## CPOs identified cost and risk management as their two main focal points for 2018.

— *Deloitte Global Chief Procurement Officer Survey 2017*

However, integrations with non-transactional data, such as risk, corporate social responsibility, diversity, and compliance, was quickly becoming an additional requirement. Complex analytics were needed, but data issues complicated procurement's need for new layers of visibility. Today, the core requirements of the past remain, and a third generation of intelligence – requiring automated extraction and integration of multiple data types in near real time – has emerged.

CPOs identified cost and risk management as their two main focal points for 2018, according to findings in the *Deloitte Global Chief Procurement Officer Survey 2017*.

Of CPOs surveyed, 75 percent said they believe that procurement's role in delivering digital strategy will increase in the future. CPOs also indicated that technology will impact all procurement processes to some degree, though Deloitte found that awareness of emerging technologies and skills to deliver solutions using technology were lacking.

That awareness gap needs to close quickly, and intelligence gained through spend analytics will need to underpin future success.



## A BRIEF HISTORY: Three generations of spend analysis

Spend analysis solutions for supply chain professionals have evolved and improved over time. **Greg Iaquinto, Regional VP, Supply & Compliance Solution Sales** at Dun & Bradstreet, walks us through his first-hand perspective of those developments.

### FIRST GENERATION: PIVOT-TABLE REPORTS

It's been almost two decades since I encountered my first spend analysis solution, and I was fortunate enough to work for a company that created one of the early solutions in the market. Targeting the complex discrete manufacturing space, this first-generation solution introduced me to new terms such as MOLAP (multidimensional online analytical processing) and AML (approved manufacturer list). Visualizing transactional data from cost centers and suppliers over time, complex cross-tab queries, and supplier family lineages were all part of the available first-generation spend analysis information. As spend analysis was evolving, connecting multiple disparate ERP systems, harmonizing category schemes, rationalizing a vendor master, and producing category savings reports were thought to be revolutionary. For most companies, just getting access to a harmonized data source provided immediate value by allowing them to better understand and leverage their vendor relationships, thus leading to immediate cost savings. There were many challenges to overcome. So-called visualization capabilities were limited to glorified pivot-table reports available to a limited amount of power users who analyzed the data in complex categories. Users struggled for advanced reports, and if a complex cross-tab query was required, you needed to schedule that around your lunch break. Data latency, quality, and governance issues were also concerns as the extraction, cleansing, and data governance process relied heavily on manual intervention. Over time and with a significant amount of effort, these early adopters started to achieve their original savings targets.

Looking for additional savings, they quickly realized they needed faster refresh times and deeper insights into their supplier relationships, buying patterns, expenses, and compliance. Unfortunately, the technology available at that time had limitations, such as minimal reporting capabilities and the inability to search quickly through a complex taxonomy, perform rapid and accurate data extraction, and accommodate fast refresh cycle times.

### SECOND GENERATION: SPEND VISIBILITY

More than 10 years later, I had my next experience with spend management, and the solution had evolved to the next generation, called "spend visibility." Procurement users had pushed software providers for more speed, moving from quarterly data refresh cycles to monthly. Advancements in extraction tools moved from batched files to ETL technologies, and improvements in matching technologies supported better data quality. Categorization was refined, adding end-user feedback loops for higher matching results and spend management. Lastly, the focus was on a better user experience, with business intelligence solutions replacing fixed custom-reporting solutions. Technology had advanced, and more cross-functional users had access to the data, providing greater insight and the ability to push the data to executive reports and downstream systems. When I sat back and viewed my first spend executive reports, I thought after all this time the complexities of spend visibility had been resolved. Well, almost. The market was rapidly expanding. Integrations to non-transactional data, such as risk, social responsibility, diversity, compliance, and ESG information was quickly becoming a requirement. Every discussion centered on big data and complex analytics. Data lakes further complicated procurement's need for new layers of visibility.

## A BRIEF HISTORY *(continued)*

### THIRD GENERATION: AUTOMATION AND INTEGRATION PROVIDE INTELLIGENCE

Fast forward to the present, where 79 percent of procurement professionals surveyed by Deloitte say that cost reduction remains their top priority, and the procurement landscape is still challenging. The core requirements of the past remain, and a third generation requiring automated extraction and integration of multiple data types in near real time has emerged. Finding patterns in spending behaviors using advanced visualizations and achieving deeper insight to entity ownerships with third parties are both crucial for effective spend analysis. But as companies are expanding globally and accelerating their growth, procurement organizations still deal with dirty ERP data. This data is typically incomplete, contains duplicate suppliers, inconsistent entity information, and missing family lineages. Spend analytics and master data initiatives can fail due to poor data quality and low confidence in the information (and/or lack of meaningful insights). In addition, the ever-changing landscape of M&A and divestitures requires constant updates to ERP data. That, in turn, causes changes across the organization, including cost centers, G/L, and commodity hierarchies.

## THE SWIFT PACE OF CHANGE IN BUSINESS DATA

US business information will change frequently. Procurement professionals need full visibility into those changes in real time. Without a reliable master database to gain actionable insight, procurement professionals will continue to struggle.

### In fact, in the next 60 minutes:



**64** businesses  
will move



**159**  
new businesses  
will open their doors



**302** business telephone  
numbers will change or  
be disconnected



**3** businesses  
will file bankruptcy



**360** businesses  
will have a suit, lien or  
judgment filed against them

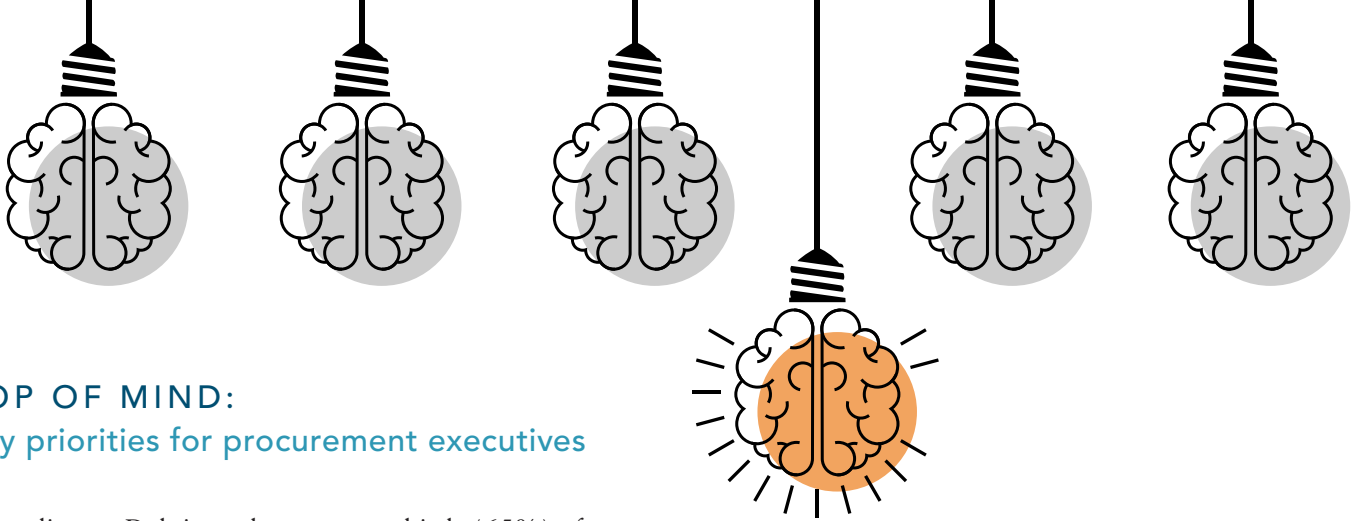


**182**  
Chief Executive  
Officer or Owner  
changes will occur



**2** companies  
will change their names

SOURCE: DUN & BRADSTREET NORTH AMERICA DATABASE.  
(FIGURES BASED ON 24 HOURS BY 365 DAYS.)



## TOP OF MIND:

### Key priorities for procurement executives

According to Deloitte, close to two-thirds (65%) of CPOs surveyed believe that analytics will have the most impact on procurement during the next two years. These professionals continue to be focused on the application of analytics, especially in negotiations (58%), process efficiencies (57%), market intelligence (44%), and supplier portfolio optimization (40%).

As the areas of cost and risk analysis receive more attention this year, the ability to assure data quality and assess compliance risk will be critical. Without that intelligence, no amount of analytics and automation can address the challenges ahead. The future requires a 360-degree view of suppliers.

The challenge is that organizational silos, isolated data, and disparate metrics impede an organization's ability to get actionable insights from data. A data-driven model that underscores collaboration across the enterprise, data investment, strategic data sourcing, and analytics capabilities is key to overcoming these hurdles. There is considerable room for improvement when it comes to consolidating and modernizing tools to gain fast, actionable insights from data.

Global enterprises continue to face increasing complexity, and businesses seek data-driven analytics and insights to gain a better understanding of suppliers and customers and to look for growth.

**Close to two-thirds (65%) of CPOs believe that analytics will have the most impact on procurement during the next two years.**

The findings of the *Dun & Bradstreet/Forbes Insights 2017 Enterprise Analytics Study* bear this out, and indicate that a move to intelligent, data-driven insights is being driven by continued reliance on technology and automation throughout the enterprise. Growth in digital technology is driving the ability to analyze more data. This, in turn, is fueling the enterprise's appetite for better data, more advanced analytics skills, and the implementation of best practices.

**Analytics is the primary enabler to derive truth and meaning from data that drives business growth.**

Thirty-three percent of respondents expressed interest in responsible business analytics covering key areas, including human trafficking and sustainability. Indeed, analytics is the primary enabler to derive truth and meaning from data that drives business growth.

Unfortunately, many companies are not ready to meet this challenge. Of those surveyed by Dun & Bradstreet/Forbes Insights across business functions, 27 percent cited skills gaps as a major obstacle to their current data and analytics efforts. And close to two-thirds of respondents (60%) reported working with third-party data vendors to address the lack of skilled data analysis across the enterprise.

— *Deloitte Global Chief  
Procurement Officer Survey 2017*

## D&B SPEND INTELLIGENCE: The next generation of spend management

Companies that can address the data intelligence skill gap can be a powerful ally to businesses in achieving true spend intelligence. For example, **D&B Spend Intelligence** enables you to do more than just visualize data. We empower you to interact with and change the data dynamically. This is achieved by integrating Dun & Bradstreet's powerful, comprehensive global business database, data analysis and integration tools, and dashboards that can be customized for your specific needs.

Benefits of this robust solution include:

- **SPEED TO INSIGHTS**, which is accomplished by automated and certified ERP connectors that make data extraction from source systems easy. Implementation will have minimal or no IT involvement.
- **INTEGRATED DATA QUALITY & GOVERNANCE**. By integrating the D&B D-U-N-S® Number, you get a primary key for every supplier transaction, and D&B's patented entity matching produces a single accurate picture for every business entity. Best practice dashboards with corporate lineage and enhanced supplier data enable greater visibility of risk, diversity, and sanctions, while accelerating master data initiatives.
- **SELF-SERVICE SPEND ANALYSIS**, which enables business users to improve data quality in real time. Now you can search, filter, classify, and edit all your centralized data. Unique data tagging and rules and write-back capabilities enable you to personalize your data. It's also easy for you to add your own role-based knowledge to improve both quality and relevance. You can also classify and organize information using intuitive drag-and-drop features. Combined search and query tools enable you to seamlessly search and filter both structured and unstructured data simultaneously.
- **HIGHLY CONFIGURABLE**. One size does not fit all. As your business, regulatory landscape, and corporate policies change, so does your risk framework and the need to tie enhanced supplier data to the transaction for deeper insights. To accomplish this, global enterprises require a configurable data model and a platform that's built for expansion. Leveraging business intelligence technology allows users to configure, interact with, and extract the data. In addition, APIs allow integrations to downstream decision support systems.
- **ACTIONABLE INSIGHTS**. D&B Spend Intelligence comes with a set of prepackaged, best-in-class analytics, based on D&B proprietary content, that enables you to quickly identify outliers and explore a wide range of opportunities. These include analytics for reducing costs, improving process efficiencies, freeing up working capital, increasing compliance, reducing supplier risk, and attaining social responsibility goals.

By leveraging the experience of more than a thousand spend analytics engagements, we have embedded these learnings and codified the intelligence into each analysis so you can focus on the things that matter – capturing the opportunities. The hard work has all been done for you.

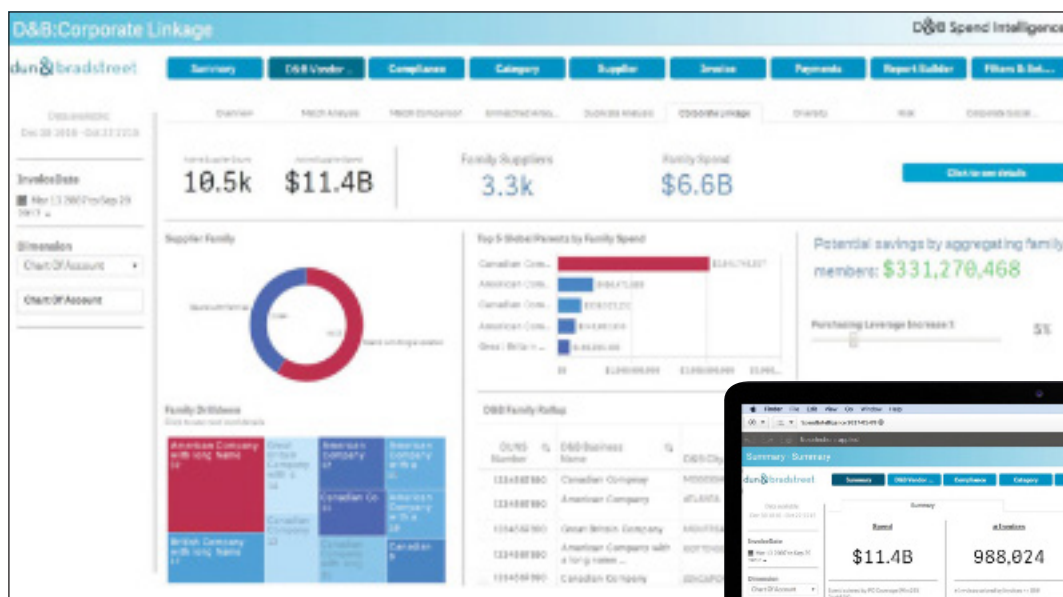
In addition to the prepackaged analytics, D&B Spend Intelligence also enables users to create dashboards with new data on the fly or modify existing ones. This unique capability greatly enhances the relevance and usefulness of the information and dramatically broadens the analytical possibilities for companies to find even more opportunity beyond the core spend analytics.

D&B Spend Intelligence's custom dashboards offer up to 50 user-defined fields, allowing you to track the spend, supplier, or invoice data that is most important to you.

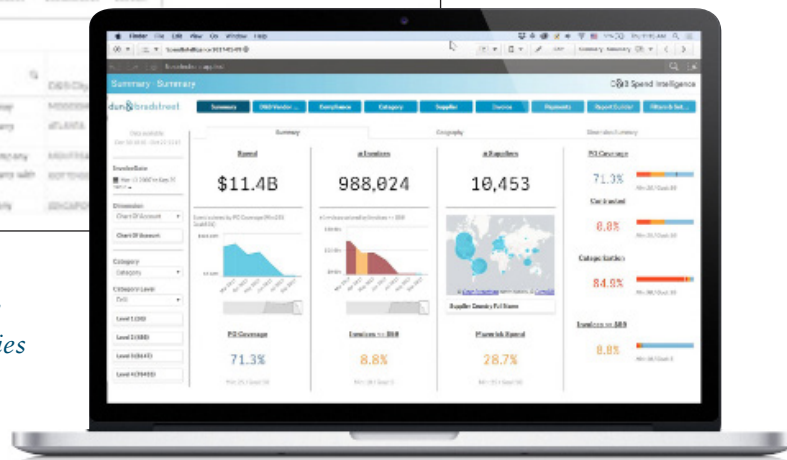
**D&B Spend Intelligence's custom dashboards offer up to 50 user-defined fields, allowing you to track the spend, supplier, or invoice data that is most important to you.**



## D&B Spend Intelligence Custom Dashboards



*The ability to create dashboards on the fly dramatically broadens the possibilities to analyze spend.*



An accurate view into a corporation's full spend data is imperative in a fast paced, global world. As a procurement professional, how do you manage all the moving parts? How do you identify cost savings? How do you ensure payment terms are being accurately managed? Multiple ERP systems and inconsistent data are just some of the things that can wreak havoc on your day-to-day functions. When identifying a spend analysis solution, you must select one that will grow and be as flexible as your business needs it to be. You must consider the global impact on your organization's spend, and you must find a solution that is fast, is easy to implement, and will stand the test of time.

For more information about D&B Spend Intelligence, visit [dnb.com/spendintelligence](http://dnb.com/spendintelligence).



### ABOUT DUN & BRADSTREET

Dun & Bradstreet (NYSE: DNB) grows the most valuable relationships in business. By uncovering truth and meaning from data, we connect customers with the prospects, suppliers, clients and partners that matter most, and have since 1841. Nearly ninety percent of the Fortune 500, and companies of every size around the world, rely on our data, insights and analytics. For more about Dun & Bradstreet, visit [DNB.com](http://DNB.com).