Big Data and Analytics: A Big Advantage in the Pursuit of Digital Procurement Transformation

Big data? Big deal.

Procurement organizations generate and store massive amounts of data, which is often widely dispersed across different systems, operations and geographies. But how can data help procurement take control of its landscape? How can procurement use data and make it work to provide the insights that will enable better planning, efficiency and effectiveness?

Before there was big data, there was just… data. Procurement organizations compiled mainly internal, structured data from transactions, operations and partners through laborious processes that could take weeks to complete. Today, sources for data have expanded to include a much more disparate set of both internal and external, structured and unstructured data obtained from automated processes executed within hours or, in many cases, in real time.

Having the data is a good thing – but it’s the procurement organization’s analytical capabilities that truly change the game, enabling it to unlock the real value of large amounts of structured and unstructured data and get to the next level of impact on enterprise-wide performance.
A New Data-Driven, Strategically Focused Procurement Organization

Analytics help tie together internal data sources, such as spend data, contract data and data related to supplier relationship management, with external data sources, such as supplier databases – providing information anytime and anywhere about supplier markets. Essentially, analytics can help procurement do things like identify the right suppliers, mitigate supplier risk, identify changing market conditions early, shorten procurement cycle times, optimize operations, and unlock new revenue opportunities, among others. Another benefit of analytics is a better understanding of participants and their behavior in the procurement process.

From Reactive to Proactive

For procurement, big data represents a completely new approach. In the not-so-distant past, procurement was only able to reactively satisfy the demand triggered by requisitions. Big data allows it to become proactive by forecasting demand based on identified patterns, thus widening its traditional scope of action. A further benefit is a more detailed understanding of supplier performance. The results can be used to weigh strengths and weaknesses and make determinations when designating certain suppliers for key products. This can be achieved by detailed root-cause analysis based, for example, on data about ordering, delivery and quality.

Applying Analytics to Procurement

Big-data technology can provide significant benefits to procurement organizations in the following areas:

- **Self-service Analytics and Reporting**: An approach to data analytics that enables procurement to develop reports and perform analysis on spend, supplier base, compliance, and other spend-related data.

- **Predictive Analytics**: Predictive models typically support planning or predict the most likely outcomes based on actual conditions. Procurement can forecast spend based on anticipated changes in the business and pricing based on external factors. Additionally, procurement could also support the supply chain with network design and optimization.

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• **Scorecards:** An easy-to-read, real-time graphical snapshot of performance outputs of procurement based on a set of effectiveness and efficiency metrics. This enables instantaneous, informed decision-making.

• **Risk Analysis:** This technique identifies business risks to the supplier base – including pricing risk, compliance risk, geographical risk, disaster risk and others. It also helps define preventive measures and detect countermeasures to successfully deal with risk scenarios.

• **Data Mining:** An application that analyzes large amounts of data to identify trends that offer meaningful insight. Procurement can better understand spending trends, supplier performance trends and external pricing trends.

• **Slice-and-Dice Analysis:** An analytical tool that presents data along different dimensions. Procurement can thus benefit from spend information by supplier, geography and category.

### Transforming the Procurement Landscape

Big data and analytics can bring about transformative changes in procurement. They will usher in a new frontier for procurement with the potential to deliver on the promise of business intelligence. A combination of big data feeds, predictive analytics and reporting frameworks helps deliver greater data assurance, ultimately helping reduce costs thanks to greater visibility and control.

### Also Available:

**Procurement Analytics in the Era of Big Data: What CPOs Need to Know**

Big data and analytics are driving big change in procurement – in some new and surprising ways. This GEP-sponsored white paper from The Hackett Group explains how procurement organizations can use big data and analytics to make better-informed decisions that strengthen business impacts, yield greater savings and create more value within the enterprise. [DOWNLOAD NOW](#)

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RECOMMENDED READING FOR SOURCING AND PROCUREMENT PROFESSIONALS

Procurement Transformation: How Technology Is Driving Change and What to Expect Next
Emerging technologies such as IoT, AI and cloud computing are transforming enterprises and opening up new possibilities in the procurement function. How do you harness these opportunities to build a high-performance digital procurement organization? Read this report, which also discusses key tech trends shaping procurement strategies today and tomorrow. [DOWNLOAD NOW]

The Internet of Things: Reimagining Procurement in the New Digital Ecosystem
The massive technological advance known as the Internet of Things (IoT) is permanently changing the relationship between people and machines and creating new opportunities for businesses. But what exactly is IoT? And what are the anticipated benefits for procurement and supply chain? This concise, engaging guide from GEP tells you what you need to do now to unlock IoT’s imminent potential. [DOWNLOAD NOW]

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