Legacy to leading: transforming public sector procurement

Global Government and Public Sector
EY Knowledge Insights
Legacy to leading: transforming public sector procurement

Digital procurement for maximum public value

As the technological renaissance unfurls, public sector leaders are embedding digital into the government enterprise and reinventing public sector delivery – the procurement function is no exception. The long-standing operations of public sector procurement – centered on thorough processes and minimizing risk above all else – is outdated and increasingly unresponsive to digital disruption. Recognizing the outsized importance of government procurement and its outdated and legacy operations – digital adoption can unlock significant value for public sector procurement.
Procurement’s growing role

Delivering a leading public sector procurement focuses on three critical functions. These core functions comprise delivering services and public goods to citizens directly and indirectly such as health care, infrastructure, and defense and security; a strategic economic and social policy lever such as economic development, reducing inequality, and raising standards of living and; operation of public sector agencies and programs. Global government procurement ranges from 12.6% of GDP in high-income countries to 14.4% of GDP in low-income countries. The largest shares of spending are located in South Asia and Africa, while spending as a percentage of GDP is on similar levels in North America, Europe and Central Asia (Figure 1).¹

Figure 1. Global government procurement as a share of GDP by country income group and region

And as a percentage of government expenditures, procurement averages 29.1% of general government expenditures among OECD and other key countries (Figure 2).²

**Figure 2. General government procurement spending as a percentage of GDP and total government expenditures, 2007, 2009, and 2015**

The expansive purchasing power of public sector entities can be leveraged into greater impact on the broader economy – through doubling down on digital investment.

Moving government procurement from legacy to leading

Public sector procurement offices still rely on paper-based, process-oriented systems that lack full coherence into spending, cost management and performance. The overlay of traditional contract management that had a place in a lower-tech world is now ill served for the digital economy. Manual sourcing for low-complexity tasks, inconsistent and nonstandard procedures, and tedious reporting tasks with minimal output hamper the function of public sector procurement offices. Moreover, there is a lack of integration between human and digital processes, drawn out practices for complex procurements, and inactive monitoring of performance.

Digital across the procurement enterprise

Procurement offices have long been stymied by inefficient administrative functions and poorly performing digital tools across the enterprise. These challenges have been caused by siloed information and information systems, lack of data analytics, limited view into costs and difficulty adhering to procurement mandates. These inefficiencies and duplicities in the procurement office cost governments billions. A report from the US Government Accountability Office found that if agencies engaged in more strategic sourcing, shifted away from numerous individual procurements to an aggregate approach and reconciled using digital tools, they could achieve $1.3 billion in savings.

Over the past decade, governments have taken a number of steps to improve the procurement function. This includes the overhaul of procurement function through category management, contract vehicle consolidation and roll out of more sophisticated IT systems for the procurement function. These actions have improved the performance of procurement offices, yet significant pain points such as lack of automation, visibility in operations and integration still persist. The convergence of digital technologies, analytics and collaboration enables government procurement offices to unlock a myriad of cost-savings and value propositions (Figure 3).
The convergence of digital technologies, analytics and collaboration creates a step-change in the function of public sector procurement offices. Digital-first enables governments to dramatically alter the life cycle of the procurement function from a legacy to leading operation. Achieving full value is the combination of a strategic procurement organization enabled by digitally focused operations and capabilities. Digital procurement enablement focuses on building a strategic operation that integrates cost reduction, improves and enhances compliance, accelerates processing of procurement functions, provides greater visibility into the supply chain and monitors proactive risk management of operations. This leads to smarter collaboration among internal teams, vendors and support functions of the procurement office across the acquisition process (Figure 4).
### Figure 4. Digital enablers across the procurement enterprise

<table>
<thead>
<tr>
<th>Digital enablers</th>
<th>Sourcing</th>
<th>Requisition</th>
<th>Contract and catalog management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robotics and automation</td>
<td>Automated go-to-market and bid process with minimal human interaction</td>
<td>A cloud-based, mobile platform for requisitioning on the go or at the plant site with user self-service</td>
<td>Enhanced contract compliance and approvals enabled by blockchain authorization and big data contract compliance reporting</td>
</tr>
<tr>
<td>Cloud-based platforms and trading networks</td>
<td>Enhanced sourcing leverage driven by increased access to impactful data sets and market sensing</td>
<td>Automatic requisitions created based on predefined triggers, such as connected device “wear and tear” trigger points</td>
<td>Blockchain enabled smart contracting technology to increase trust between parties</td>
</tr>
<tr>
<td>Internet of Things (smart devices)</td>
<td>Improved collaboration among internal and external stakeholders through cloud-based exchange platforms</td>
<td>Expedited/automatic approval of requisitions through predefined rulesets</td>
<td>Continuous real-time contract monitoring</td>
</tr>
<tr>
<td>Blockchain</td>
<td>Real-time updates of goods received using IoT to improve process cycle time</td>
<td>RPA-enabled detection system to compare goods receipt to PO</td>
<td>Smart contracting technology to increase trust between parties</td>
</tr>
<tr>
<td>Big Data data and analytics</td>
<td>RPA-enabled detection system to compare goods receipt to PO</td>
<td>Advanced analytics to efficiently measure quality and feed into non-procurement systems in real time</td>
<td>AI based automatic allocation of work to optimize resources</td>
</tr>
<tr>
<td>Professional social collaboration</td>
<td>Enhanced sourcing leverage driven by increased access to impactful data sets and market sensing</td>
<td>Real-time updates of goods received using IoT to improve process cycle time</td>
<td>Blockchain enabled smart contracting technology to increase trust between parties</td>
</tr>
</tbody>
</table>

- **Category management**

<table>
<thead>
<tr>
<th>Digital enablers</th>
<th>Goods receipt/service entry</th>
<th>PO processing</th>
<th>Returns and replacement</th>
<th>Invoicing</th>
<th>Supplier management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robotics and automation</td>
<td>Real-time updates of goods received using IoT to improve process cycle time</td>
<td>Intelligent PO processing through cloud-based trade networks with predetermined external partners</td>
<td>Returns automatically routed for approvals</td>
<td>Approved invoices are auto-matched based on contract terms defined in blockchain</td>
<td>Real-time supplier scorecarding, leveraging big data analytics to obtain real-time information from multiple, disparate systems into meaningful insights</td>
</tr>
<tr>
<td>Cloud-based platforms and trading networks</td>
<td>RPA-enabled detection system to compare goods receipt to PO</td>
<td>Minimized administrative/ non-value-add through the deployment of RPA</td>
<td>Blockchain integration ensuring process compliance</td>
<td>Tracking invoice compliance using blockchain and AI</td>
<td>Supplier collaboration and innovation virtual portals and workspaces to enhance connectivity, knowledge and idea sharing both internally and externally with supply base</td>
</tr>
<tr>
<td>Internet of Things (smart devices)</td>
<td>Advanced analytics to efficiently measure quality and feed into non-procurement systems in real time</td>
<td>Automated generation of accruals at period-end</td>
<td>Real-time tracking of goods across multiple POs using advanced analytics and AI</td>
<td>Cryptocurrency on blockchain platform for instant and secured vendor payments</td>
<td>Use advanced analytics to manage and mitigate risks proactively and to calculate the cost of identified risks</td>
</tr>
<tr>
<td>Blockchain</td>
<td>Enhanced sourcing leverage driven by increased access to impactful data sets and market sensing</td>
<td>Use advanced analytics to manage and mitigate risks proactively and to calculate the cost of identified risks</td>
<td>Enhanced sourcing leverage driven by increased access to impactful data sets and market sensing</td>
<td>Enhanced sourcing leverage driven by increased access to impactful data sets and market sensing</td>
<td>Use advanced analytics to manage and mitigate risks proactively and to calculate the cost of identified risks</td>
</tr>
<tr>
<td>Big Data data and analytics</td>
<td>Improved collaboration among internal and external stakeholders through cloud-based exchange platforms</td>
<td>Real-time tracking of goods across multiple POs using advanced analytics and AI</td>
<td>Enhanced sourcing leverage driven by increased access to impactful data sets and market sensing</td>
<td>Real-time tracking of goods across multiple POs using advanced analytics and AI</td>
<td>Use advanced analytics to manage and mitigate risks proactively and to calculate the cost of identified risks</td>
</tr>
<tr>
<td>Professional social collaboration</td>
<td>Real-time updates of goods received using IoT to improve process cycle time</td>
<td>Real-time tracking of goods across multiple POs using advanced analytics and AI</td>
<td>Enhanced sourcing leverage driven by increased access to impactful data sets and market sensing</td>
<td>Real-time tracking of goods across multiple POs using advanced analytics and AI</td>
<td>Use advanced analytics to manage and mitigate risks proactively and to calculate the cost of identified risks</td>
</tr>
</tbody>
</table>
Helping governments build a digital procurement strategy

The key to building a digital-first procurement office is assessing digital maturity. How are the value drivers of government procurement being affected by digital? To what extent does public sector procurement strategy ease the risks of digital disruption while leveraging the potential upside? Most governments have invested in digital to varying levels of success. Laying the groundwork for a digital-first public sector procurement strategy involves setting out leading practices that demonstrate successful use-cases followed by building a digital procurement strategy.

Digital enablement in support of procurement adds immediate value through increased productivity, spending and cost reduction and improved working capital flows and asset management. Leading practices across the procurement function include artificial intelligence, robotic process automation and cloud integration tools with requisitioning, approval, and purchase order generation, blockchain integration for contract management and cost optimization, and smart contracting ensuring better transparency and compliance. Overall organizational effectiveness comes in the form of procurement operations that are faster, better, smarter, more secure and cheaper.

These gains can be translated across the public sector’s procurement enterprise at all levels of government by aligning digital solutions with an organizational strategy. Evaluating a government procurement office’s ability to leverage digital technology begins with assessing digital maturity and measuring current capabilities against aspirations (Figure 5).

Figure 5. Digital strategy approach and assessment
Next, define future channel and required capabilities. The final steps encompass planning, prioritizing capabilities and building the business case. The end result is the development of a digital road map centering on investment and implementation.

**The path forward for digital procurement**

Recognizing outdated technologies and processes, governments are reforming public procurement systems by developing and adopting new technologies, tools and governance in order to better manage public resource spending. Efficient and effective public procurement is essential to responding to the needs of the citizens, standing as a beacon of good governance and helping to restore trust in the public sector. As digital tools are linked across the enterprise, procurement leaders are empowered to make the right decisions in a way that’s responsive to internal and external challenges. Most importantly, this will lead to a clearer understanding of where their resources go, what they get in return and whether the investment works.
About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

How EY’s Global Government & Public Sector can help your organization

Around the world, governments and not-for-profit organizations are continually seeking innovative answers to complex challenges. They are striving to provide better services at lower costs and to create sustainable economic development, a safe environment, more transparency and increased accountability. EY combines private sector leading practices with an understanding of the public sector’s diverse needs, focusing on building organizations’ capabilities to deliver improved public services. Drawing on many years of experience, we can work with you to help strengthen your organization and achieve lasting improvements. Our Global Government & Public Sector brings together teams of highly skilled professionals from our assurance, tax, transaction and advisory services. We are inspired by a deep commitment to help you meet your goals and enhance public value, for today and tomorrow.

© 2018 EYGM Limited. All Rights Reserved.

In line with EY’s commitment to minimize its impact on the environment, this document has been printed on paper with a high recycled content.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax or other professional advice. Please refer to your advisors for specific advice.

The views of third parties set out in this publication are not necessarily the views of the global EY organization or its member firms. Moreover, they should be seen in the context of the time they were made.

ey.com/government

Contacts

Kirsten Tisdale
EY Canada Government and Public Sector Leader
Ernst & Young LLP
+1 604 891 826
kirsten.tisdale@ca.ey.com

Justin Badlam
EY Global Government and Public Sector, Strategic Analyst
Ernst & Young LLP
+1 202 327 7011
justin.badlam@ey.com