Use procurement's data to power your performance

If information is power, the procurement function occupies an enviable strategic position. New digital tools and approaches can unleash the value locked up procurement data.

by Leon Mishkis, Marco Moder, and Matthias Toepert

Procurement sits at the confluence of the massive flows of digital data that run between a company and all its suppliers and partners. Today, however, too few procurement functions are effectively tapping into those flows and using them to find and capture new sources of value.

That failure has three principal root causes. First, CPOs sometimes miss the biggest opportunities when they think about their digital procurement strategies. Often, they see digitization primarily as a way to reduce labor in the purchasing function, through steps such as automating procure-to-pay workflows. Those measures can do their job very well, but by our analysis, more than 80 percent of the value of digital procurement comes from techniques that drive spend reduction.

Second, when they do hunt for those new sources of value, procurement functions have lacked good tools, or the ability to use them well. In the past, the systems and analytical approaches available to procurement personnel were often unwieldy or limited in their effectiveness.

Today, however, new digital tools and advanced-analytics approaches can supercharge procurement capabilities, allowing purchasing teams to operate faster, more effectively, and at a larger scale. Modern cloud-based solutions provide simple interfaces that allow any category manager to harness the power of deep analytics. Instead of working product-by-product and category-by-category to identify price-arbitrage, raw-material-reclaim, or despecification opportunities, teams can rely on data-analysis tools to quickly generate dashboards and heatmaps that highlight opportunities across a wide range of categories.
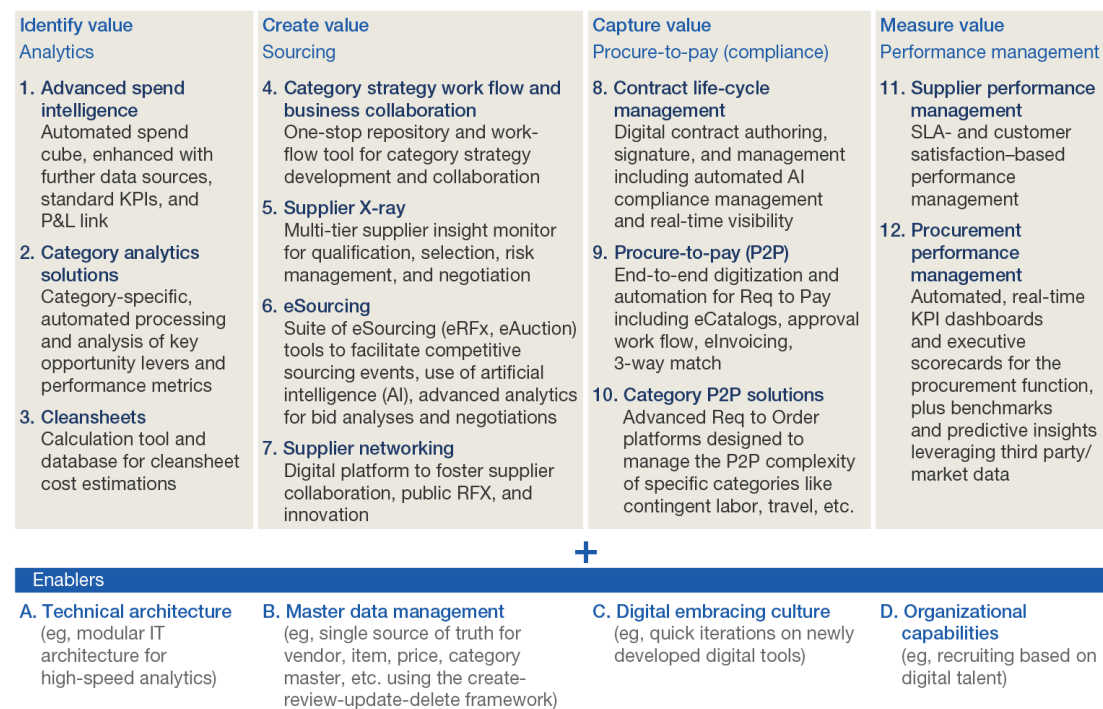
And managing supplier performance in large outsourcing contracts is much easier. Natural-language-processing systems can now extract hundreds of service-level requirements and performance indicators from complex contracts, convert them into parametric conditions, and match them against purchase-order, invoice, or usage data. That allows companies to instantly identify compliance issues and claims opportunities, which together can amount to as much as 5 percent of total spend under such agreements.

Find out where to dig

With digital procurement advancing so quickly, the third barrier facing companies is lack of clarity on where they could capture the most value. That's where new digitals tools can help. By combining quantitative KPIs, qualitative interviews with key stakeholders, and a detailed evaluation of the current tool landscape, a single digital diagnostic can yield a deep understanding of a procurement organization's digital maturity (Exhibit 1).

Exhibit 1

Advanced analytics and digital can generate major procurement value.

Identify value Analytics	Create value Sourcing	Capture value Procure-to-pay (compliance)	Measure value Performance management
1. **Advanced spend intelligence** Automated spend cube, enhanced with further data sources, standard KPIs, and P&L link	4. **Category strategy work flow and business collaboration** One-stop repository and work-flow tool for category strategy development and collaboration	8. **Contract life-cycle management** Digital contract authoring, signature, and management including automated AI compliance management and real-time visibility	11. **Supplier performance management** SLA- and customer satisfaction–based performance management
2. **Category analytics solutions** Category-specific, automated processing and analysis of key opportunity levers and performance metrics	5. **Supplier X-ray** Multi-tier supplier insight monitor for qualification, selection, risk management, and negotiation	9. **Procure-to-pay (P2P)** End-to-end digitization and automation for Req to Pay including eCatalogs, approval work flow, eInvoicing, 3-way match	12. **Procurement performance management** Automated, real-time KPI dashboards and executive scorecards for the procurement function, plus benchmarks and predictive insights leveraging third party/ market data
3. **Cleansheets** Calculation tool and database for cleansheet cost estimations	6. **eSourcing** Suite of eSourcing (eRFx, eAuction) tools to facilitate competitive sourcing events, use of artificial intelligence (AI), advanced analytics for bid analyses and negotiations	10. **Category P2P solutions** Advanced Req to Order platforms designed to manage the P2P complexity of specific categories like contingent labor, travel, etc.	
	7. **Supplier networking** Digital platform to foster supplier collaboration, public RFX, and innovation		

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Enablers

A. **Technical architecture** (eg, modular IT architecture for high-speed analytics)	B. **Master data management** (eg, single source of truth for vendor, item, price, category master, etc. using the create-review-update-delete framework)	C. **Digital embracing culture** (eg, quick iterations on newly developed digital tools)	D. **Organizational capabilities** (eg, recruiting based on digital talent)

McKinsey&Company | Source: The Digital Procurement Value Diagnostic (a McKinsey Solution)

Based on the maturity assessment, digital use-case opportunities can be identified and assessed, then ranked by financial impact and feasibility—based on dimensions including a solution's availability, required investment, implementation complexity, and demands on organizational capabilities.

The nature and size of the digital opportunity inevitably varies from company to company, but our analysis of more than 30 organizations has revealed a number of common themes.

Use the available technology

Many companies underutilize their current digital solutions, some of which may have been in place for many years. That's often because their people haven't received appropriate training, or their processes and governance systems haven't been updated to require using digital. Electronic auction (eAuction) systems, for example, can deliver savings of as much as 2 to 5 percent in certain direct categories, and 7 to15 percent in many common indirect categories. At one European basic-materials company, for example, diagnostic analysis identified savings potential of up to €16 million per year from the implementation of eAuctions in all relevant categories.

The accessibility of modern digital tools can also give companies the opportunity to skip whole stages in in their digitalization path. Instead of implementing a standard electronic RFP system, a company can now move directly to large-scale scenario-based eRFP solutions that can simultaneously automate RFPs and RFQs for hundreds of SKUs and suppliers.

Such systems are widely available and easy to implement, but aren't used as often as they might be. One company paid license fees for eRFP software for more than a decade, but used the system less than ten times in a project that never went beyond the pilot stage.

Set a goal: 100% automation for operational procurement

Transactional procurement activities are prime candidates for automation, yet the degree to which they have been varies significantly. In the companies we analyzed, the proportion of purchase orders that were automatically generated varied between 0 and 80 percent.

Organizations at the upper end of this scale make use of a range of digital tools. Robotic process automation systems, for example, automate activities from generating purchase orders to invoice reconciliation; they also provide business units with electronic buying guides and platforms that help operational personnel execute the category strategies developed by their strategic procurement colleagues. At one airline, a diagnostic on procure-to-pay automation using these tools estimated savings of $35 to $50 million per year, equivalent to 1 to 2 percent of the organization's total spend.

Support manual analyses with the right technology

Strategic procurement activities are not yet targets for full automation, but it is here that digital tools have the most potential to extend procurement teams' power and reach. A case in point: Cleansheet cost models are highly effective negotiation and specification tools, but because of the expertise and manual effort involved in creating them, they're relatively rare outside a few industries, such as automotive. Moreover, the lack of a standardized development approach or common data assumptions means that cleansheet quality can vary significantly even in the same organization.

Now, by contrast, cleansheet applications are appearing that allow companies to build these models faster and to a more consistently high quality. Such systems can pull data automatically from external sources, such as databases on labor rates or material and process costs. The European basic-materials company mentioned above found that in categories including industrial services, road transport, and packaging, automated cleansheeting tools identified opportunities to reduce spend by around 10 percent.

Look to category analytics for future potential

In category analytics, digital tools in price-variance analysis, forecasting, or logistics-cost analysis have achieved tremendous impact, but few companies have adopted them. That's because the right tools are only just starting to emerge. One area that appears especially promising is the development of end-to-end raw-material procurement solutions that take advantage of improved information flows across the value chain.

For instance, automated early warnings of supply shocks, with visibility into raw-material price effects across categories, would give procurement a considerable advantage in price negotiations. Similarly, improving the flow of data between procurement, operations, and sales groups provides a clearer view of true end-customer requirements, enabling better decisions on pricing, make-versus-buy determinations,

and level of commitment to key suppliers. The systems that permit this kind of end-to-end communication across the value chain are still in their early stages, but should remain a top priority in the coming years.

At one chemicals company, the introduction of a new category-analytics approach enabled managers to evaluate savings opportunities across the end-to-end value chain, which added up to around 2 percent of the company's total spend. That was as much as the combined impact of around a dozen other digital procurement approaches the company evaluated.

How to think about digital procurement

While many companies recognize the need for action in procurement digitization, their efforts are often piecemeal, failing to address the value potential in a structured way. A truly strategic perspective is essential if companies are to capture the entire potential that digital approaches—both current and emerging—can offer. Two overarching considerations are essential to keep in mind, however.

The first is to get the basics right. Advanced digital tools require good input data, starting with a clear understanding of how the company spends its money today. That's an area where organizations still vary greatly in their maturity. Some companies are strong in spend intelligence, with high-quality master data held on a single global platform. They can automatically create spend reports with a few mouse clicks. Others are still struggling to pull together a basic overview of their global spend.
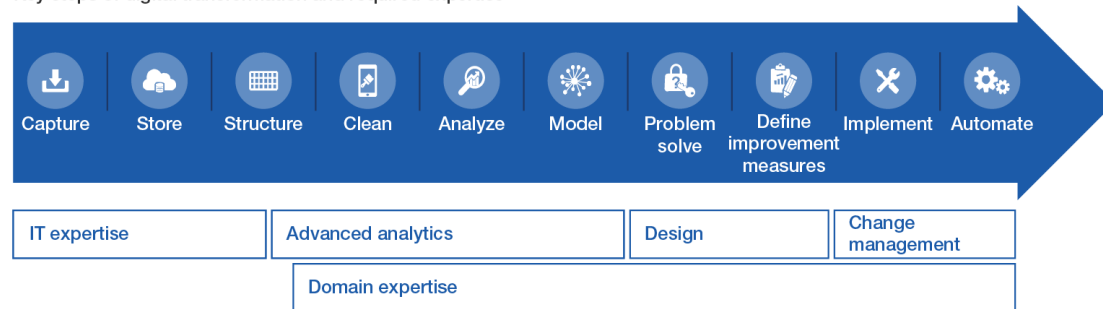
The second is to focus beyond individual tools and instead consider the complete operating models that digital efforts need. While adding some specialized tools might strengthen a few capabilities here and there, the long-term value of digitization requires a much more coherent approach. That generally means building a digital backbone that encompasses the whole procurement process, and can support an adapted operating model.

This type of comprehensive digital transformation requires equal consideration of four main factors. Companies need IT expertise to capture, store and structure the relevant data. They need advanced analytics capabilities to clean, analyze, and model the data. They must have purchasing and technical domain expertise to derive recommendations and the adaptation of category strategies. Finally, they must ensure the organization has the mindset, skills, and governance to make the change effort happen (Exhibit 2). Without these, the risk is high that even working digital solutions fail to get past the pilot stage.

Exhibit 2

Procurement digitization requires a broad range of new skills.

Key steps of digital transformation and required expertise

| Capture | Store | Structure | Clean | Analyze | Model | Problem solve | Define improvement measures | Implement | Automate |

| IT expertise | Advanced analytics | Design | Change management |

| Domain expertise |

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Our analysis suggests that digital procurement transformation is one of the most promising value levers for strategic and operational procurement departments. Typically, such transformations can reduce overall spend by 3 to 10 percent. To successfully transform procurement departments, companies should take a consistent, long-term approach along the dimensions of IT expertise, advanced analytics capabilities, domain expertise, and change management. Such a transformation takes time, with some effects being visible immediately, and others requiring a sustained commitment to reach their potential. To remain competitive in the medium-term, therefore, companies need to initiate their digital transformation today■

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The authors would like to thank the Digital Procurement Value Diagnostic team for their contributions to this article.