



# TECH NOW: Next Generation eProcurement

In this eProcurement edition of the Tech Next series, we will explore:

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[Meet the Next Generation](#)

[Advanced Assistance, Automation, & Analysis](#)

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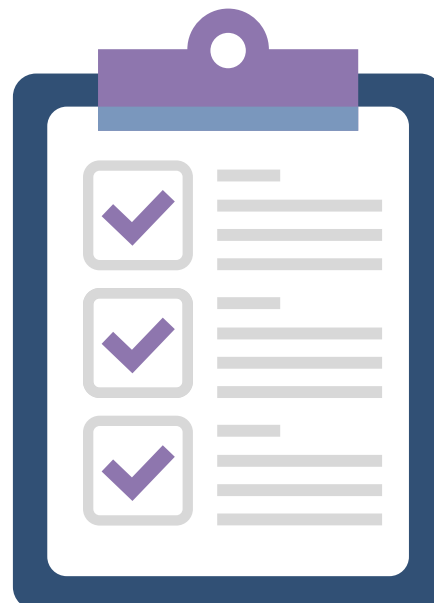
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## INTRODUCTION

Expanded functionality and enhanced administrative and analytical capabilities are key features of the latest generation of eProcurement systems. **Generally, eProcurement systems offer procurement offices a tool for centralized oversight and administration of decentralized purchasing operations by concentrating procurement activities around a shared platform.** One of the key benefits of eProcurement systems is how they facilitate self-service, allowing the buyer or end user to initiate, direct, and in some instances, fully execute the procurement process themselves. This represents a streamlined process whose efficiency is compounded as more procurement cycle activities and process administration are incorporated into the eProcurement system. This publication will discuss these systems, several of the tools and features available, and recommendations for starting or advancing your organization's eProcurement journey.



# CURRENT CONDITIONS

Since its introduction in the late 20th century, eProcurement has steadily evolved in functionality and exponentially grown in use. It is entering the maturity stage, with widespread adoption across industries. Generally, this is when commercial technologies are adopted for government use – when risk is low and product options are plentiful. Following that trend, **87.5% of states currently use an eProcurement system.**<sup>1</sup>

For those public sector entities acquiring their first system or looking to upgrade, the market for eProcurement software is significantly concentrated with SAP, IBM, and Oracle commanding an estimated 40-55% of market share for private and public sector organizations, according to Procurement IQ.<sup>2</sup>

Such concentration offers providers some leverage over prospective customers. However, there is a growing group of providers able to cater to the specific needs of government procurement. Other major market factors driving prices or power include a rising demand for eProcurement solutions over the past three years and the degree of specialization required to meet organization-specific needs, which pushes prices upward. Tariffs have introduced some volatility to pricing due to the industry's heavy reliance on IT hardware and infrastructure.



<sup>1</sup> "2024 Survey of State Procurement Practices Report," NASPO, accessed November 19th, 2025, <https://cdn.naspo.org/RI/2024SurveyofStatePracticesExecutiveSummary.pdf>.

<sup>2</sup> Ibis World, "Procurement Software," Procurement IQ, 2025, accessed November 19th, 2025, <https://my.ibisworld.com/procurement/standard/united-states/en/31275372/224/aboutthismarket>.

# MEET THE NEXT GENERATION

Once a technology product reaches maturity, developers often turn to innovation as a way to maintain market power, retain existing users, and attract new ones. Over the last few years, eProcurement capabilities have evolved. **Next-generation eProcurement solutions are characterized by advanced features and functions that differentiate them from conventional systems commonly used in public procurement.**

## CLOUD-BASED

- The earliest version of “next gen” was a move to the cloud – operations occurring on-demand in virtual spaces powered by secure servers.
- Procurement operations no longer require bulky software installations and manual updates for every computer.
- Access to procurement systems is no longer limited to on-premise operations.

## SOFTWARE-AS-A-SERVICE (SAAS)

- SaaS is a departure from purchasing licenses to a software that ages until the developer no longer supports it.
- This subscription model is easily scalable with multi-tenancy, where users share application resources but maintain individual data privacy and security.
- Suppliers can automatically provide new updates and features, lessening the burden on the state’s IT management and infrastructure.

## FULL PROCUREMENT CYCLE SUPPORT

- Tools to facilitate every step of the procurement process, from solicitation development through contract retirement.
- Generate and publish solicitations, evaluate responses, draft and authorize contracts, with all process documentation securely stored.
- One-stop shopping from supplier catalogs, with requisition orders, purchasing, payment processing, and delivery tracking on a shared platform.
- Contract Lifecycle Management (CLM) capabilities spanning processes from contract drafting and approval through renewal or retirement, including automated tools for measuring and monitoring contract usage, risk and compliance issues, and supplier performance metrics.

## FLEXIBILITY AND CUSTOMIZATION

- Many systems offer a modular approach, allowing procurement offices to select specific tools or applications a la carte.
- Systems can be tailored to meet highly-specific needs or to account for budgetary or resource constraints.
- Application programming interfaces (APIs) can be added to facilitate information interchange and configure data, making them adaptable to work with existing and legacy systems and software.
- Customizable on an entity and individual basis, allowing for each agency or user to have tailored processes, authority, templates, and contracts within a central shared system.

# ADVANCED ASSISTANCE, AUTOMATION, & ANALYSIS

Next generation systems powered by AI offer new capabilities while significantly enhancing traditional eProcurement functions.



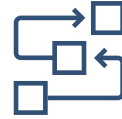
## Chat Bot Assistants and Agents

Virtual assistance provides user guidance for processes and compliance, automates menial tasks, directs users to appropriate resources or authorities, and provides preliminary document reviews.



## Contract Summarization

Analysis tools enable the comparison of contract terms and conditions for statutory and policy compliance. This includes redlining incompatible clauses, identifying areas of potential risk, outlining service-level agreements, and defining key performance indicators.



## Automation of Workflows

Executes programmed complex business parameters that can automate approvals or direct the flow of work to the correct persons for authorizations, flag errors or anomalies, and initiate actions and next steps.



## Invoice Matching and Optical Character Recognition (OCR)

Expanded OCR capabilities eliminate the need for a single standard template or form by identifying and extracting required information from submitted documents in a variety of formats and layouts. Systems automate the reconciliation of purchase and pricing data with supplier invoices, catalogs, and reports.



## Solicitation Development

Modules for solicitation building that simplify the process using customizable templates and automatically add mandatory or boilerplate information. Generative AI tools can assist with scope development and document drafting, turning informal requirements into practical specifications.



## Business Intelligence and Data Analytics

Real-time performance dashboards for measuring procurement cycle process efficiency, agency and category spend, contract use, supplier performance, and other metrics. Big data analysis to find spending trends and opportunities for strategic sourcing, predict future purchasing needs, and identify areas of risk or potentially fraudulent activity. Advanced tools for reporting and communication in multiple formats.

# NEXT-GEN EXAMPLES

## Virginia



The Commonwealth of Virginia was an early pioneer in eProcurement. Their statewide system, known as eVA, was first designed in 2000 and began operating in 2001. Its current iteration is an Ivalua cloud-based solution with comprehensive government-to-business and government-to-government procurement functionalities that launched in November of 2022.

Used by buyers from 216 Commonwealth entities (departments, agencies, and higher ed.) and more than 800 local government entities, eVA integrates with other systems to provide end-to-end information and full procurement cycle support. These procurement, analysis, and reporting tools include:<sup>3</sup>

- Procure-to-pay purchasing functions for requisitioning, ordering, and receiving – including entity-specific process and approval workflows
- Entity-specific solicitation development and management for formal competitive sourcing and informal sourcing
- Public posting of opportunities and awards and automated supplier notifications for sealed and unsealed solicitation methods
- Contract lifecycle management
- Invoice management and tracking
- Integration with ERP (Enterprise Resource Planning) financial systems and other government platforms for reporting, procurement analytics, strategic sourcing, and spend management
- Procurement information warehouse and document retention, including historical data from previous system iterations
- Entity-specific, in-house administrative tools for user, data, and entity management setup and maintenance

For its more than 206,000 registered suppliers, eVA offers self-registration and a convenient portal for accessing contracts, orders, and billing information. It recognizes a range of SWaM (small-, women-, and minority-owned) certifications. A foreign supplier support feature tailors the registration process based on location. Businesses receive notifications about solicitations and can respond to and track opportunities within the system. A machine learning algorithm matches suppliers to potentially favorable contract opportunities.

Great emphasis was placed on implementing the new system without service interruptions, partial rollouts, or a multi-phased implementation. The previous iteration maintained operability while engineers prepared for the one-time transition. This included a data conversion process for reference data (user and supplier information and custom workflows) and recent transactional data (requests, purchase orders, receipts, contracts, etc.), which enabled users to transition seamlessly with no work lost.

eVA enhances accountability and transparency by exporting procurement activity data to the Virginia Open Data Portal, which aggregates and publishes data from 59 state and public entities. A robust reporting system documents issues from users of all types, and accompanying reports outline all system updates, listing what components or tools have been updated, the specific actions taken, and how it impacts operations.

For fiscal year 2024, eVA hosted 7,000 solicitations, more than 21,000 responses, and facilitated more than 725,000 purchases.<sup>4</sup> It is a model for fully mature eProcurement operations at scale.

For a detailed look at eVA's usage and impact, see its [annual report](#).<sup>5</sup> To read more about its next-gen development and implementation, check out their [Cronin Awards submission](#) (pg. 125).<sup>6</sup>

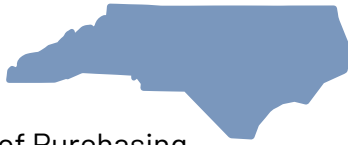
<sup>3</sup> Virginia Division of Purchases and Supply, "Next-Gen eProcurement: Innovation Drives Efficiency in Virginia," In 2024 Cronin Submission Booklet, NASPO, 2024, [https://cms.naspo.org/wp-content/uploads/2024/11/2024\\_Cronin-Booklet\\_Annual\\_Updated\\_Aug26.pdf](https://cms.naspo.org/wp-content/uploads/2024/11/2024_Cronin-Booklet_Annual_Updated_Aug26.pdf).

<sup>4</sup> Virginia Division of Purchases and Supply, "eVA Fiscal Year 2024 Report," 2024, <https://dgs.virginia.gov/globalassets/business-units/dps/documents/buyers/stats-fy2024.pdf>.

<sup>5</sup> Virginia Division of Purchases and Supply, "eVA Fiscal Year 2024 Report," 2024, <https://dgs.virginia.gov/globalassets/business-units/dps/documents/buyers/stats-fy2024.pdf>.

<sup>6</sup> Virginia Division of Purchases and Supply, "Next-Gen eProcurement: Innovation Drives Efficiency in Virginia," In 2024 Cronin Submission Booklet, NASPO, 2024, [https://cms.naspo.org/wp-content/uploads/2024/11/2024\\_Cronin-Booklet\\_Annual\\_Updated\\_Aug26.pdf](https://cms.naspo.org/wp-content/uploads/2024/11/2024_Cronin-Booklet_Annual_Updated_Aug26.pdf).

## North Carolina



For more than 20 years, North Carolina's Division of Purchasing and Contract (P&C) has operated an enterprise-wide online eProcurement system, NC eProcurement. First adopted as a solution for purchase order processing in 2001, support for the first-generation system was eventually phased out by its developer, Ariba, after nearly two decades of heavy use. In 2020, P&C began transitioning to their next-generation, cloud-based solution. The SaaS approach replaced the original on-premise applications, including those used to integrate data between the original NC eProcurement and ERP systems used by various entities, while expanding to include new solicitation and contract management capabilities. The multi-phased implementation of the new system included design planning with representation from all stakeholders, product testing with end users, and a fit/gap analysis to identify areas for improvement.

The next-gen NC eProcurement system features:

- Procurement data repository that aggregates historical and current purchase data from agencies, colleges, and school districts for record retention and strategic sourcing
- Sourcing module that allows buyers to generate and post electronic formal solicitations, suppliers to respond to bid solicitations and quote requests, and buyers to evaluate and retain those responses
- Cloud-based contract management at the state and agency levels that generates expiration reminders, facilitates legal reviews and authorization approvals, saves documentation, and generates performance reports
- Efficient processing and tracking of purchase orders, approvals, supplier order confirmations, order status, and shipping information

- Statewide repository of contracts and related documentation
- Functions can be modified to efficiently reflect changes to rules and regulations affecting procurement processes
- Regular system updates with zero downtime for deployment

NC eProcurement represents a unified and streamlined approach to the procurement, contract management, and documentation processes. It allows P&C to provide process guidance and oversight, templates, supplier catalogs, and available contracts to approximately 9,000 users via a convenient, modern, mobile-friendly interface.

To learn more about the development and implementation process in their own words, check out this [NASCIO-award-winning submission report](#).<sup>7</sup>



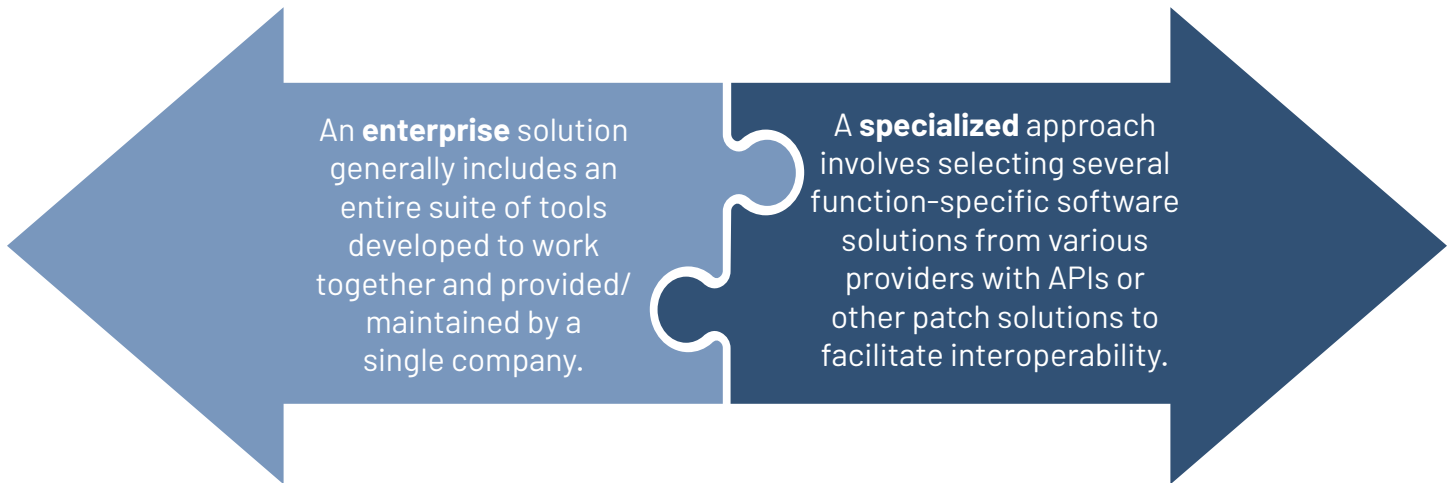
<sup>7</sup> North Carolina Division of Purchase & Contract, "North Carolina: Transforming Procurement in the Cloud," 2022, [https://www.nascio.org/wp-content/uploads/2022/08/NC\\_Enterprise\\_IT\\_Management\\_Initiatives.pdf](https://www.nascio.org/wp-content/uploads/2022/08/NC_Enterprise_IT_Management_Initiatives.pdf).

# CHALLENGES & CONSIDERATIONS

## Interoperability

One of the most critical decisions to be made when planning for an eProcurement solution concerns how the overall system will be comprised: *an enterprise solution, or several specialized solutions.*

### Enterprise vs. Specialized



**It is important to note that not all enterprise solutions are constructed the same.** Some software developers may have built tools or modules organically, in-house, to work within their eProcurement system. Others may have added functional capabilities by acquiring or licensing software from third-party developers to include within their suites. This can occasionally present interoperability challenges, as progress through stages of the procurement or purchasing processes is not seamless.

**Interoperability challenges can be common for small governments and/or agencies that have taken a piecemeal approach to eProcurement.** Such systems, built a few functions at a time over a prolonged period, may be using multiple software, applications, or providers. Often, this approach stems from insufficient resources for the large capital investment needed for a comprehensive system implementation.

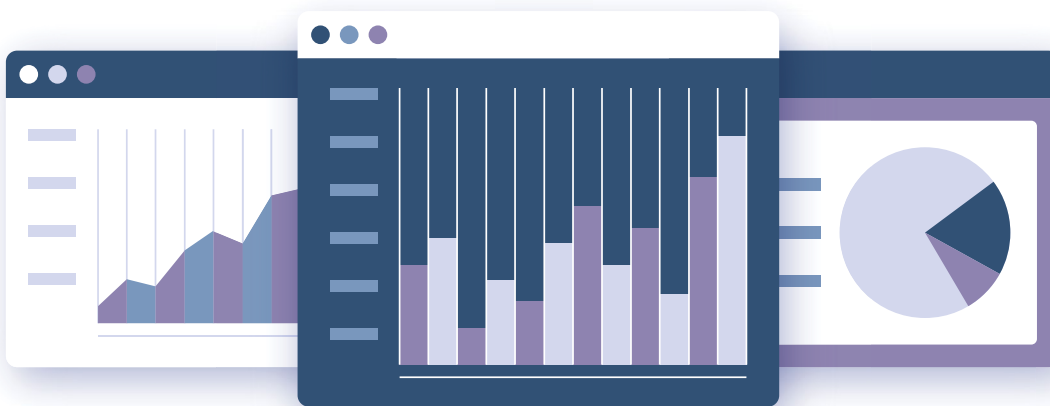
**Addressing interoperability challenges may require complicated patches to ensure new solutions properly interact with existing tools and functionality.** Language used by certain modules or tools may not be consistent with that of others. The resulting system can still operate effectively with modern functionality but may be less efficient.

## Data Security

**Cloud-based solutions carry inherent risks and cybersecurity concerns, as some operations are moved to supplier/third-party environments outside of state IT infrastructure.** Measures should be taken to ensure that solutions and providers meet the cybersecurity and operational standards set by the state's Chief Information Security Officer and/or other applicable authorities, and that both the state and supplier have the appropriate insurance.

**Chief among data security concerns is the exposure of confidential or proprietary information.** A comprehensive eProcurement solution may hold personally identifiable information, sensitive government information, or even intellectual property and trade secrets included in proposals. Protection of payment processing and bank account data is vital to operation.

**The inclusion of AI features raises similar data concerns, as many entities have restrictions on what information can be accessed by AI applications or used to train/improve them.** It is important that the implementation and use of any AI functionality within an eProcurement system is compliant with all applicable policies concerning government use.



## System Performance

**Data quality is vital, as systems are only as good as the data they rely on.** Like interoperability, inconsistent data formats or siloed data across software/platforms can hamper the effectiveness of the tools. Inaccurate data or incomplete historical data can skew analysis and reporting.

**AI-powered tools also require substantial processing capacity to perform many functions as well as significant electrical power.** This can curb system speed and performance while potentially pressuring resources.

# EXPERT RECOMMENDATIONS

Early in the planning stage, the project team should engage with key stakeholders, SMEs (subject matter experts), and long-time users of the current procurement tools and processes. These perspectives should help determine:

- Pain points in the current process or systems that should be addressed
- Which features or functions of a new system should be prioritized
- Specific, realistic objectives and preferences for solutions

When engaging with potential suppliers and industry experts to help determine the proper scope and fit of a new eProcurement solution, be sure to:

- Provide a list of systems and software you currently use and ask them to explain interoperability capabilities and potential obstacles or issues
- Ask for a technology roadmap – where will their software platform and service levels be in three years? Five years?

During the implementation process, to help ensure the effectiveness of a solution and its successful adoption, project teams and strategic leaders should:

- Pilot solutions with selected users before wider implementation
- Consider the efficacy with which the solution integrates with essential legacy systems, such as agency ERPs, during the design and development phase
- Perform fit/gap analyses to identify areas where the solution is not meeting process or policy needs or could be improved
- Develop and adopt a comprehensive rollout plan that includes effective change management strategies for leaders and supervisors

## OTHER RESOURCES

NASPO's [State & Local Government Procurement: A Practical Guide](#), Chapter 14, includes comprehensive guidance on procuring, designing, and implementing eProcurement solutions.

NASPO ValuePoint's [eMarketplace](#) platform provides a one-stop shop for purchasing from the NASPO ValuePoint cooperative agreements recognized in your state and is available as a punchout or as a module for several eProcurement and ERP systems. You can learn more [on its Resources site](#).

If your office is planning for a digital procurement enhancement, Art of Procurement describes [Five Pillars of Digital Procurement Transformation](#) that can make a difference in the effectiveness of your project.

Open Contracting Partnership offers [10 Factors for Successful eProcurement Implementation](#) based on the experiences of dozens of governments across the globe.

