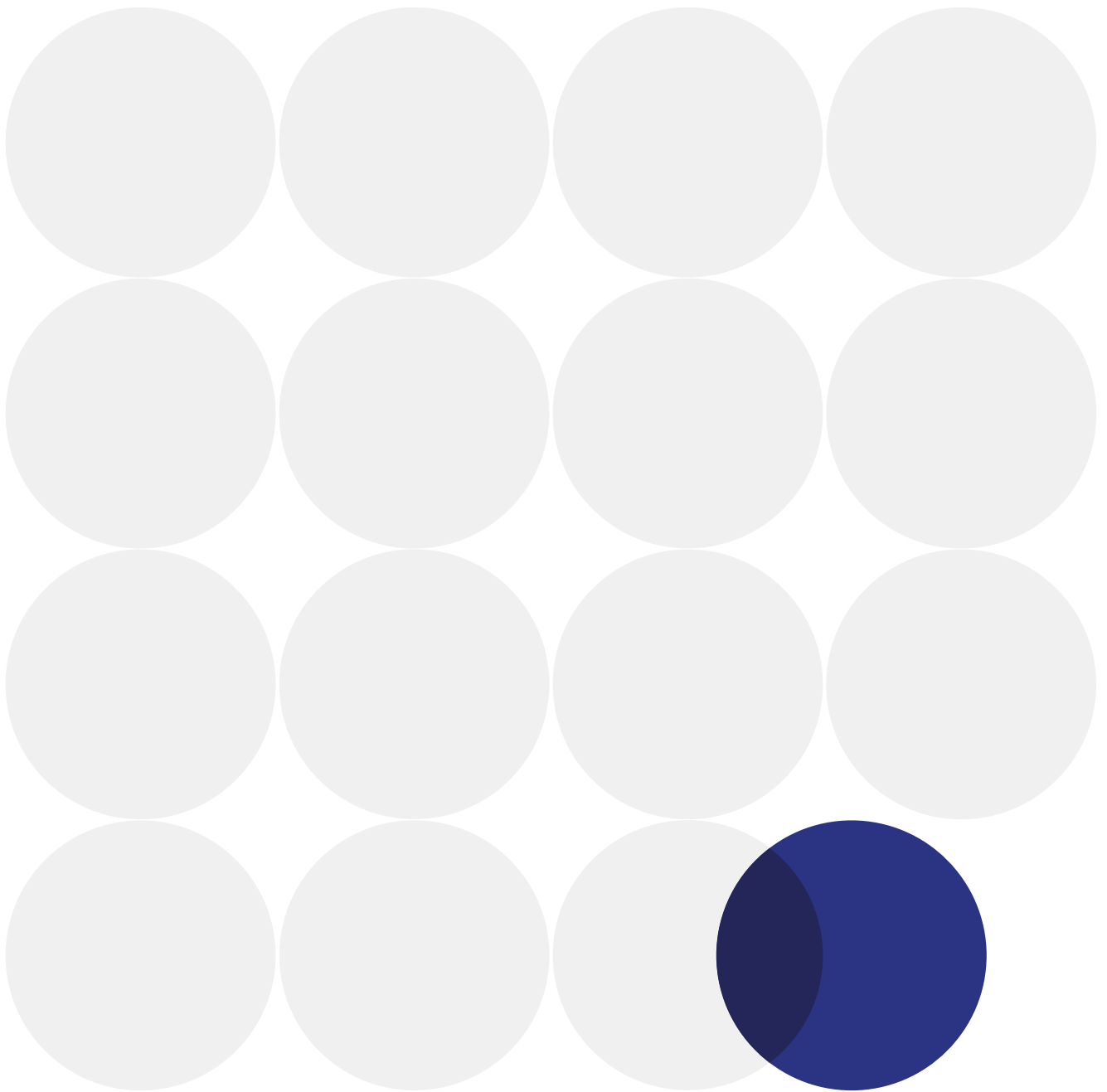


Playbook

Best practices in public procurement for continuous modernization

Using outcome-driven public procurement as an
instrument for innovation, resilience and efficiency





Executive summary

Government digital systems often drive some of the most mission-critical public services – public finance, justice, social welfare, healthcare, defence etc – however the complexity, pressure to perform and intolerance for disruptions is mostly visible only to the people building or operating these systems. Because of this, many critical systems rely on decades-old, fragile IT systems that cannot be easily decommissioned, even as public expectations and technological progress have often outpaced the ability to upgrade its systems and capabilities. Traditional IT procurement – large, multi-year projects with rigid, upfront specifications – has repeatedly led to delays, cost overruns, and solutions that fail to meet user needs.

A better approach is feasible. Instead of attempting “big bang” replacements, governments can steadily incorporate new technologies and upgrade systems and services in smaller, modular increments. This means rolling out improvements iteratively – incorporating user feedback into each cycle, encouraging competition along the way, and using performance incentives to drive results. **By modernizing continuously in smaller, outcome driven iterations, agencies reduce risk, deliver value faster, and keep systems aligned with changing requirements and technological innovations such as AI.** However, this shift often requires rethinking procurement itself: new outcome-driven contracting models, new skill sets, and a culture that embraces agility and innovation.

Procurement is not just an administrative hurdle but a strategic lever for change and innovation. Public procurement accounts for roughly

12–15% of GDP

in many countries – a tremendous influence on markets and innovation.



If harnessed properly, it can stimulate cutting-edge solutions from the private sector, grow a more competitive supplier ecosystem (including startups and SMEs), and still maintain public control over critical infrastructure and data. Procurement has the potential to be an engine of digital transformation rather than a barrier to it.

Moving to continuous modernization calls for a balanced procurement strategy pursuing multiple goals simultaneously. Governments must speed up delivery and foster innovation through flexible, modular contracting while also ensuring strong value for money over the system lifecycle. Processes should open the door to a diverse range of suppliers (including new and smaller innovators), advance also broader policy aims like sustainability, and uphold transparency, fairness, and security. Achieving all these objectives at once is challenging but essential for an adaptive and future-ready public sector.

This guide lays out practical recommendations to achieve continuous modernization, drawing on global best practices. Key recommendations include breaking large initiatives into minimum manageable units with outcomes-focused contracts; choosing contract types best suited for the work (for example, agile prototyping phases versus fixed-price deliverables); tying vendor payments and re-engagement to performance; evaluating bids based on long-term value rather than lowest cost; and investing in internal capabilities and culture for modernizing internal digital leadership and procurement. Together, these approaches allow governments to get better results faster and with less risk.

The benefits are tangible. Instead of waiting five years for a monolithic overhaul, a tax authority could launch a new online filing service within months and continuously improve it. A defense ministry could field modern, modular technologies in 18-month upgrade cycles rather than a decade-long program. In both cases, services improve for users sooner and public funds yield greater value. Continuous modernization – enabled by forward-thinking procurement – means governments can adapt and innovate continually, delivering better outcomes to citizens while staying resilient in the face of change.



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Introduction

Governments globally struggle with renewing or modernizing digital systems to meet modern expectations. In the U.S., over \$100 billion is spent annually on federal IT – much of it just to maintain legacy systems. These “heritage” systems (often running on outdated code and hardware) create mounting technical debt and cyber risk. Yet past attempts at large-scale replacements have often led to high-profile failures, given the complexity of the scope and inflexible contracts. Doing nothing isn’t viable either, as public expectations for digital services continue to rise.

Private sector in general has shifted its digital strategy towards continuous modernization: iteratively upgrading technology components and processes without interrupting services. Rather than one team or vendor delivering a whole new system after several years (the traditional approach prone to overruns), continuous modernization breaks the effort into manageable pieces delivered in shorter cycles. As a result, technological innovations are integrated faster and systems are renewed, not amortized. Using same approach in public sector requires a modern mindset in public procurement – emphasizing agility, innovation, and collaboration while still upholding public accountability.

Public procurement is not merely an administrative process; it is a strategic lever for driving change. At around 15% of GDP, government purchasing power can spur entire industries. Critically, IT procurement choices can either reinforce stagnation (if they lock agencies into old technology and incumbent vendors) or catalyze innovation (if they incentivize new solutions and new market entrants). For example, partnerships with private tech firms have enabled digital ID systems and AI systems in some governments; however, over-reliance on a few vendors can erode transparency and sovereignty. Leaders must strike a balance – harness private-sector innovation while safeguarding the public interest.

This guide distills global best practices and lessons learned into a practical model for procurement-led modernization. It is designed for senior public executives – ministers, chief procurement officers, digital leaders, and vendor management teams – who aim to turn procurement into a driver of continuous digital improvement. We present key goals and engagement models, highlight proven frameworks and contracting strategies, and outline how to implement a modular, adaptive procurement approach. The aim is to equip public sector leaders with a clear, actionable guide to procurement for continuous modernization – enabling government IT systems to evolve continuously, efficiently, and purposefully.

Key strategic considerations

To shift procurement toward continuous innovation and modernization, consider establishing clear strategic goals that balance innovation with stewardship.

Key considerations include:

01. Enable continuous innovation and modernization

Use procurement to regularly incorporate new technologies and improvements, rather than locking into static solutions. Favor flexible, outcome-based requirements (focus on the problem to solve rather than prescribing the solution) and embrace pilots and agile methods to test ideas quickly. In other words, procurement should enable ongoing digital improvement rather than one-off projects.

02. Economic growth and innovation ecosystem

Treat IT procurement as a tool of industrial policy. Large government contracts can spur innovation and foster local industry growth. By setting forward-leaning requirements (for example, mandating open standards or new cybersecurity protocols), governments “pull” innovation into the market. Favoring open architectures or pilot programs can jump-start nascent tech sectors. Within trade agreement limits, encouraging domestic firms and startups helps build a vibrant homegrown tech ecosystem – enhancing competitiveness and potentially creating exportable solutions.

03. Inclusive access

Make public contracts accessible to a wide range of suppliers. Opening up competition brings fresh ideas. Tactics include simplifying procurement documents and requirements and breaking large contracts into smaller lots so niche providers can bid. While small companies cannot bid on large contracts that are disproportional to their revenue without adding significant risks to all parties involved, large contracts can be broken into smaller ones that are suitable for including SMEs. An inclusive approach spreads economic opportunity and fosters competition that drives innovation.



04. Value for money and effectiveness

Ensure taxpayer money spent yields maximum value over the product lifecycle. This does not simply mean choosing the cheapest bid. Rather, “value” considers quality, outcomes, and long-term costs. For example, adopting multi-criteria evaluation such as “Most Economically Advantageous Tender” (“MEAT”) evaluation criteria allows consideration of quality and lifecycle benefits alongside price. Rigorous contract management should ensure the government pays for actual results delivered, not just effort or promises. Ultimately, procurement should be seen as an investment to achieve the best outcomes per dollar, not just a purchase at the lowest initial cost.

05. Sustainability and social value

Leverage procurement to advance environmental and social objectives. For example, include requirements for energy-efficient IT equipment or renewable-powered cloud hosting to support climate goals, and insist on accessibility standards and fair labor practices from vendors. Many governments now integrate “green procurement” and “social value” criteria into their tenders. In this way, public procurement can promote sustainable development (echoing UN Sustainable Development Goal 12.7 on sustainable public procurement) and ensure IT projects contribute positively to society.

06. Transparency and accountability

Maintain the highest standards of integrity, fairness, and openness in procurement. All opportunities should be openly advertised, with clear rules and criteria disclosed up front. This transparency deters corruption and builds trust in the process. Independent oversight (e.g., audit agencies, civil society) and public reporting of procurement performance (such as the percentage of tenders with a single bidder) are also crucial. Leading countries publish procurement data dashboards and conduct regular audits to hold agencies accountable. Modernization efforts must not come at the expense of due process – instead, use modernization as a chance to enhance openness (for example, by using open contracting data standards).

07. Digital sovereignty and resilience

Protect national control over critical digital infrastructure and data. As governments increasingly adopt cloud services, foreign software, or global tech vendors, they must assess the risks of dependency. **Digital sovereignty** means ensuring key systems, capabilities and data remain under national oversight and can be transferred or

modified if needed. Procurement choices should consider where data is hosted, require escrow of source code or rights to modify software, mandate interoperability (to avoid proprietary lock-in), and, where appropriate, favor local or open-source solutions for sensitive areas. Likewise, cybersecurity requirements should be baked into contracts (e.g., compliance with security standards, breach reporting obligations). Balancing openness with sovereignty is delicate – overly protectionist rules can raise costs, but too much reliance on external providers could mean ceding control. The goal is to retain **strategic autonomy** while still accessing global innovation.

These goals sometimes conflict with one another (for instance, boosting local industry vs. obtaining the lowest global price), so a balanced approach is vital. Leading jurisdictions explicitly acknowledge these trade-offs and use multi-criteria evaluations or “balanced scorecards” to weigh cost, quality, innovation, and broader impacts together. By articulating these goals, political and executive leaders establish a clear mandate: public procurement is not just about buying cheaply – it’s about investing public funds wisely to achieve efficient, innovative, equitable, and secure outcomes.



Recommendations for continuous modernization

Drawing on the above principles, this chapter outlines practical recommendations and a model for outcomes-focused procurement to enable continuous modernization.

It spans eight key areas, each addressed in the subchapters that follow:

01. Build capabilities and culture

Invest in internal digital skills and foster a culture of continuous improvement. Break down silos between procurement and IT by embracing agile, iterative processes and risk-managed collaboration.

02. Use informal market interaction

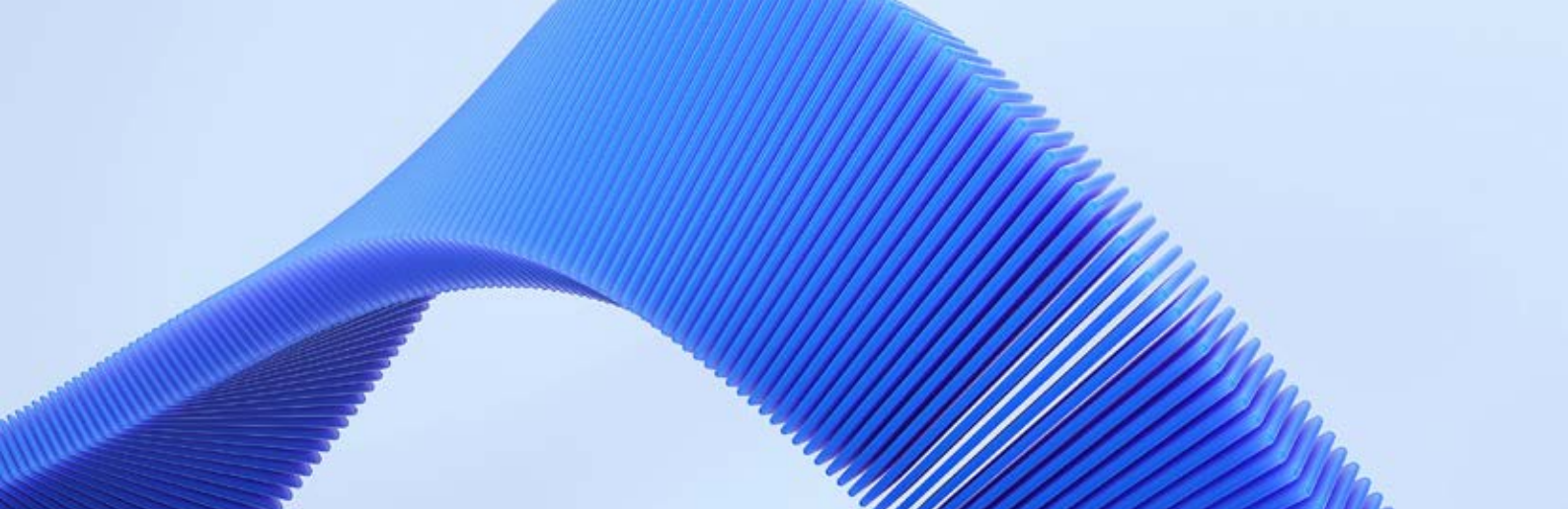
Engage early and informally with potential suppliers (e.g., industry days, market research talks) to explore solutions and refine requirements before formal procurement. Early market engagement builds trust and leads to more innovative, realistic proposals when bidding begins.

03. Decide when to build or buy

Be strategic about what to develop in-house versus using commercial or open-source products. Custom-build when it delivers unique value; for common needs, opt for proven off-the-shelf solutions to save time and cost while maintaining flexibility (but be careful how common your need truly is).

04. Ensure clear and balanced roles

Clearly define government and vendor responsibilities for a balanced partnership. The government retains control over key decisions, architecture, and priorities, while vendors are empowered to innovate in delivery. Deliberately distribute roles like project management, integration, and quality assurance to avoid over-reliance on any single vendor.



05. Break larger programs into minimum manageable teams and contracts

Organize development teams and contracts around modular system components aligned to the technical architecture. Each module (e.g., payment engine, user portal) has a dedicated team and contract, ensuring clear ownership and accountability while enabling parallel development and updates.

06. Match contract types to the work

Choose contract models that fit the project phase and goals. Use time-and-materials or outcome-based contracts for agile, exploratory work where requirements may evolve; use fixed-price contracts when deliverables are well-defined and cost certainty is needed. For large ongoing solutions, consider managed service or public-private partnership models. Align each contract type to incentivize high-quality, efficient delivery and adaptability.

07. Use framework agreements for flexibility

Leverage pre-approved vendor frameworks to enable quick, flexible procurement for iterative development. Within a framework, run mini-competitions (“call-offs”) among qualified suppliers for each new module or feature. This speeds up procurement cycles and maintains competition, and the framework can be refreshed over time to bring in new vendors and technologies.

08. Prioritize long-term value

Focus on overall value and outcomes when evaluating bids and managing vendors, rather than just the lowest price. Use multi-factor criteria (technical excellence, innovation, total cost of ownership, vendor track record, solution scalability/security) to select partners offering the best long-term value. Hold vendors accountable to their promises with performance metrics, ensuring solutions provide sustainable benefits and continuous improvement over time.

01

**Build capabilities and
culture for continuous
modernization**



Implementing a modern, continuous modernization approach requires development in the government's own organization and culture and procurement capabilities. Public organizations are not all starting from the same place: some are just beginning to modernize legacy systems, while others are already iterating and improving digital services continuously. To tailor improvement strategies, it helps to categorize an organization's digital maturity into three levels.

Maturity level	Organizational capabilities & culture	Typical challenges	Typical procurement approaches
Level 1: Traditional	Minimal in-house digital skills; IT and procurement work in silos; governance is rigid and documentation-heavy. Culture favors waterfall planning and is highly risk-averse.	Legacy systems dominate. Lack of internal expertise to manage digital projects; fear of failure inhibits innovation; heavy reliance on a few large vendors.	Large, fixed-scope “big bang” contracts and turnkey projects (the classic big RFP approach); off-the-shelf (COTS) solutions for common needs; outsourcing IT development to established contractors. These feel safe but often produce siloed, monolithic systems.
Level 2: Modernizing	Growing cadre of internal digital talent; starting to pilot agile projects and user-centered design; improving data analytics and oversight. Culture is cautiously open to change – some cross-functional project teams emerge, though traditional practices persist.	Organizational inertia and cultural resistance are slow to change. Agile practices are not yet standard across the agency; governance and budgeting are still aligned to old models; difficulty scaling successful pilots into enterprise-wide reforms.	Hybrid procurement strategies – e.g., multi-vendor framework agreements with agile work orders; large projects are broken into phased or modular contracts delivering iterative value; competitive prototyping or challenge contests to explore new solutions. The organization experiments with new models alongside traditional methods.
Level 3: Continuous Modernization	Strong in-house digital leadership; governance focuses on outcomes and rapid iterations. Culture: digital innovation is a strategic priority. Leadership embraces experimentation and managed risk, with a continuous learning mindset.	Need for constant upskilling of staff to keep pace with emerging tech. Must coordinate multiple vendors and internal teams in a modular architecture. Sustaining an innovation culture against bureaucratic “old ways” is an ongoing challenge (though leadership proactively manages this).	Modular, outcome-focused procurement – e.g., multiple smaller contracts aligned to components of a system or specific user services; challenge-based and outcome-based contracts (pay for results, not just deliverables); co-development partnerships where government and industry build solutions together. Procurement is treated as a strategic function enabling agility and innovation.

Table 1 above presents a simplified three-level maturity model – from Traditional to Continuous Modernization – describing typical capabilities, challenges and suitable procurement approaches at each stage.

Table 1: Maturity level of procurement capability and organization digital leadership.

Adopting continuous modernization and relevant procurement capabilities requires a culture shift within both the civil service and the vendor community. It means embracing change and uncertainty as ongoing realities. However, this does not mean abandoning responsibility or planning, rather, it calls for a disciplined approach to managing progress through incremental learning and adaptation. Officials must become comfortable with not having all the answers up front, while still being accountable for transparent decision-making, clear goals, and measurable outcomes. This mindset can be cultivated through targeted training programs, pilot projects, and strong leadership messaging that it's expected to adapt plans as you go.

Vendors, for their part, should be encouraged to act as collaborators rather than just contractors. For instance, vendors should be willing to share honest feedback, flag risks early, and suggest improvements even if those weren't explicitly asked for in the RFP. Creating forums for open dialogue – such as pre-market engagement events, “industry day” workshops, or iterative negotiations – helps break the adversarial mold of procurement and builds mutual trust between government and suppliers.

Public sector leadership (ministers and agency heads) plays a pivotal role in setting this tone. By supporting innovative procurement experiments (for example, the first challenge contest or the first agile contract in the agency) and protecting teams when initial trials don't go perfectly, leaders can build momentum for broader adoption. Celebrating quick wins (like launching a new digital service in months instead of years) will reinforce the benefits of this approach across government.



02

**Use informal market
interaction for finding
innovative solutions**



Governments face increasing pressure to modernize and innovate within the public sector. Informal market interaction is a strategy to facilitate early engagement with the market before formal procurement, allowing governments to discover and refine innovative solutions with minimal risk. This approach includes methods such as pre-commercial procurement, innovation challenges, hackathons, and regulatory sandboxes, all aimed at identifying creative solutions to pressing public problems before entering formal tender processes. These informal engagements open the door to non-traditional vendors, especially SMEs, and foster a collaborative relationship with the market.

By engaging with innovators early, governments can **reduce the risk of procuring outdated or ineffective solutions** and fine-tune their needs through **collaborative co-creation**. **Informal engagements also allow agencies to test and validate emerging solutions** in real-world scenarios, providing valuable feedback that will guide formal procurement later on. Below, we explore several common informal market engagement mechanisms:

01. Pre-commercial procurement (PCP)

This method partners government with vendors to develop and test **prototypes** before they are commercially available. By funding early-stage development, governments share the risk and influence the design of solutions to meet specific needs.

02. Innovation challenges and hackathons

These competitions invite innovators to solve a public-sector problem by submitting **prototype solutions**. This rapid approach helps governments uncover creative ideas and identify new suppliers quickly, often providing solutions that are not found through traditional procurement.

03. Regulatory sandboxes

These controlled environments allow **technologies or business models** to be tested with real users under relaxed regulatory supervision. Sandboxes enable **early-stage experimentation** without the constraints of full regulatory oversight, ensuring that solutions can be tested before scaling.

04. Early market consultations

Informal dialogue between procurers and suppliers helps governments **explore market possibilities** and refine procurement requirements before formal tender. This **early engagement** enables a clearer understanding of what solutions exist and ensures the market is prepared when the official procurement begins.

Each of these mechanisms addresses different public sector needs and delivers distinct policy outcomes, as outlined in the table below:

<i>Public sector need</i>	Informal mechanism	Resulting outcome
<i>Unclear or complex requirements for a project – need to explore solutions before writing a tender.</i>	Market sounding and supplier dialogue (e.g., RFIs, “industry days” and workshops)	Refined understanding of what the market can offer; better-defined procurement requirements; broad supplier awareness and interest.
<i>Known public problem lacking obvious solutions – need fresh ideas and prototypes.</i>	Innovation challenge or hackathon (open contest for ideas/prototypes)	Creative, prototype solutions from new innovators; identification of non-traditional suppliers; inspiration for formal procurement specifications.
<i>Public need that requires R&D – no off-the-shelf solution exists.</i>	Pre-commercial procurement (PCP) (competitive R&D contracts)	Development of prototype/new technology tailored to public needs; risk-sharing in innovation; viable solution ready for commercial procurement phase.
<i>Promising emerging technology – need to test viability or policy implications in real context.</i>	Sandbox or pilot program (controlled live testing)	Real-world performance data and feedback; validated solution adapted to requirements; evidence to support scaling or regulatory changes.

Table 2: Mapping informal engagement mechanisms to needs and outcomes.



The policy value of informal market interactions lies in their ability to identify and refine potential solutions before committing significant resources to a formal contract. Through these engagements, governments can test prototypes, understand market feasibility, and evaluate the viability of new technologies without the commitment of a full procurement cycle.

To institutionalize informal market interaction, governments can:

01. Anchor innovation engagement in policy

Integrate early market engagement as a key component of procurement strategies. This sends a clear signal to both agencies and vendors that informal interactions are encouraged.

02. Invest in pre-procurement programs

Allocate funding and resources for **challenge competitions, pilot projects, and R&D partnerships**, creating a **structured pathway** for ideas to transition from concept to full-scale procurement.

03. Build skills and capacity

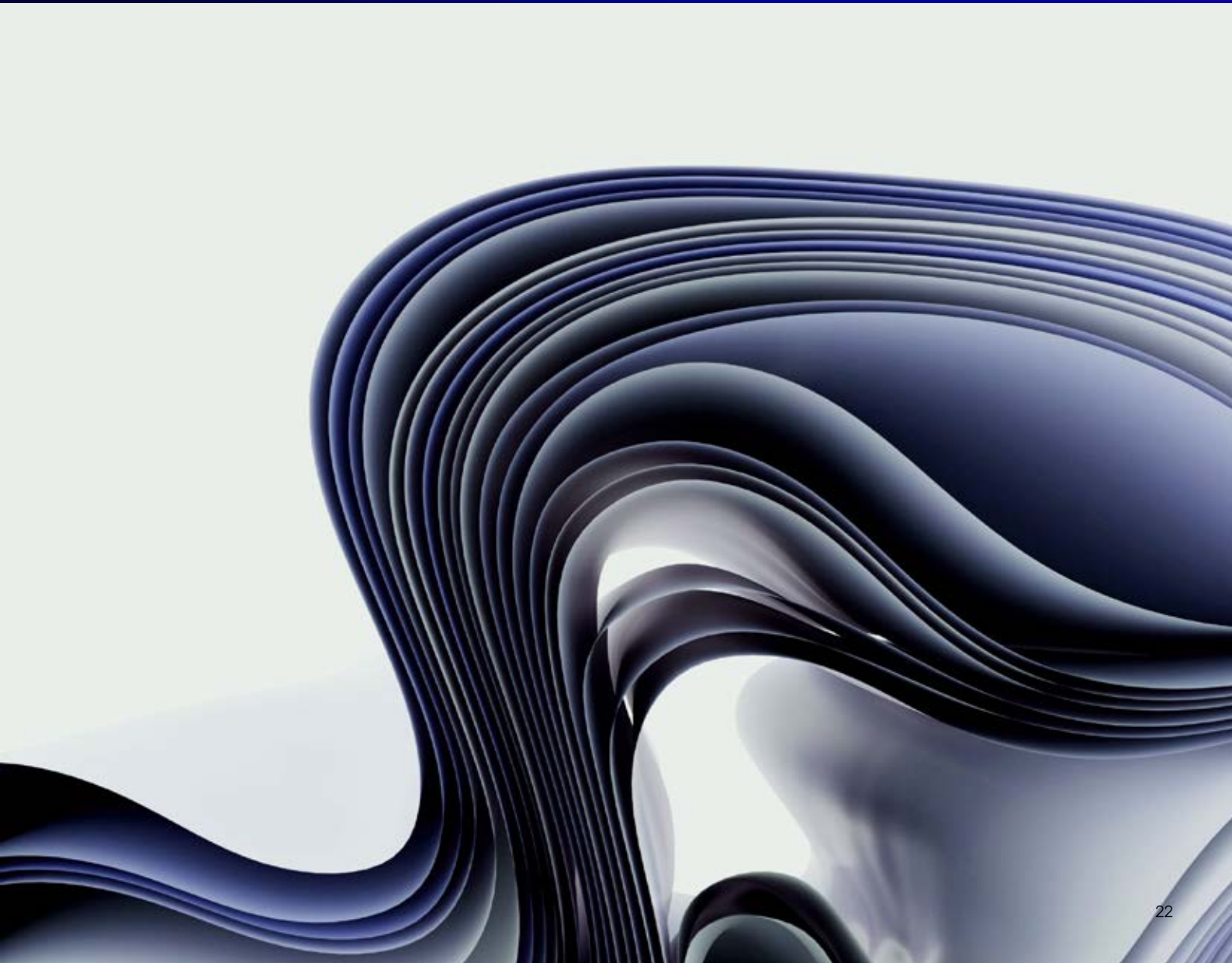
Train procurement officers and project managers in how to effectively run informal engagements, ensuring that they understand the **legal, technical, and operational aspects** of market dialogues and prototype development.

04. Ensure transparency and fair play

Develop guidelines to conduct market dialogues and innovation challenges in an **open and transparent manner**, ensuring fairness in how vendors are selected and engaged.



By embracing informal market engagement, **public procurement transforms into a proactive force for innovation**. Governments can identify **novel, effective solutions** more quickly, engage with a broader range of suppliers, and continuously **adapt procurement needs** to evolving market possibilities. As informal mechanisms give way to formal procurement processes, **the risk of failure decreases**, and the likelihood of **successfully procuring cutting-edge solutions** increases. This fosters a dynamic, **innovative public service** that is better aligned with the needs of the community and the rapidly changing technological landscape.



03

Decide when and what
to build or buy



Government IT leaders face a strategic choice when modernizing systems: do we build a bespoke solution from scratch, configure and adopt a platform, or implement a Commercial Off-The-Shelf (COTS) product and customize it?

This “build vs. buy” decision has far-reaching implications for delivery speed, long-term flexibility, talent needs, integration effort, vendor dependency, and total cost of ownership. Historically, many public agencies defaulted to buying or outsourcing solutions. But as governments strengthen in-house digital talent – and with the rise of AI-enabled development tools that increase the development productivity of bespoke solutions – the build vs. buy question has become more complex and worthy of careful analysis.

The following table summarizes how **Bespoke Build**, **Low-Code/No-Code Platform**, and **Customized COTS Package** stack up on key decision criteria:

Criteria	Bespoke build	Low-code platform	Customized COTS solution
Strategic fit & uniqueness	High – Fully tailored to unique mission needs; ideal if requirements are highly specific and unmet by market offerings.	Medium – Configurable for many use cases but constrained by the platform’s features. Good for common workflows with some customization.	Low – Best for generic functions (e.g., HR or finance). Heavy customization is possible but undermines the benefits of a COTS product and can introduce issues.
Time to deliver	Slower traditionally, fast with AI-enabled development tools. Requires full development lifecycle, so initial delivery historically takes longer, however this dynamic is rapidly shifting with AI-enabled development and prototyping tools which significantly increase the productivity.	Fastest – Can deploy solutions quickly using visual development and pre-built components. Ideal for rapid prototyping or urgent needs.	Moderate – If requirements fit the product well, initial setup can be quick. However, extensive configuration or lengthy procurement processes can slow down delivery.
Flexibility to evolve	Very High – Code can be modified as needed to adapt to new laws, policies, or technologies (given sufficient developer effort).	High (within limits) – Solutions can be updated quickly, but you are ultimately bound by the platform’s capabilities. If needs outgrow the platform, flexibility drops.	Low – Largely tied to the vendor’s roadmap. Major changes are difficult; over-customizing to fit unique needs makes upgrades and maintenance problematic. Often the agency must adapt to the software, not vice versa.
Talent & skills required	Requires a strong internal digital leadership and governance capabilities. High technical leadership must be maintained in-house over the long term.	Requires fewer traditional developers, but still needs skilled platform specialists and governance to prevent sprawl. Less deep coding talent needed, but integration and platform management skills are necessary.	Requires product-specific expertise and strong vendor management skills. Internal staff focus on configuration and oversight. Little custom coding, but the agency must retain enough technical know-how to manage the vendor (you cannot fully outsource understanding or risk).

Criteria	Bespoke build	Low-code platform	Customized COTS solution
Integration complexity	High effort, full control – Custom integrations can be designed to fit existing systems exactly (using open APIs, tailored interfaces).	Moderate – Many platforms offer pre-built connectors for common systems and simplify authentication and data processing tasks, easing typical integrations. Unique legacy integrations may still require custom built adapters beyond what the platform provides.	Varies – Modern COTS solutions often have APIs, but integrating into a complex environment may require additional middleware or workarounds, adding cost and complexity.
Vendor lock-in	Low – Minimal vendor lock-in (especially if using open-source frameworks). The government owns the source code, so reliance is on internal skills rather than a single vendor.	Medium to high – The services are tailored to work only on given platform, rebuild is required to migrate, so switching later can be costly and complex. The agency depends on the platform vendor for updates and support.	High – A heavily customized COTS can create dependency on that vendor. Switching later often means abandoning significant sunk costs and undertaking a major migration.
Total 5+ year cost (TCO)	High upfront, lower ongoing – No license fees, but significant upfront investment and annual maintenance (~15–25% of development cost per year). Can be cost-efficient long-term if the system is kept updated, avoiding continuous license payments.	Moderate upfront, ongoing subscription – Development is faster and cheaper initially, but you pay recurring platform fees. Over 5+ years those fees accumulate (though one platform can support many applications). Open-source alternatives in this space have not matured enough, and community-edition licenses are often too restrictive for government use.	Low upfront, high ongoing – Initial license and configuration may cost less than building from scratch, but annual license/support fees (often ~20% of purchase price per year) add up. Total cost grows with user count and add-ons, and upgrades or vendor changes can incur significant expense.

Table 3: Choosing between tailored solution, a low-code platform or COTS solution.



Choosing between **build, platform, or COTS** is not one-size-fits-all. Government technology leaders should evaluate each project against criteria like those above, asking questions such as:

01. How unique and mission-specific are our requirements?

If requirements are highly unique to the agency's policy or operations (core to mission, not met by typical market offerings), lean toward custom development for a tailored fit. If requirements are common across many organizations (general functions like HR, finance), a proven COTS or SaaS solution is likely more cost-effective. A low-code platform can serve as a middle ground – enabling some unique workflows built atop a common platform.

02. What is our time-to-market urgency?

If speed is critical – for example, a new program must launch in six months – configurable COTS solutions or low-code platforms can deliver faster than building from scratch if (and only if) it closely matches the requirements without heavy customization. However, speed should not override fit. If your business requirements significantly differ from the out-of-the-box capabilities of a COTS product, forcing a mismatch can lead to painful compromises, costly customizations (that can be more difficult than a custom build), or even failure to meet core user needs. Long-term agility matters: a quick deployment that locks you into inflexible tooling may result in higher costs and rework later. The right solution balances delivery speed with strategic alignment to evolving business goals.

03. Do we have the right talent and team?

Do we have the capabilities to deliver and manage this solution? Success doesn't require building a full in-house team, but it does require strong internal digital leadership. Whether you choose to build, buy, or partner, someone on your side needs to understand the technology, set direction, and manage delivery. External vendors can provide the talent, but not the ownership. Low-code platforms can reduce dependency on deep technical skills, but still demand thoughtful oversight. Similarly, COTS solutions may simplify implementation, but they still require internal clarity on business needs, active configuration management, and a plan for long-term ownership.

04. How will it integrate with our broader architecture?

Consider how the new solution will plug into existing systems, data sources, and identity management. A custom build can be designed to fit the enterprise architecture exactly (using open APIs, microservices, etc.), whereas with COTS you must ensure it has the necessary integration hooks or you'll spend extra on middleware. Low-code platforms often integrate well with modern systems out-of-the-box but might

struggle with very old legacy tech. Ensure whichever approach you choose aligns with your integration strategy and enterprise architecture principles.

05. What are the vendor and sovereignty implications?

If using a platform or COTS, evaluate the vendor's stability, flexibility, outlook and where your data will reside. For example, EU public agencies might prioritize solutions that can be hosted in-country or are open-source to meet digital autonomy goals. If a proprietary solution is chosen, mitigate risks by negotiating strong contract terms (e.g., source code escrow, SLAs, exit/transition assistance) and by avoiding overly heavy customizations that could trap you on an outdated version.

06. What is the total cost over the system's life?

Build a total-cost-of-ownership model for each option. Include not just initial costs, but also 5+ year licensing fees, support costs, and internal labor. This often reveals that an option with a low upfront price tag can become the most expensive in the long run (or vice versa). For instance, if a vendor product costs \$X per year, in five years you've paid 5×\$X (plus inflation) – compare that to investing those funds in a one-time build and annual maintenance. On the other hand, remember that a vendor's recurring fee includes ongoing improvements; weigh that against the cost of your own development team doing equivalent upgrades. A thorough cost analysis, backed by market research or even a small pilot, leads to a more informed decision.

Often, a **balanced approach** works best in large government enterprises. Non-differentiating, common functions can be provided by shared platforms or COTS services (many governments adopt a “buy or adopt first” principle for commodity IT), while truly critical and unique capabilities are built or heavily tailored in-house to ensure mission alignment and control. In some cases, a hybrid strategy is wise – for example, using a low-code platform to build internal business applications that extend a core COTS system, or adopting open-source components as the foundation of a custom system (so you're technically “building” but not from scratch, leveraging community-developed code).

All in all – drive the decision with enterprise architecture principles: **maximize reuse and interoperability, preserve flexibility for future change, and focus bespoke solutions on areas that provide strategic value or require sovereign control.** By carefully considering factors like team capabilities, maintainability, strategic control, and long-term cost, government IT executives can choose an approach that delivers immediate results while safeguarding the public interest for the long run. The goal is to strike the right balance between **speed, cost, and control** – delivering modern digital services to citizens efficiently, without compromising adaptability or governance.

04

Break larger programs
into minimum
manageable teams and
contracts





A core principle in system design is often cited as **Conway's Law: organizations that design systems are constrained to produce designs that mirror their communication structures.** If a government buys everything in one giant contract, the result will likely be a single, siloed mega-system. Conversely, if the government organizes work into smaller, outcome-focused teams (both internally and with vendors), the resulting systems tend to be more modular and user-centric.

To support continuous modernization, structure your teams and procurements in a way that mirrors modern digital organizations. Rather than launching a single comprehensive contract for an entire new system, **break the program into small logical components or workstreams that can be managed (and procured) independently, each with clear purpose and value driven outcomes.** Organize around end-to-end services or business products, not around technologies and systems.

Modern digital organizations often organize their work around different types of teams, each with a specific purpose. For example, some teams focus on delivering user-facing services, while others provide shared capabilities like identity management or internal APIs. These different team types (the concept of **team topologies** covers this well) benefit from different vendor engagement models. A team working on shared platforms might be best supported through a long-term partnership or a "build-operate-transfer" model. In contrast, a team developing a new digital service for citizens may need a shorter, outcome-based contract focused on quick delivery. The key takeaway for leadership is this: there's no one-size-fits-all approach. Successful organizations often use a mix of vendor strategies – long-term contracts for core systems, short-term help for innovation projects, and specialist consulting support when needed. This flexible model reflects how modern IT teams work: forming around

specific needs and evolving as those needs change.

Concretely, **build an architecture and integration capability as a first step.** This could be an external systems integrator or an internal "architecture team" (augmented by consultants) responsible for the overall technical architecture and ensuring all the moving parts work together. This integrator defines the system blueprint – how components interface (APIs, data standards), security and interoperability requirements, and so on. Crucially, the integrator should not automatically be the same vendor building all the modules. In fact, having a neutral integrator (or doing integration in-house) avoids a situation where one vendor becomes the de facto owner of the entire system.

After establishing the architecture oversight **issue separate procurements for each major module or workstream.** For instance, bid out the front-end user portal as one project (perhaps emphasizing UX design capabilities)

and the core processing engine as another (allowing COTS solutions to compete with custom builds), and maybe a data analytics component as a third. By running these as simultaneous but smaller procurements, you can engage multiple specialized suppliers at once – each focused on what they do best. A small UX-focused firm might win the portal contract; a large enterprise software company might deliver the engine; a niche analytics company might handle the data insights – rather than one large firm doing a mediocre job on all three. This also opens opportunities for SMEs or non-traditional vendors that would never qualify for a huge all-or-nothing contract.

Critically, **define clear interfaces between modules from the start**. The architecture/integration work should specify how each module will communicate (e.g., the portal sends tax filings via a defined API to the engine). Use open standards for these interfaces so modules can be easily swapped out if needed. If each component adheres to common standards, the government can later re-compete that piece or replace a vendor without having to rebuild the whole system. Open interfaces protect against lock-in by ensuring no part of the system becomes a proprietary black box accessible only by one vendor.

Also consider **staged delivery within each module**. For larger components, structure contracts with phases or stage-gates, for example: **discovery, validation, pilot** then **general availability**, each with a decision point. If a vendor fails at the discovery stage, the contract might end there or not proceed to the next phase, limiting wasted spend. If it succeeds, you continue (possibly via a pre-agreed option or by opening a competition for the next phase). This is essentially applying agile principles to contracting at the module level. It provides flexibility to redirect course early if something isn't working, rather than discovering failure after sinking the entire budget.

05

**Ensure clear and
balanced roles and
responsibilities**





A continuous modernization model often involves more moving parts – multiple contracts, iterative changes, and various stakeholders. Without strong coordination and clarity on “who does what and what is whose accountability” it could become chaotic and mismanaged expectations. **Defining roles, responsibilities, accountability and communication channels up front** is essential to keep everyone aligned. It also defines who can effectively be accountable for what, and what contractual engagement models make sense.

Key roles include:

01. End-users and stakeholders

Modern procurement approaches actively involve the end-users throughout the process. These are the government employees or citizens who will ultimately use the system or service. Ensure the project includes user representatives or subject-matter experts in all stages, not just at initial requirements or final user testing. This might involve having a small **user testing contract** or requiring each vendor to include user research and user-feedback cycles in their work. For example, the portal development vendor must test the interface with actual users (taxpayers, clinicians, students, etc., depending on the system) and use that feedback to improve the product. By giving end-users a voice at every iteration, the delivered solutions are far more likely to meet real needs, gain acceptance and build trust.

02. Government (owner)

The contracting authority – the government department or agency – must retain strong ownership of the vision, priorities, and standards. The government team sets the objectives and success metrics, establishes technical standards (security, interoperability, data governance, etc.), and makes key architectural decisions. Building an **“intelligent customer”** capability is critical, meaning the agency ensures it has (or can hire) people who understand technology well enough to define needs, evaluate proposals, manage vendors, and integrate inputs from multiple sources. Leading governments invest in training civil servants in software project management and bring in subject-matter experts to support procurement teams. In essence, even if development work is outsourced, the strategy and oversight must remain in-house.

03. Program manager / integrator

This can be an internal program management office or an external vendor on an integration contract. Their job is to coordinate multiple suppliers and keep the overall program on track. If the integrator is external, ideally, they should be incentivized on the **overall program success** (e.g., a bonus for meeting the overall system go-live date or performance goals), not just their piece of work, to encourage a collaborative approach. Some governments use a "lead vendor" model where one firm subcontracts others, but a better approach in continuous modernization is often for the government to hold separate contracts and itself play the orchestrator role (with or without an external integrator facilitating). Regular joint planning sessions, shared project tools, and even co-location of teams (if feasible) can foster better collaboration among vendors.

04. Module contractors (vendors)

Each vendor contracted for a specific module or service is accountable for provision of service or delivering their component according to specifications, on schedule, and for working cooperatively with other module teams. Contracts should include explicit **collaboration requirements** – for example, mandates to attend joint design reviews and planning meetings, to use shared code repositories or testing environments, and to cooperate on integration testing and issue resolution. In RFPs, you can even ask bidders to describe their experience working in multi-vendor environments to screen for those with the right mindset. A module vendor will focus on its deliverables, but it must also adhere to the overarching architecture and standards of the program and be willing to adjust interfaces or timelines in coordination with others.

The specific vendor **engagement model defines the balance of accountability between parties involved**. If customer wishes to control every aspect of the project, then team extension with a Cost-Plus or T&M contract is likely the best engagement model. If customer wishes to cede risk and accountability (but also control) and free up own management time, then ordering a turnkey solution with a fixed-price contract or even outsourcing entire business service with a retainer or a PPP might be the best approach.

All in all, the government leads and governs, integrators coordinate, vendors build, and users inform and test. Based on customer's own capabilities and resources to manage the engagement and the risks involved a specific engagement model is agreed. Establish clear **governance structures** such as steering committees that include representatives from all parties, regular cross-vendor meetings, and transparent issue resolution processes to keep everyone aligned and accountable.

06

**Match contract types for
aligned incentives and
balanced risks**



Different tasks require different types of contracts. In a continuous modernization program, you will likely use a mix of contract mechanisms depending on the nature of work. Each contract model comes with upsides and downsides – the key is to choose the one that best aligns vendor incentives with the outcomes you seek for that particular task. The table below provides an overview of common contract types and their typical strengths and risks:

Contract type	Typical use case	Upsides (strengths)	Downsides (risks)
Cost-reimbursement (Cost-Plus)	R&D projects or initiatives with highly uncertain scope. The government pays all actual costs, plus an agreed fee (profit) to the vendor.	Maximum flexibility for exploratory work – the vendor’s costs are covered, so they can adapt as requirements change without fear of losing money. Encourages thorough research and innovation when objectives are clear but exact specifications are not.	Weak cost discipline – little incentive for the vendor to control costs or timelines (the more they spend, the more profit they earn). Can lead to overspending or “gold-plating” if not tightly managed. Best limited to research/prototyping phases and paired with controls (e.g., award fees for meeting targets or cost caps).
Time & materials (T&M)	Agile development, staff augmentation, or any project with evolving scope. The vendor is paid for actual hours worked (often at fixed hourly/ daily rates) and materials used, sometimes with a not-to-exceed cap.	High flexibility and transparency – you pay only for the work completed and can adjust scope as needs evolve. Good for iterative development where requirements can’t be fully specified upfront; allows mid-course corrections based on feedback. Also provides visibility into the effort (hours, resources) being spent.	Risk of scope creep or open-ended costs – the vendor has no built-in incentive to be efficient with time (more hours = more revenue). Without strong oversight, T&M projects can drift or run longer and cost more than anticipated. To avoid a “never-ending” engagement, the government must enforce clear deliverables or time limits, set caps or phased budgets, and monitor progress closely.
Fixed price (Lump Sum)	Well-defined projects or purchases with stable requirements. The vendor delivers a specified product or service for a fixed total price.	Price certainty and efficiency – the total cost is agreed upfront, which aids budgeting. The vendor is motivated to be efficient and finish on time (to protect their profit margin). Ideal for projects with a clear, unchanging scope (e.g., implementing a standard software package or rolling out hardware); the government isn’t on the hook for overruns.	Rigidity – if requirements change or were initially misunderstood, change orders will be needed and can be costly and slow. Vendors might deliberately underbid (“low-ball”) and then rely on change orders later, or conversely, cut corners to stay within the fixed price. Not suitable for highly complex or evolving projects, since it locks in scope and requirements early; adjusting mid-stream can be painful.

Contract type	Typical use case	Upsides (strengths)	Downsides (risks)
Managed service (Retainer)	Ongoing services (operations, maintenance, support) delivered for a fixed recurring fee (monthly or annually) under defined Service Level Agreements (SLAs).	Predictable service and costs – ensures a consistent service level per the SLAs and predictable budgeting. The vendor handles day-to-day operations, allowing agency staff to focus on core priorities. Ideal for steady-state needs like helpdesk support, data center operations, or cloud infrastructure management.	Potential complacency and lock-in – the vendor receives payment regardless of actual effort each period, which may reduce their incentive to improve or innovate over time. If SLAs aren't stringent, the government could overpay for subpar performance. Long contracts can create dependency on a single provider, so it's wise to include benchmarking reviews, periodic performance audits, and exit options to maintain leverage.
Public-private partnership (PPP)	Very large, long-term initiatives (often 10–20+ years) where a private consortium finances, builds, and operates a system or service for government. Common for major infrastructure or nationwide technology projects.	Risk-sharing and access to capital – leverages private investment and expertise for public projects. The private partner has a vested interest in success and efficiency (they recoup their investment via performance payments or user fees over time). Can accelerate delivery and innovation by tapping into private-sector capabilities, while spreading public costs over a longer period.	High complexity and potential misalignment – decades-long contracts risk technology obsolescence if regular upgrades aren't required. The government can lose direct control over critical tech or data (raising sovereignty concerns). If public needs change or projections are off, adjusting a PPP can be difficult without penalties. Strong safeguards are needed: e.g., include tech-refresh clauses (mandatory updates every few years), require open standards and data ownership for the government, and retain rights to step in or re-tender parts of the service if needed. PPPs should be used selectively and structured to allow flexibility for continuous modernization throughout their lifecycle.

Table 4: Comparison of different contract models.



Note: No single contract type is inherently “best” – each can succeed or fail depending on context and execution. Modern procurement programs often **mix models** within a broader initiative to balance these pros and cons. NASA’s Commercial Crew Program is an illustrative example: legacy contractors on cost-plus contracts routinely ran over budget, whereas SpaceX’s fixed-price, milestone-based contract drove efficiency and innovation. The lesson is to **align contract incentives with desired outcomes** – contractors perform best when their profit motive aligns with the public interest (for instance, when they earn more by delivering under budget or meeting performance targets, rather than by simply booking more billable days).

Another common challenge is **vendor lock-in**. If one vendor develops and maintains a system for years, they gain an entrenched position. Proprietary technology or exclusive knowledge can make it very hard for the agency to switch vendors later, leading to higher costs and reduced competition. Overly strict or burdensome procurement processes can unintentionally reinforce this, as only large incumbents bother to bid – resulting in many tenders with a single bidder. To counter these effects, design your procurement strategy to **keep competition and flexibility alive over time**: emphasize open standards, modular designs, and periodic re-tendering of work to prevent any one firm from monopolizing the system. By breaking projects into smaller pieces (as discussed earlier), if one vendor underperforms, others can take over parts – avoiding total dependency on any single contractor. Likewise, simplifying bid procedures and lowering entry barriers (e.g., reducing overly onerous requirements) encourages more firms to bid, which prevents incumbent dominance.

In summary, it’s important to be aware of the trade-offs associated with each engagement model and avoid a

one-size-fits-all approach to contracting. By **selecting the appropriate contract type for each component** of a project – and by structuring incentives and safeguards effectively – governments can significantly improve outcomes and mitigate the risks of cost overruns or vendor lock-in.



07

Use framework
agreements for
flexibility and to foster
competition





To streamline the execution of multiple procurements (since a modular approach means you'll have several modules and continuous needs), **framework agreements** are invaluable. A framework contract pre-selects a meaningful pool of qualified vendors for certain categories of work (for example, a panel of software development firms, a roster of cybersecurity service providers, etc.) under agreed general terms and pricing arrangements.

Once the framework is in place, whenever you need to procure a specific module or new feature, you can run a **mini competition** among those pre-qualified vendors (or even make a direct award if rules allow for small tasks). This drastically cuts down procurement lead time – projects can kick off in weeks instead of many months. For example, Estonia's government set up a four-year IT services framework with about 10 companies; when a ministry needs a new digital service, it issues a short Statement of Work to those companies, gets quick bids, and can start the project within a month. The UK's Digital Marketplace frameworks operate similarly to rapidly engage agile development teams.

The framework approach balances speed with competition: you don't sacrifice competitive bidding; you simply do it in a faster, simplified way among known, vetted vendors, who over time develop deeper expertise in the domain. It's especially useful for continuous delivery environments, where you may have dozens of small projects rolling out over time. It's wise to **periodically refresh or reopen** the framework (say every 2-3 years) for recompetition – this incentivizes performance from existing vendors and new. Also consider creating an **"innovation sandbox" framework** – a lightweight agreement specifically designed to engage startups or unorthodox suppliers for experimental projects with minimal bureaucracy. For instance, have a standing mechanism to issue small pilot contracts (with simplified terms and conditions) for 3-6-month proofs-of-concept. This way, when

an urgent need or creative idea emerges, you have a vehicle to test it quickly without launching a full open tender from scratch.



08

Prioritize long-term value
over
short-term cost





Choosing the right vendors in a multi-contract, continuous modernization program is crucial. The bid evaluation process should be designed to pick partners who offer the best **long-term value and adaptability**, not just the lowest initial price.

Key elements of a modern evaluation approach include:

01. Use “Most Economically Advantageous Tender (MEAT)” evaluation

Define a set of weighted criteria covering technical quality, proposed approach, experience, and price. For each tender, ask “What factors will make this project successful?” and weight those factors accordingly. For example, for a user-centric web portal project you might weigh **UX design capability, security & scalability, team qualifications, and past performance** at a total of 70%, with price at 30%. Publish these weights and the scoring method in the RFP to encourage bidders to propose better solutions – not just cheaper ones. Often the winning bid for a complex project is not the lowest-priced, but the one with the best overall value. A multi-criteria approach ensures you can justify choosing a higher-quality bid when it delivers superior outcomes.

02. Consider life-cycle cost and avoid lock-in

Incorporate life-cycle considerations into your criteria – e.g., the cost of future operations, maintenance, and eventual exit or transition. A bid that is cheap to build but will charge high license fees for 10 years might end up more expensive overall. You can include a **total cost of ownership (TCO)** estimate in your evaluation scoring or assign points for lower expected 5-year costs. Similarly, account for solution openness: if vendor A proposes an open-source or open-standards solution and vendor B a proprietary one that could lock the agency in, you might favor A’s approach for strategic reasons. Tie such preferences to your stated goals (for instance, if digital sovereignty is a goal, include criteria like “openness of a solution” or “minimizes vendor lock-in”). This way, long-term considerations are formally factored into award decisions.

03. Focus on quality of team and methodology

Especially for agile or complex projects, the vendor's proposed **team and execution approach** may matter as much as the technology solution itself. Evaluate key personnel résumés and qualifications, ask for examples of similar work, or even conduct bidder presentations and interviews to gauge their understanding and mindset. Some procurements include scenario-based questions (e.g., "How would you handle a hypothetical change request or a security incident?") to see the team's problem-solving approach. The principle is to contract not just for a product, but for a capable team with the right approach. This ties to the idea of "buying capabilities, not bodies" – prefer vendors that demonstrate a cohesive, skilled team and a robust delivery method, over those who simply offer the lowest billing rates with an unproven team.

04. Examine past performance and references

Where regulations allow, include criteria for past performance. Request case studies or references for similar projects. A bidder that has successfully delivered comparable projects on time and on budget should score higher than one with a history of delays or failures, even if their new proposal looks good on paper. This helps guard against selecting a vendor who "promises the moon" but has a track record of falling short. Many governments are implementing formal vendor performance tracking systems to support such criteria.

05. Advance broader policy goals (when relevant)

You can include evaluation points for contributions to innovation or social value, as appropriate. For instance, you might give weight to proposals that subcontract a certain percentage of work to SMEs or minority-owned businesses, or that have strong environmental sustainability measures, if those align with your procurement's objectives. (The UK often includes a ~10% "social value" score in major procurements, for example.) Use these carefully – they should support the project's success and policy objectives without overshadowing the core delivery factors.

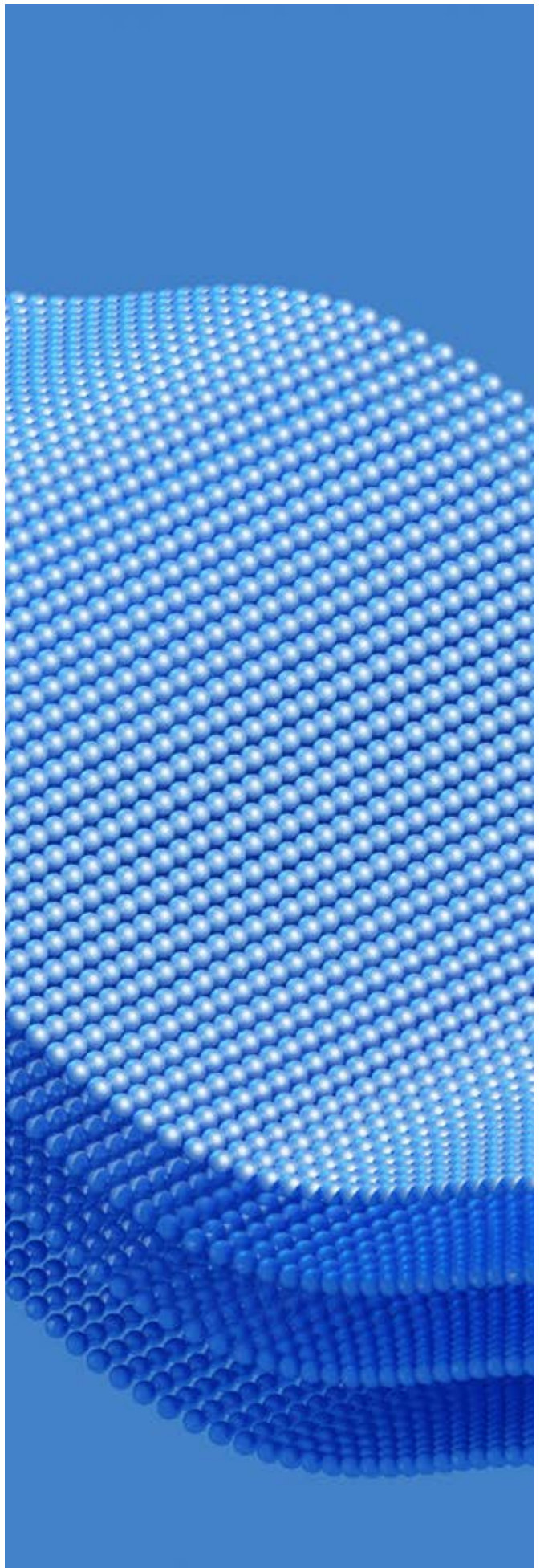


A transparent and well-structured evaluation process is not just about fairness – **it also improves outcomes**. When bidders know exactly what matters to you, they will tailor their proposals accordingly. If you highlight that quality, innovation, and long-term value together count for 70% of the score, vendors will invest more effort in those aspects instead of racing to cut costs. This flips the dynamic from a race to the bottom on price to a competition for the best solution. It's also critical to document evaluation decisions and debrief both winning and losing bidders on their scores; this builds trust in the process and helps the market improve for next time.

Finally, once a contract is awarded, **hold the vendor to the promises they made** in their proposal. If a bidder wins by showcasing an “A-team” of experts or a brilliant technical approach, ensure those details are written into the contract. Include key personnel commitments (so the vendor can't swap out the star team for juniors without approval) and detailed statements of work or deliverables that reflect what they proposed. Set performance metrics or acceptance criteria tied to those promised outcomes. This ensures accountability – the vendor cannot win with a great pitch and then deliver something subpar. By tying contract obligations directly to the proposal commitments, you close the loop: the focus on quality in evaluation carries through to execution.

Overall, **smart evaluation in a continuous modernization context means selecting partners, not just suppliers**. You want vendors who will work collaboratively with you through inevitable changes, bring new ideas to the table, and commit to success beyond mere contractual obligations. These are the partners who will help government services keep evolving and improving long after the initial contract is signed.





Case study: modernizing national tax administration

To illustrate the power of modular, outcome-driven procurement, this section presents a case study of a national tax authority's digital transformation using continuous modernization approach.

This case study is a simplification of Estonian Tax and Customs Board's journey in modernizing legacy-heavy systems by using continuous modernization approach and achieving global renown for its tax collection efficiency and public trust gained through digital-first service strategy and continuous modernization IT delivery and procurement strategy.

The case study was chosen because tax administrations typically have decades of legacy and improvement is difficult because tax collection must continue uninterrupted, especially in nations where tax collections forms most of the government income and fiscal policy changes occur regularly. It demonstrates how breaking a large IT overhaul into manageable, outcome-focused modules enabled rapid improvements, reduced risk, and engaged multiple vendors and users in delivering value early and often.



Estonian Tax and Customs Board's digital transformation started in early 2000s and achieved "fully digital" operations around 2005. Since then, Estonian Tax and Customs Board has been operating in digital-first mode, with focus on improving operational efficiency and public trust by intelligent use of data, automation and improving service experience. With this approach we have been able to increase both public trust and collection efficiency to among the highest in peer group. The challenges faced in this is to assure the IT infrastructure and systems are constantly up to date and we have trusted partners with whom to achieve our strategic goals. We prefer smaller contracts with faster outcomes, budgeted under multivendor larger frames. We maintain digital sovereignty over our IT ecosystem to be able to incorporate new technologies faster, and how we see fit, and reduce strategic risks. Our vast IT ecosystem is never ready – we are constantly modernizing individual pieces of this complex system while assuring taxpayers nor the government sees any disruption. This is necessary because the taxpayer expectations for service quality are constantly improving, and as the economy is constantly changing, so must we.

– Janek Rozov, Deputy Director General,
Estonian Tax and Customs Board



Background and strategy

A national tax authority embarked on a major IT overhaul to replace its decades-old tax administration system. A traditional “**big bang**” approach (one massive multi-year contract) was deemed too risky given past failures and the need to keep critical services running uninterrupted. Instead, leaders adopted a **continuous modernization** strategy – iteratively upgrading components in shorter cycles to deliver improvements faster and manage risk gradually. Key objectives for the agency were to increase voluntary tax compliance, improve collection efficiency, and boost public satisfaction **without disrupting annual tax filing seasons**. In short, the tax authority aimed to deliver value continuously rather than waiting years for a one-time implementation, all while avoiding service outages. Rather than one monolithic project, the program was broken into manageable pieces with clear business outcomes.

Modular program design

Instead of a single contract, the tax authority structured it into multiple **contracts**, each tailored to a specific domain and outcome. This modular design fostered competition and allowed the agency to choose the right procurement method for each module.

Four key sub-programs illustrate this approach:

01. New taxpayer self-service portal

The agency aimed to renew the taxpayer experience to modern citizen expectations and beyond by launching a new one-stop online portal for taxpayers to file and manage taxes. Using an IT services framework agreement, they ran **competitions among pre-qualified vendors** to encourage an agile **approach**. Instead of prescribing a detailed technical stack, the RFP emphasized desired outcomes and user experience metrics (e.g., ability to handle high user volumes, mobile accessibility, top-tier security). A mid-sized local software firm won with a strong agile proposal. The contract was phased: an initial **Alpha prototype** built in a few months on a time-and-materials basis (capped budget), followed by a **Beta full deployment** on a fixed-price basis upon successful prototype validation. This phased delivery let the government **test with real users** early and only commit to full rollout once the solution proved itself. Within four months, the team delivered a prototype that achieved ~90% user satisfaction, giving confidence to proceed to a nationwide launch within year 1. This early win demonstrated the value of agile methods and quick user feedback in public services.

02. Integrated tax administration system

Replacing the core back-end that handles tax calculations, return processing, refunds, etc., was a complex undertaking. The authority used a **collaborative competitive dialogue** procurement, engaging

multiple major vendors in structured discussions to refine requirements and explore solutions. Through dialogue, the agency decided on a **modular bespoke build**: different teams would develop different functional modules of the core system, integrated into a cohesive whole using common standards. For some internal business systems, a low-code platform was chosen to speed up delivery. The contract avoided a single lump-sum payment; instead, it was divided into **incremental deliverables with milestone payments tied to each module's completion**. Payments were made only upon successful delivery of each module and meeting defined acceptance criteria. To further align incentives with outcomes, a portion of each payment was **withheld until the module proved itself in a live tax-filing cycle** – ensuring the new core components worked under real-world conditions before the vendor was fully paid. The contract also required continuous **knowledge transfer** to government IT staff throughout the project. This meant internal teams learned alongside vendors, enabling the government to maintain and improve the system long-term and avoiding dependency on any one supplier. In essence, this module's procurement was structured to reward real results (working software in production) and build internal capacity for future agility.

03. Data analytics and fraud detection (innovation challenge)

To modernize tax fraud detection and analytics, the agency wasn't sure which technology approach (AI algorithms, rule-based engines, network analysis, etc.) would work best. Rather than guessing up front, they ran an **open innovation contest** – a paid multi-vendor competition for the best prototype. They issued modest short-term contracts to three different teams (e.g., a tech startup, a university lab, large vendor) to develop working prototypes using anonymized historical tax data. After a brief development period (~3 months), each prototype was evaluated on how well it identified fraudulent filings and assisted auditors. **The top-performing solution** was then awarded a larger implementation contract to deploy the tool nationwide. (The runners-up were paid for their participation but did not advance.)

This approach meant the government only made a major investment once a solution had proven effective in practice, **tying procurement to actual outcomes**. It also drew in non-traditional innovators who might have been overlooked in a normal RFP. The result by year 2 was a cutting-edge AI-based fraud detection system that significantly improved compliance and essentially **paid for itself through recovered revenue**. This demonstrated how challenge-based procurements can spur creative solutions and reduce the risk of investing in unproven tech.



04. Legacy integration and phase-out (managed transition)

Because tax collection could not pause during the overhaul, the legacy system had to run in parallel until fully replaced. The agency devised a managed transition to **gradually retire the old system** while ensuring new and old systems worked together. Rather than signing a long (and expensive) extension with the incumbent legacy vendor – which would increase lock-in – they negotiated a **short “bridge” contract (one year)** with that vendor, strictly to keep the old system stable during the transition. To avoid sole reliance on the incumbent, a second small support firm was contracted to **shadow the legacy system**, documenting its operations and standing ready to assist. The bridge contract included explicit cooperation requirements: the incumbent had to assist with data extraction and interfaces to the new modules, and incentives (bonus payments) were offered for timely knowledge transfer and migration support. These measures kept the incumbent vendor cooperative – preventing the common pitfall of a replaced vendor dragging its feet or “holding data hostage.” In sum, the legacy module’s procurement ensured continuity of service while **mitigating vendor lock-in risk** during cutover. By the end of the transition, the government had full control of data and systems, without having been trapped under a long legacy support contract.



Across all these modules, the tax authority maintained a consistent **enterprise architecture vision**. An internal architecture team set common standards for interoperability and security. This allowed multiple vendor teams to work in parallel on different pieces while still plugging into a unified system architecture. In practice, modular design plus architecture governance meant the agency could integrate innovations from different sources smoothly.

Governance and outcomes

Strong **program governance** and user involvement were crucial to the success of this multi-vendor, modular approach. The tax authority provided executive oversight, and a dedicated program manager coordinated the moving pieces across all vendor teams. **Biweekly joint coordination meetings** were held with all contractors' present (portal, core system, analytics, legacy) to openly discuss progress and resolve interdependencies. For example, if the portal team needed a new API from the core system team, this was identified and addressed in a joint session rather than through siloed communication. An external integration consultant assisted as a **program integrator**, mediating technical decisions across teams and ensuring each module aligned with the overall architecture standards. This collaborative governance structure fostered transparency and quick issue resolution, which was vital for keeping parallel workstreams on track.

Equally important was continuous **user engagement** throughout the project. End-users, including tax authority officers who would use the back-end systems and ordinary taxpayers using the portal, were involved at every stage. The development teams held regular demos and feedback sessions: for the portal, working software was shown at the end of each sprint to a focus group of taxpayers for usability testing; for the core system, tax officials participated in quarterly workshops to validate that new business rules and workflows met their needs. This iterative user feedback loop ensured the new systems were **user-friendly and met real operational requirements**, not just theoretical specs. It also helped build buy-in among those who would ultimately use the systems, smoothing adoption. From a CIO/CTO perspective, this user-centric approach reduced the risk

of delivering a system that fails to address actual needs, and for procurement officers it highlighted the value of incorporating user testing milestones into contracts.

The Finance Ministry's central IT governance and procurement unit provided an extra layer of oversight across the entire program. They monitored compliance with procurement rules, kept each contract within scope and budget, and tracked vendor performance metrics across modules. This allowed early detection of any vendor underperformance so that corrective action could be taken (or contract terms enforced) promptly. Notably, this oversight was done **without stifling the flexibility** of the modular approach – procurement officials acted as enablers and watchdogs, ensuring accountability while the project teams maintained agility.



Key outcomes and benefits

Within one year of kickoff, the tax authority delivered tangible results. A new self-service portal went live, connected on the back end to the first module of the new core processing engine. Other tax types were still temporarily handled by the old system, allowing a **gradual cutover** instead of a risky big switch. This incremental go-live dramatically lowered risk: if any issue arose in the new system, it would only affect a subset of users, not the entire taxpayer population. In that first tax season, the results were very positive – taxpayers experienced faster filing and fewer errors for returns handled by the new system, driving high user satisfaction and public confidence.

Over the following year, additional core modules were rolled out one by one, steadily replacing legacy functions domain by domain. Thanks to this continuous rollout, the agency delivered visible improvements **in year 1** (a better user portal and quicker processing for many filers) rather than making citizens wait five or more years for an all-or-nothing overhaul. By year 2, the analytics innovation challenge produced a sophisticated AI-based fraud detection tool that caught numerous improper refunds – effectively **paying for itself through increased compliance and recovered revenue**.

Different vendors handling the portal, core engine, analytics, and legacy support meant no single contractor “owned” the whole system or its data. This prevented vendor lock-in and kept companies competing throughout the program. If one vendor underperformed or demanded an unreasonable price for a future phase, the agency could bring in alternative providers for subsequent modules – a credible **threat of competition** that kept all vendors motivated to perform

well. All critical interfaces and data remained under government control, ensuring the **freedom to switch providers or re-compete work as needed**.

This case demonstrates that a modular, outcomes-driven procurement approach can successfully drive continuous modernization in a high-stakes public system. For procurement officers, the tax authority’s experience highlights how breaking large projects into smaller outcome-based contracts, with phased delivery and performance-tied payments, can reduce risk and deliver value faster.

For government CIOs and CTOs, it shows the importance of strong program governance and user involvement to align technology with business needs.

By engaging a competitive ecosystem of vendors, incentivizing them to constantly do their best work and focusing on tangible results, the agency modernized its critical tax systems faster and with lower risk than traditional methods. The outcome was better services delivered sooner to citizens, greater long-term value for public funds, and a more innovative, diversified supplier base – a true win-win for the government and the public it serves.



Conclusion – questions to consider before procurement

Continuous modernization in government is as much about procurement innovation as it is about technology innovation.

An outcome-focused procurement model that is modular and flexible allows governments to keep pace with change – launching new digital services faster, updating systems without big bang outages, and integrating emerging technologies as they appear. For the public, this means better services sooner. For the government, it means getting more value from vendors and taxpayer funds, while also cultivating a more competitive and dynamic domestic tech sector. With clear goals, the right contract strategies, and strong governance, public procurement is a powerful instrument for continuous modernization and innovation.

Procurement is also increasingly viewed as key value driver that must be aligned with the broader organizational mission and goals. This evolution means procurement plays a pivotal role in ensuring that new contracts, strategies, and systems not only save money, but also deliver measurable results and advance organizational objectives. To put these principles into practice, we must ask ourselves several key questions when evaluating proposals, strategies, or systems:



01. Have we clearly defined the desired outcomes and how success will be measured?

Every initiative should start with specific outcome goals and metrics for success, rather than just outputs. Defining **what** impact or value a proposal must achieve (and **how** that will be measured) ensures all stakeholders share the same expectations from the outset.

02. Does the proposal align with our organization's broader goals and strategy?

Any procurement decision should support the overall strategic objectives of the organization. This means evaluating whether the proposed solution or service contributes to our mission and values, and ensuring it addresses the priorities that matter most to our stakeholders.

03. Are we incentivizing the vendor based on outcomes rather than just activities or outputs?

The contract's payment and reward structure should be tied to meaningful results. In outcome-based contracts, service providers are directly paid for achieving specified outcomes (e.g. actual performance improvements), not merely for delivering tasks. Aligning incentives with outcomes helps motivate vendors to innovate and deliver real value, as opposed to simply checking boxes.

04. Has the vendor demonstrated evidence of effectiveness or provided proof-of-concept for their approach?

Rather than taking claims at face value, look for concrete evidence. Increasingly, agencies ask vendors to "show me, not just tell me", for example through pilot projects or data from past performance. A proposal backed by strong evidence, case studies, or successful pilot results can give confidence that the solution will work as promised.

05. Does the plan allow for flexibility and innovation during implementation?

Overly rigid plans can hinder success in a changing environment. Assess whether the proposal includes flexibility to adapt to new technologies or shifting requirements over time. Contracts that focus on outcomes (rather than prescribing every process) allow providers to be more flexible and innovative in how they meet our needs. This adaptability is crucial for long-term projects where conditions may change.

06. Are risks and responsibilities appropriately allocated?

Effective proposals clearly define who is accountable for various risks and outcomes. Ideally, risks should be borne by the party best able to manage them. For instance, if a vendor has more control over delivering a result, the contract can assign them both the responsibility and corresponding risk (with suitable incentives) for achieving that outcome. Ask if the contract fairly shares risks and rewards, so that vendors are accountable for results but not over-penalized for factors outside their control.

07. Does the evaluation consider value and effectiveness in addition to cost?

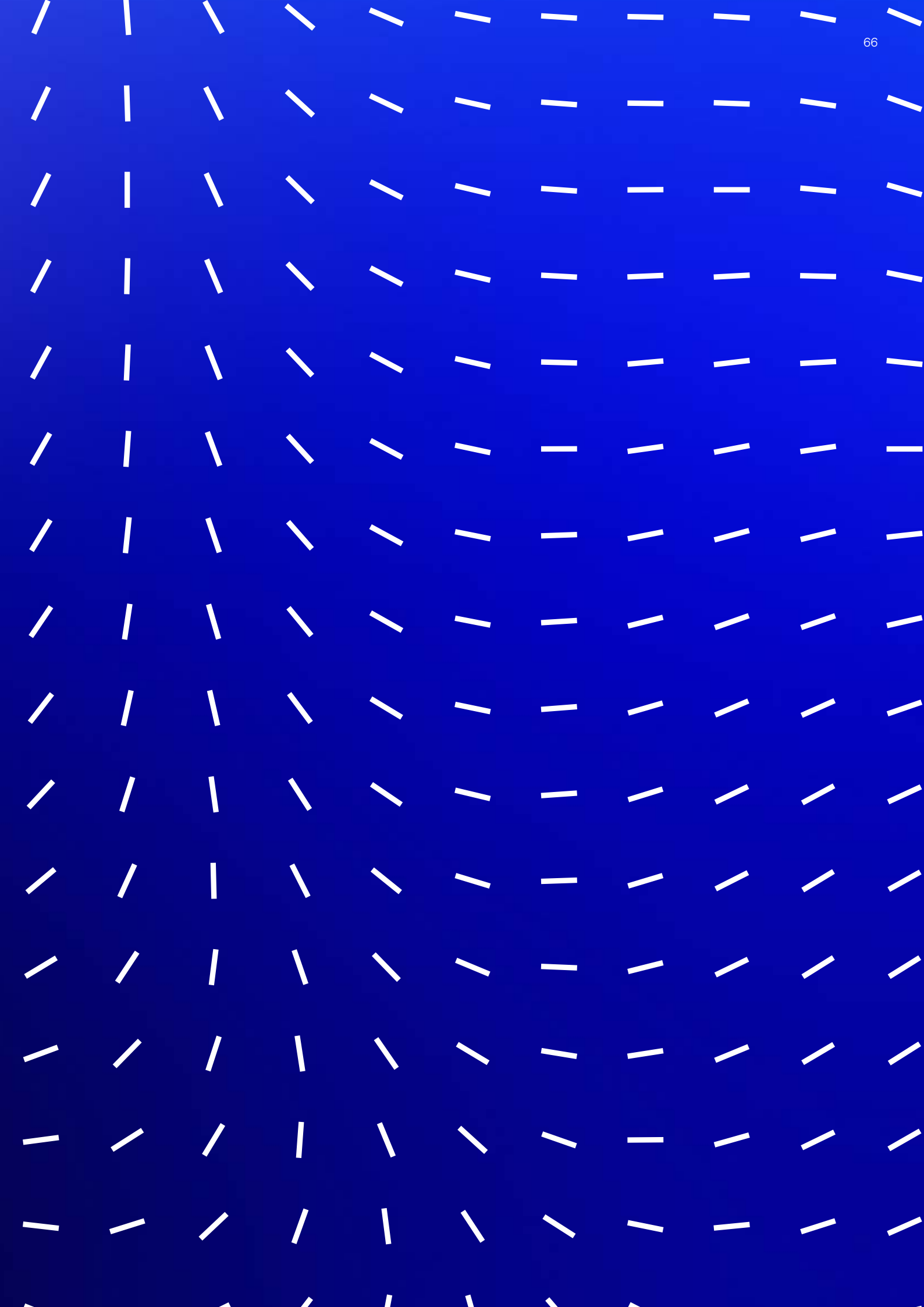
While price is important, procurement decisions shouldn't be made on cost alone. It should always be examined whether the proposal delivers strong value for money in terms of quality, impact, and long-term benefits. This means considering the vendor's past performance, service quality, and evidence of effectiveness – not just the bid price. A slightly higher upfront cost may be justified if the solution is likely to produce significantly better outcomes or savings down the line.

08. Do we have the necessary resources and capabilities to implement and manage this initiative successfully?

Even a great proposal can falter without proper support. Leaders should evaluate whether the team has the capacity, expertise, technology tools, and budget to execute the plan and oversee the contract. This includes ensuring there are skilled staff to manage vendor relationships and data systems to track performance. If gaps exist, training, support, or process or vendor engagement model changes must be planned so the initiative can thrive.



By rigorously considering questions like these, we can strengthen decision-making and better ensure that chosen solutions will deliver the intended outcomes and long-term value. Such an approach helps translate high-level procurement strategies into on-the-ground results, ultimately driving more mission-focused outcomes and greater value for the organization, and the taxpayers.





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