HARVARD Kennedy School
Government Performance Lab

Procurement
Excellence Network

Navigating the Challenges of Using Technology to Transform Procurement

Procurement Excellence Network
Peer Roundtable

May 1, 2024

In the chat, please share **your name and government!**

Learning Agenda & Objectives

Provide a **platform to discuss challenges and best practices** in leveraging technology to improve procurement operations.

Elevate insights from **successful procurement technology transformations** among peer governments.

Community Roundtable: Breakout sessions to **discuss procurement technology challenges and experiences.**

How can you engage in this session?

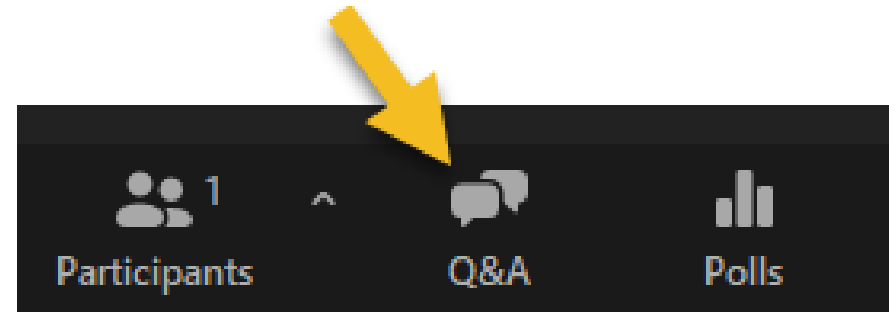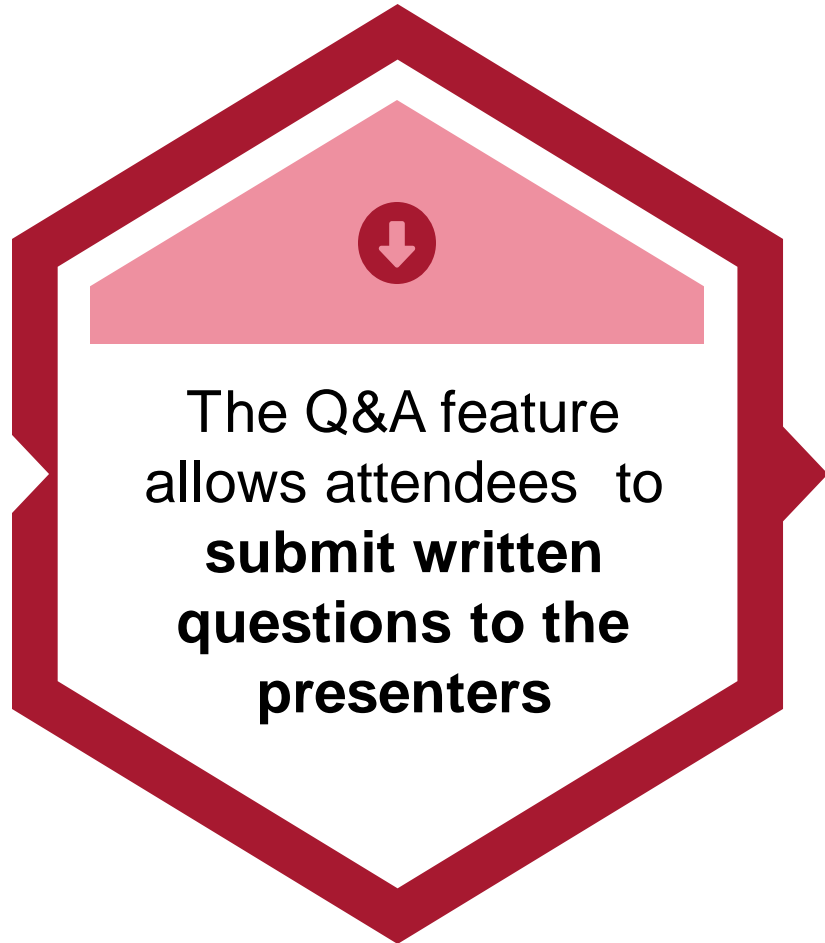Please use the **"Raise Hand"** function on Zoom

Look out for **discussions and resources** in the Zoom chat

Actively participate in the **Community Roundtable Breakout Rooms**

Questions? Use the Zoom Q&A Feature!

The Q&A feature allows attendees to **submit written questions to the presenters**

How to use this feature:

Select the Q&A button at the bottom of your Zoom screen – Input your questions, publicly or anonymously.

Upvote Questions! – Vote for existing questions that you would like to see answered.

Zoom chat will still be used to engage with other attendees in dialogue or to share resources.

How can investing in technology help to transform procurement operations?

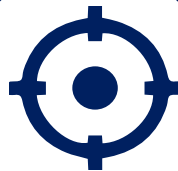# Digitizing procurement processes can drive efficiency and ignite innovation

Defining
"Procurement Technology"

Any software or digital system that improves strategic and/or transactional aspects of the end-to-end procurement process.

Improved Efficiency
Eliminating manual procurement processes allows staff to focus on higher-value activities.

Actionable Data Insights
Increased visibility into procurement operations with data can help diagnose bottlenecks and challenges.

Increased Collaboration
Digitizing processes can lead to improved communication with departments and vendors.

Governments have tactically used technology to improve various procurement processes

Des Moines, IA

Challenges

- Bids received via mail/email
- Limited ability for contact or outreach with potential vendors
- Vendor lists on antiquated spreadsheets

Value Added
(External-Facing System)

New system **(IonWave)** gave opportunity to correctly register vendors in one place, advertise registration to new vendors, and streamline bid submission.

SHARE YOUR THOUGHTS!

Name a procurement process your government was able to automate or improve using technology.

So, why are procurement teams slow to adopt and adapt technology?

High Price Tag
Limitations in funding availability can impact decisions to purchase new technologies to improve procurement operations.

Once Burned, Twice Shy!
Negative experiences with failed legacy systems that created process bottlenecks and added limited value are top of mind!
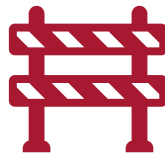
Knowledge & Capacity Gaps
Lack of staff capacity and knowledge to initiate, manage, or adequately support the technology changes.

Time Constraints
The process of planning, sourcing, implementing, and training staff on new changes can be time-consuming.

Inflexible Processes
Due to strict purchasing processes, regulations, and bureaucracy, purchasing technology can be difficult.

"Good Enough" Philosophy
Despite frustrations with current processes, teams are comfortable working within the status quo system.

Member Insights: Procurement Technology Challenges

Purchasing staff don't **have** a lot of excess **resources** and commonly have to **decide between spending the money on more personnel or a software system** that may or may not do the work better. There is risk and investment even in the process of research and discovery.

James Moering
Procurement Supervisor Goods, Services & Technology
City of Portland, Oregon

SHARE YOUR THOUGHTS!

What are other challenges you have experienced with procuring technology to improve procurement operations?

Intersection of procurement tech and ERP systems

There are several challenges related to timing, integrations, and the right mix of systems to best optimize individual procurement operations and creating true procure-to-pay systems.

Key Challenges

Depending on the timing of existing ERP implementations, **procurement staff are often asked to wait to implement procurement functionality.**

ERP procurement module functionality **is more transactional rather than strategic** (vendor scorecards).

There is often **overlap between standalone e-Procurement systems and existing ERP systems** (like vendor files), which **can result in "shadow systems"** that create frustration for staff.

There are complications with the integration of standalone e-Procurement systems with existing ERPs.

Creating true **procurement to payment linkages may limit customization options** to meet business needs.

What are successful practices for procuring procurement-related technology?

Navigating the stages of technology procurement

Planning
- **Process Mapping**
- **Identification of Process Improvement**
- Market Research
- Cost-Benefit or Spend Analysis
- Decisioning
- Piggybacking

Sourcing
- **Business Requirements**
- **Pilots/Demos**
- Creating RFI or RFP
- Evaluation
- Negotiation
- Contract Execution

Implementation
- Marketing & Messaging
- Training and Development
- **Scaled or Full Deployment**
- Process Evaluation
- **Data Collection & Review**

PEN Pulse Poll

What **stage of the digital procurement journey** is your government currently in?

What information would your government find helpful at this stage in the digital procurement journey?

Government Case Studies

How have governments used technology to improve procurement operations?

Planning

Nicolas Diaz Amigo
Chief Innovation & Data Officer
City of Syracuse, NY

Sourcing

Lawrence Gann
Purchasing and Contract Service General Manager, Internal Services Department
County of Los Angeles, CA

Implementation

Windy Aphayrath
Director / Chief Procurement Officer, Division of Purchasing & General Services
State of Utah

Government Spotlight: City of Syracuse, NY

Featured Speaker:

Nicolas Diaz Amigo

Chief Innovation and Data Officer

Defining the Challenge

The process for starting purchasing (bids, RFPs) was manual, inconsistent and time consuming.

Some major pain points include:

- Vendors having to submit solicitations via physical mail

- The purchasing team spending a lot of time seeking out required documents

- Lack of reliable data

Action Plan for Reform

We sought to digitize our process by doing **market research** (understanding what tools are out there) and **mapping our internal processes** (defining our biggest pain points).

We ended up selecting an **e-procurement tool** that would integrate to our Enterprise Resource Planning system.
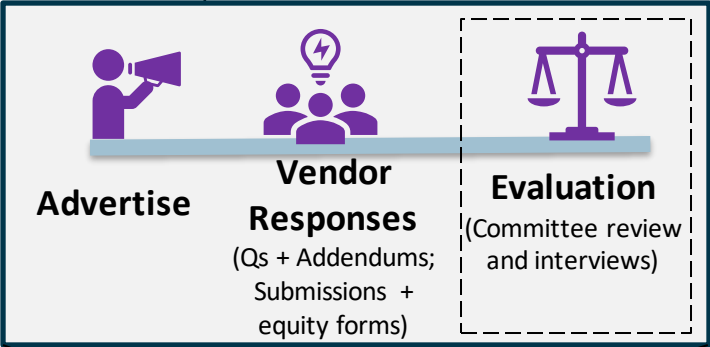
Rationale

- **We are in the middle of an ERP** transition effort that will likely take years.

- We feel a **specialized system solves our pain points** better.

- The **risk of increased complexity was limited** since the financial and purchasing functions are siloed (and already part of different systems)

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Solving Challenges During This Phase

Challenge

Strategy

No clear understanding of what e-Procurement entails
(i.e., where does it begin and end?)

- Defined and prioritized needs (e.g., portal to advertise, online documentation gathering, etc.).

- Created a high-level systems map to explain what this system is meant to do and gathered consensus.

In the big picture, **procurement touches multiple stakeholders and systems of record**

- Mapped out which steps of the process would require any integration or information sharing between systems.

- *Asked the question: Is integrating a nice-to-have or a must-have?*

Current State Systems

Advertise

Vendor Responses
(Qs + Addendums; Submissions + equity forms)

Evaluation
(Committee review and interviews)

Market Research

PROFESSIONAL SERVICE & CONSTRUCTION BIDS, OVER $35K

| Purchase Request (Request to Advertise) | Budgetary Approval | Drafting (Scope of Work/ Specs) | City Solicitation (RFP/Construction Bid) | Award Approval (Dept; Budget Director/Mayor; Council for RFPs) | Contracting (Insurance; contract negotiation & execution) | Purchase Request (Requisition Request) | (PeopleSoft Approval Workflow) | Purchase Order | Contract Management (Equity compliance; performance monitoring) | Payment Request | Vendor Payment |

NON-PROFESSIONAL SERVICES OVER $35K & COMMODITIES OVER $20K

| (Requisition Request & County Bid Request Form) | County Solicitation (Commodities/ Non-professional) | (PeopleSoft Approval Workflow) | (Non-prof. services require city contract & terms) | Purchase Order | Contract Management | Payment Request | Vendor Payment |

ALL SERVICES (Professional, Non-professional & Construction) UNDER $35K & COMMODITIES UNDER $20K

| (Requisition Request) | County Solicitation (Quotes) | (PeopleSoft Approval Workflow) | Purchase Order | Payment Request | Vendor Payment |

Ideal State Systems

Systems Legend:
- eProcurement solution(s)
- Paper/Email/Microsoft Suite
- PeopleSoft
- Project management software
- B2GNow & LCPtracker
- **Connection Opportunity**

Advertise

Vendor Responses
(Qs + Addendums; Submissions + **equity forms**)

Evaluation
(Committee review and interviews)

PROFESSIONAL SERVICE & CONSTRUCTION BIDS, OVER $35K

Drafting	City Solicitation	Award Approval	Contracting	Purchase Request		Purchase Order	Contract Management	Payment Request	Vendor Payment
(Scope of Work/ **Specs**)	(RFP/Construction Bid)	(Dept; Budget Director/Mayor; Council for RFPs)	(Insurance; contract negotiation & execution)	(Requisition Request)	(PeopleSoft Approval Workflow)		(**Equity compliance**; performance monitoring)		

NON-PROFESSIONAL SERVICES OVER $35K & COMMODITIES OVER $20K

Market Research	Purchase Request	Budgetary Approval		County Solicitation	Award Approval	Contracting		Purchase Order	Contract Management	Payment Request	Vendor Payment
				(Commodities/ Non-professional service Bids)	(PeopleSoft Approval Workflow)	*(Non-prof. services require city contract & terms)*					

ALL SERVICES (Professional, Non-professional & Construction) UNDER $35K & COMMODITIES UNDER $20K

County Solicitation	Award Approval		Purchase Order		Payment Request	Vendor Payment
(Quotes)	(PeopleSoft Approval Workflow)					

Year 1 research revealed procurement pain points and guided our procurement technology solutions
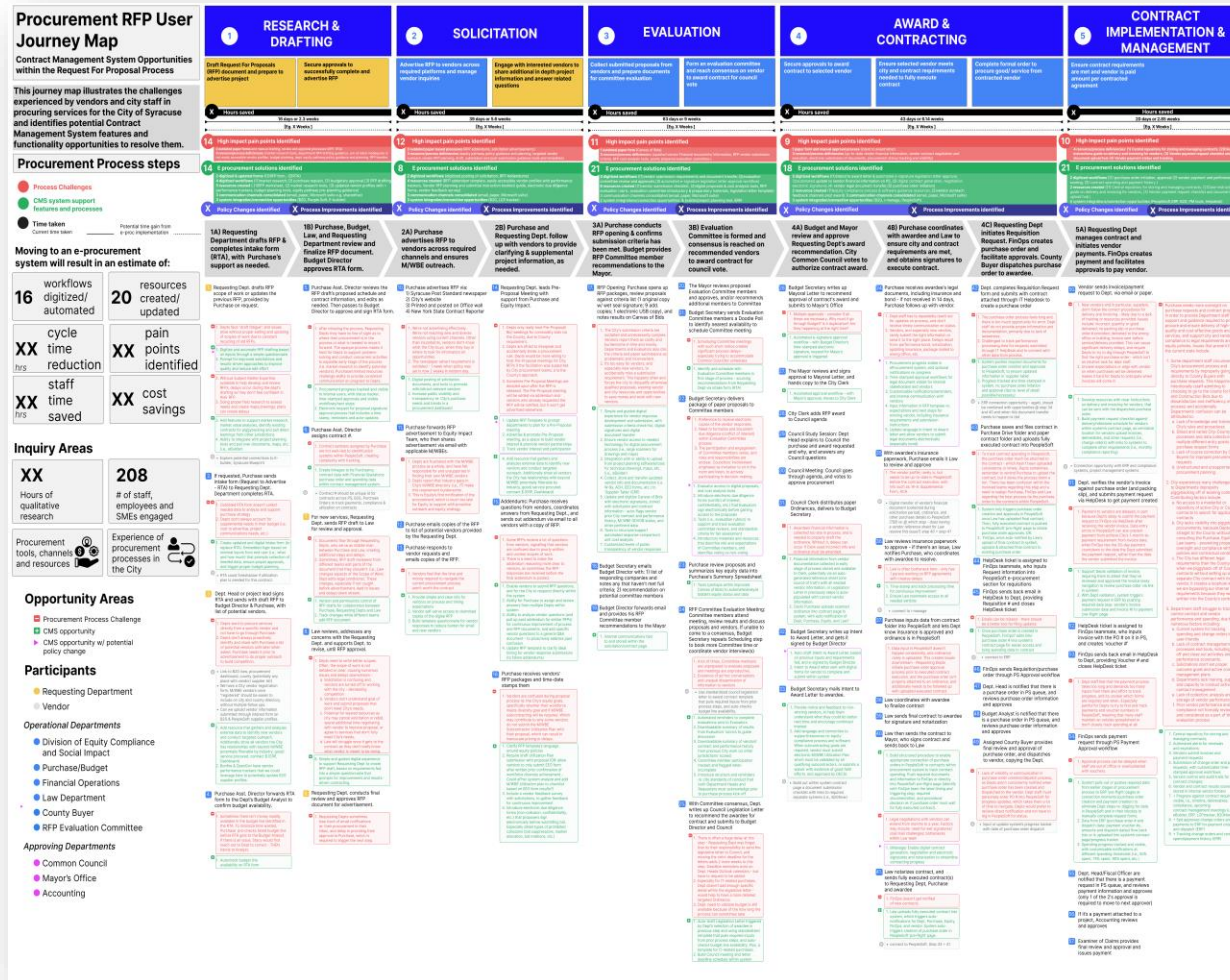

- **Goal:**
  - **Streamline and digitize procurement systems** to alleviate challenges felt by staff and vendors across the procurement lifecycle

- **User-centered approach:**
  - 11 procurement process mapping sessions across 7 departments
  - 10 vendor interviews
  - 128 vendors surveyed
  - 70 department staff and heads surveyed

Results:
- **56 high-impact pain points**
- **81 potential technology solutions**

Plus, additional process and practice improvements

Efficient and Fair

Planning Best Practices
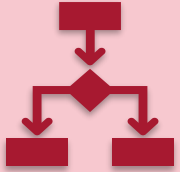
Spend time understanding your process and pains

- Digital transformation efforts commonly begin from the premise "We have to go digital because we have to go digital"
- Spend time defining the "why" – this will help as you implement, configure and prioritize features

Multiple rounds of market research

- Conduct a few rounds of demos to allow team to get a sense of what the tools do (after defining what priorities are)
- Conduct another round of in-depth demos once you know what to watch out for

Develop iteratively and put 'the thing' in front of users

- Avoid abstract 'collection requirement' and instead interact with sandbox version of tools
- Ask vendors (or in-house developers) to approach this through sprints where you focus on one feature, and then test it out

SHARE YOUR THOUGHTS!

Any questions?

Featured Speaker:

Lawrence Gann

Purchasing and Contract Service
General Manager
Internal Services Department

Defining the Challenge

Los Angeles County spends $6-8B annually (80% from Contract Services), decentralized across 40 Departments. No sourcing module for Contract Services as the current Procurement system was implemented in 2005:

- Disparate processes and systems
- Manual processes lead to
  - No visibility of lead times
  - No data
  - No forecasting

Action Plan for Reform

- Assessment of County's Procurement current state

- Alignment to Countywide objectives to develop future state vision and strategy

- Execute strategy of people, process, and technology transformation

Rationale

- Created the **Office of Countywide Contracting** to centralize, streamline, and provide oversight and government of the County's Contract Services

- Transform **policies, procedures, and processes** to build into a new end to end **Source-To-Pay system**

Solving Challenges During This Phase

Challenge

Strategy

Change Management

- Present use cases that demonstrate current challenges
- Provide solutions that drive efficiency and value
- Alignment of key decision-makers
- Continuous communication with input and feedback loop

Solicitation Requirements

- Strategy based on data-driven decisions
- Ensure full assessment of technical, functional, and configuration requirements
- Allow for flexibility (where feasible)
- Determine resources before solicitation including contingency

Organizational Collaboration = Adoption

Ensure that all parties (decision makers, end users, etc.) are involved, engaged, aware, and have a forum for input to generate buy in, ownership, and adoption
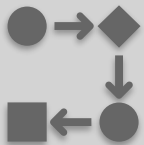
Output Dependent on Inputs

An end-to-end Source-To-Pay system is a platform and mechanism to execute your Procurement strategies, policies, processes, procedures, etc.

Fully Utilize the Solicitation Process

Ensure that the solicitation process works for your organizational needs and addresses unique technical, functional, and configuration requirements needed

Resources Key To Success

Building the right team is instrumental to the success

SHARE YOUR THOUGHTS!

Any questions?

Implementation — Government Spotlight: State of Utah

Featured Speaker:

Windy Aphayrath

Director / Chief Procurement Officer,
Division of Purchasing & General Services

Defining the Challenge

<u>"The way we've always done this"</u>
- Expiring Contract
- Technology Advances
- Statute/Policy Changes
- Process Changes
- "There has to be a better way…"

Action Plan for Reform

- Where are the bottlenecks?
- **Standalone system** for better partnership with municipality partners
- Multiple modules
- Work-group/roles functionality

Rationale

Why was this best for us?
- Separate from Division of Finance
- Opened up use for municipality partners
- Autonomy from integrations and reliances

Solving Challenges During This Phase

Challenge	Strategy

"This is not how we do this."

Change is HARD!!
- Acknowledge and validate that – respect their feelings
- Work together to address the concerns
- Do this "with" not "to"

Stay on Track – beware of scope creep and the shiny

BOUNDARIES are your best friend.
- Watch out for "little things" that will grow big fast!
- Make note of the "extras" - come back to them later. Right now your focus is on the core functionality.

Implementation Best Practices

Communicate Early and Often

Figure out who your stakeholders are – and communicate with them based on what they need to know, and what role you need them to play in championing the solution. If they don't have to ask, then they already know – but tell them again anyway.

Build in Flexibility

You can know what you know, know what you don't know, but there will always be something you don't know you don't know. Plan for it.

CELEBRATE!

Identify milestones that are key to the success of the program - figure out metrics that show forward progress – and celebrate every achievement!

SHARE YOUR THOUGHTS!

Any questions?

PEN Community Roundtable

Community Roundtable Instructions

Breakout Rooms:

Five discussions on diverse topics related to procuring procurement technology

Selecting Your Session:

Complete the Zoom Poll to select the topic you are interested in to join the breakout room!

Facilitation:

PEN team members will facilitate but please bring up questions or any promising practices!

To foster open, candid conversation, we kindly ask any non-government entities to drop off.

Community Roundtable Topics

1 **Intersection of Procurement Technology with ERP Systems** ➡ What is the right approach in terms of timing, system mix, and integrations? How can procurement teams influence relevant stakeholders?

2 **Piggybacking versus New Solicitation** ➡ How can you decide if piggybacking is the right approach for you, and how can you maintain competition and best value if you decide to do it?

3 **Facilitating Vendor Demos** ➡ How should you structure a demo to best understand functionality and fit of a system?

4 **Managing the Contract** ➡ How can you set up the right contract management structures to maximize vendor accountability and mitigate project risks?

5 **Building Buy-In and Internal Training** ➡ What are effective strategies to create buy-in from users for a new process or tool?

Feedback Poll

Join us for our next PEN event!

Elevating Vendor Insights to Improve Procurement Processes and Attract More Suppliers

Thursday, June 13 | 2-3:30p ET

When vendors have positive experiences engaging with government, government delivers better results.

Join us for a dynamic **training** on best practices for designing, distributing, and analyzing data from vendor surveys.

PEN Resources: IT Procurement

Check out this publications series to explore common challenges governments face when procuring IT and explore strategies for applying a results-driven approach to IT procurements. Stay tuned for future installments!

Transforming IT Procurement: A Four-Part Series
Part 1: Framing the Problem

This is the first of a four-part series on transforming government IT procurement. Future installments will discuss understanding the market and expanding competition, writing the RFP, and getting results.

Authors: Sarah Mostafa and Greg Wass

Contributors: Kailey Burger Ayogu, Elena Hoffnagle, Kate Mertz, and Hope Patterson

Last year, state and local governments spent nearly $120 billion on information technology (IT),[1] much of which was purchased from the private sector in the form of software subscriptions and maintenance, systems integration, infrastructure, and managed services across a multitude of segments, from health and human services to transportation to education. IT spending continues to rise every year as governments prioritize cybersecurity, data governance, and application and infrastructure modernization.

Yet while IT may be critical to government operations, it can also be one of the most difficult things for state and local governments to procure. Many high-profile failures of government IT have their roots in faulty requirements gathering, procurement, and contract management. For example, some of the early issues with state-level implementation of the Affordable Care Act were a result of a hurried procurement phase and a lack of market capacity.[2,3] Some troubled systems projects at the state and local level last for years and far exceed their initial budgets because of changes in

1. https://www.govtech.com/budget-finance/heres-the-technology-government-needs-in-2021.html
2. https://www.propublica.org/article/epic-fail-where-four-state-health-exchanges-went-wrong
3. https://www.gao.gov/assets/gao-15-238.pdf

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Transforming IT Procurement: A Four-Part Series
Part 2: Understanding the Marketplace

Authors: Sarah Mostafa and Greg Wass

Contributors: Kailey Burger Ayogu, Elena Hoffnagle, Kate Mertz, and Hope Patterson

In Part 1 of this series, we looked at some common issues with IT procurement in state and local government and suggested initial steps for designing procurements around problem statements rather than prescriptive solutions. Once there is consensus on the problem to be solved and on the goals and desired outcomes of an IT procurement, you'll need to conduct market research to determine whether the market can provide what you need. This post discusses how to productively engage with the IT marketplace, describes several market research tools, and shares tips for expanding IT vendor diversity and competition.

Market research is helpful for most procurements, but especially when buying IT. Not only is technology constantly changing, but also IT departments are continually revising their standards, policies, and requirements. Keeping up with changes in the marketplace and IT standards is critical for the IT/procurement team working on RFPs and other procurement documents.

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Transforming IT Procurement: A Four-Part Series
Part 3: Writing the RFP

Authors: Greg Wass and Sarah Mostafa

Contributors: Kate Mertz

The Story So Far...

Part 1: Framing the Problem and Part 2: Understanding the Marketplace of this series on transforming IT procurement flagged some of the important steps to take before sitting down to write a major technology RFP:

- Clearly state the problem and desired outcomes driving the procurement using the method shown in Part 1; consider doing a "problem-based procurement" to center on the technology challenge you wish to solve and remain agnostic towards a solution.
- Establish executive project governance and continuously seek alignment with internal stakeholders.
- Do your research and include users and user experience; review previous procurements and contracts and don't repeat past mistakes.
- Determine which legacy systems the new system should replace, and the scope of and limits to the functionality it should include (without making this a lengthy list of requirements).
- Use techniques discussed in Part 2 to diversify and expand the vendor pool, and prioritize diversity, equity, and inclusion throughout the procurement and contracting process.
- Issue a procurement forecast, hold a vendor forum, and issue a draft RFP, RFI, or other method of signaling to and getting feedback from the marketplace about a potential procurement.

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PEN Resources: Process Mapping

Check out this training that explains core concepts and best practices for effective process mapping:

HARVARD Kennedy School
Government Performance Lab

Process Mapping 101

How to map your procurement process to reduce cycle times

INSTRUCTIONS: this deck is a resource you can review at your own pace that covers the mechanics of process mapping and how it can be a tool for your procurement transformation efforts. The appendix includes sample slides and notes to use to hold your own process mapping session.
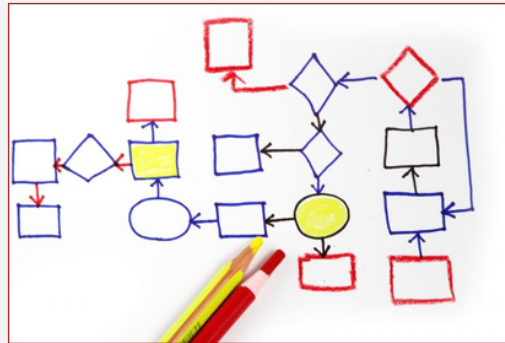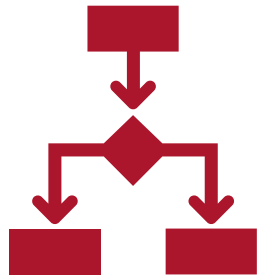
govlab.hks.harvard.edu

- **Understanding and Building a Process Map**: What is a process map and how can it be a tool to capture my procurement processes accurately?

- **Moving from Documentation to Change**: How do I use my process map to diagnose and solve procurement efficiency challenges?

Submit Materials to the PEN Community Resource Library

Do you have a brag-worthy example of one of the procurement materials below?

Process Maps & Decision Trees	Vendor Surveys	Vendor Performance Evaluation Forms	Procurement Intake Forms

Submissions are due Friday, May 3.

Appendix

Governments have tactically used technology to improve various procurement processes

Des Moines, IA

Challenges

- Bids received via mail/email
- Limited ability for contact or outreach with potential vendors
- Vendor lists on antiquated spreadsheets

Value Added
(External-Facing System)

New system **(IonWave)** gave opportunity to correctly register vendors in one place, advertise registration to new vendors, and streamline bid submission.

Sioux Falls, SD

Challenges

- Digital catalog for p-card purchases not user-friendly
- Departments often opted out of the self-service functionality
- Sent individual requisitions to the procurement system

Value Added
(Internal System)

New punchout system **(Equal Level)** incorporated end-user feedback and is now actively used by 250+ city staff, reducing separate requisition requests outside the system.

POST IN THE CHAT!

Name a procurement process your government was able to automate or improve using technology.

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Member Insights: Procurement Technology Challenges

Purchasing staff don't **have** a lot of excess **resources** and commonly have to **decide between spending the money on more personnel or a software system** that may or may not do the work better. There is risk and investment even in the process of research and discovery.

James Moering
Procurement Supervisor
Goods, Services & Technology
City of Portland, Oregon

Sometimes your **organization may decide on a technology solution**, pilot it, utilize it, and **realize you wish it could do more**. […]

But we learned that the technology system is half the battle. **Do not try and codify a bad process.**

Julie Salinas
Procurement Manager
Purchasing and Contracting
**City of Seattle, Washington**

SHARE YOUR THOUGHTS!

What are other challenges you have experienced with procuring technology to improve procurement operations?

Evolution of Procurement Technology

Application Era	All-in-one Suites Era	Microservices Era	Artificial Intelligence (AI)
Late 1990s-2005	**2006-2016**	**2016-now**	**The Future**
• Strategic sourcing software: RFPs & contract management	• Native ERP integration many services	• "Containerized" tech • Applications built with micro-services and APIs	• AI and machine learning to support every aspect of procurement and contracting

Based on "The future of procurement: moving beyond mediocre technology" (Kearney, 2021)

Technological interventions to support end-to-end procurement processes
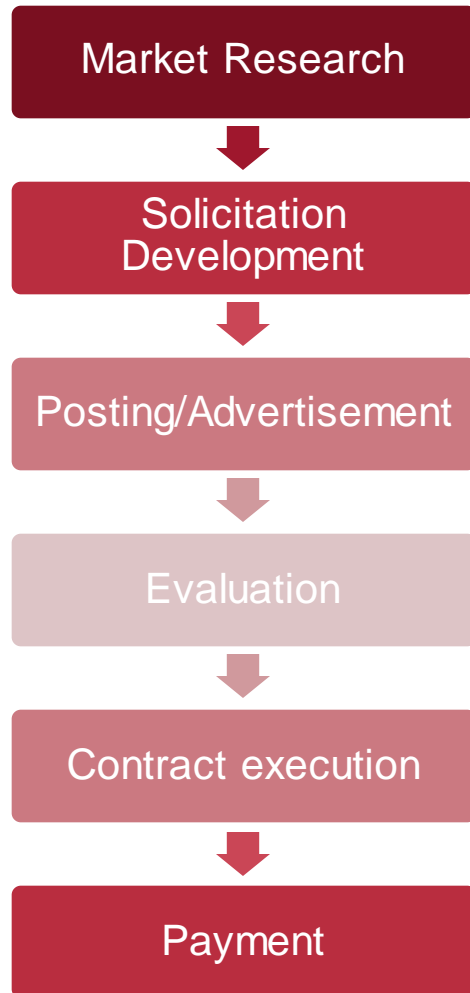
Checklist of key considerations for each phase

Planning	Sourcing	Implementation
❑ Consult with relevant internal and external stakeholders	❑ Compile needed functionality to achieve goals	❑ Review potential issues and outline plan to mitigate before scaled implementation
❑ Check what legacy systems exist and their existing and potential functionality	❑ Check if the proposed solution integrates or has compatibility with existing systems	❑ Communicate changes to all stakeholders consistently
❑ Review budgetary, legal or risk concerns to ensure you are adhering to all requirements	❑ Include vendor management and performance expectations in solicitation	❑ Build confidence and capability of system users
❑ Review current process for any inefficiencies to update before purchasing a technology system	❑ Consider the best method to procure the technology (e.g. new solicitation, piggybacking)	❑ Measure the impact of the change from the technology on procurement operations

Stage 1: Planning your procurement technology

Common Challenges

Not Fixing the Process Problem First

Shifting the focus to an IT solution rather than addressing the underlying problem – *is a new tech solution the answer?*

Complex Governance/Approvals

While stakeholder buy-in is necessary, too many people involved in decision-making can cause bottlenecks.

Planning in a Silo

Failure to incorporate internal or external user feedback in the process from the onset!

Decision Paralysis

Making technology purchases is daunting considering the potential disruption and impacted stakeholders; not making the "right decision" can be devastating.
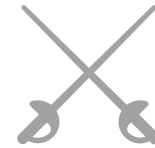
Stage 2: Sourcing your procurement technology

Common Challenges

Overreliance on Vendors to Propose the Right Solution

Vendors know their business but do not know your process – governments need to firmly articulate their process woes to get the "right-sized" solution!

Managing Conflicting Stakeholder Needs

When choosing the right technology solution, often users have different priorities and expectations.

Lack of Defined Process

Not thinking through the procedures for procuring, reviewing, and evaluating all solutions could cause bottlenecks.

Scope your Scope

Changing scope throughout the process can lead to additional costs or increased timeline!

Stage 3: Implementing your procurement technology

Common Challenges

Rushing Deployment

Lack of foresight in planning, testing, and validating operations issues before scaling implementation.

Vendor Accountability

Failure to identify or define specific criteria for vendor support beyond deployment to mitigate issues.

Inadequate Stakeholder Training & Messaging

Not enough attention is placed on capacity building and developing a comprehensive communication strategy to inform stakeholders of changes!

Deprioritizing Data Collection

Activating the power of data can help identify issues with deployment and adoption, measuring ROI!