Chapter highlights

- **Purpose**: This chapter provides guidance on how the acquisition of information technology (IT) goods and services is different than the procurement of non-IT commodities and also provides guidance on the IT procurement process.

- **Key points:**
  o IT sourcing is constantly changing and requires the application of specialized best practices.
  o Technology risks must be analyzed and mitigated during solicitation development and prior to contract execution.
  o Applying strategies and principles to technology procurement, positions the Commonwealth to maximize the benefits it receives from technology and reduces the risk of supplier and technology failures.

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2.0 Introduction

This chapter focuses on how the process of technology acquisition is different from other types of commodity and services sourcing. It also explains why IT procurements require special diligence and the application of specialized best practices to obtain best-value IT solutions for the Commonwealth. IT procurement differs in complexity and analysis from commodity-driven procurements because technology is constantly changing due to new service offerings like cloud computing, constant technical improvements, software changes like open source software and security enhancements Unlike general commodities, IT goods and services may have very complex interdependencies, continuity requirements or serious risk considerations that support the operational backbone of the Commonwealth's public safety and citizen services.

Additionally, the Code of Virginia has evolving procurement requirements, based on annual legislative changes. These changes involve the Commonwealth's IT strategic planning and reporting, which ensures that technology projects are planned in accordance with the Commonwealth's overall IT strategy. The CIO of Virginia is required to develop policies, standards and guidelines that require that any contract for information technology entered into by the Commonwealth's executive, legislative, and judicial branches and independent agencies be made in accordance with federal laws and regulations pertaining to information security and privacy, as defined by §2.2-2009 of the Code of Virginia. In addition, in accordance with House Bill 1221, all agencies are required to have cybersecurity policies that meet or exceed the Commonwealth's cybersecurity policy. The CIO is required to conduct an annual comprehensive review of cybersecurity policies of every executive branch agency, with a particular focus on breaches in information technology that occurred in the

reviewable year and any steps taken by agencies to strengthen cybersecurity measures in accordance with §2.2-2009.

Refer to Chapter 1 for discussion on IT procurement delegation and authority and unique processes and procedures that agencies are required to comply with.

VITA is committed to using technology procurement processes supported by the Virginia Public Procurement Act and industry best practices. These IT procurement business processes will enable VITA and the Commonwealth to achieve an IT sourcing environment which:

- leverages Virginia's ample IT buying power which enables the procurement of innovative IT tools and solutions at competitive prices and terms
- promotes the increased use and usefulness of statewide technology contracts
- provides fast and flexible sourcing processes
- drives positive business relationships between the Commonwealth and its IT suppliers
- promotes an evaluation process for IT goods and services which is value-oriented, not price-oriented
- encourages sourcing processes which are business-driven and enterprise-oriented
- results in fair, standardized contract vehicles which are performance-based and can easily define the scope of the IT purchase
- improves the ability of suppliers to do business with the Commonwealth
- promotes a consistent IT procurement approach across the Commonwealth

2.1 The Commonwealth's dependence upon technology grows and evolves
The Commonwealth is increasingly dependent on data, systems and communications that deliver information and services to its citizens and stakeholders, including systems that integrate and share data with other federal, state and local agencies.

Our dependence on technology necessitates that procurement professionals use efficient and repeatable procurement and project-related processes that comply with the VPPA; industry best practices; Commonwealth security, data privacy, project management and other technical standards; and that prompt careful analysis and mitigation of technology risks are carefully considered while staying within the Commonwealth's budget and strategic technology plan.

The increase in value of IT means a corresponding increase in risk to the Commonwealth and the services it provides to its citizens. Commonwealth IT procurement professionals must assess these risks and adapt agency IT strategies and outcomes to match business objectives. IT procurement professionals are experiencing fundamental changes in their roles and responsibilities—transitioning from commodity buyers to negotiators and from transactional order placers to strategic IT solution managers.

VITA's technology procurement process encompasses much more than sourcing and buying IT goods and services. It includes planning; developing requirements; compliance with Commonwealth and federal, technology standards or regulations, assessing risk factors; preparing the solicitation, evaluation, award and contract documents; approval, formal acceptance and receipt of deliverables; payment; inventory tracking and disposition and post-award supplier performance and compliance management. Regardless of whether the technology product or service required is procured by the agency under its delegated authority, purchased off a statewide contract or procured by VITA, the workflow is essentially the same. Here are some things that need to be considered when making any technology purchase:

- Identify the technology business needs and the technology products, services or solutions that will best fulfill those needs while determining life-cycle cost containment and aligning with the agency's IT strategic plan.
- Determine the business owner's technical, functional and performance requirements, and determine how these goals may be achieved through a structured procurement. This will require agency purchasing personnel or VITA personnel to meet with stakeholders to help identify needs, craft requirements and propose available technology solutions.
- Develop specifications that describe the characteristics of the technology product, service or solution being sought. Consideration should be given to product or system suitability and to overall cost effectiveness, in addition to acceptability and price. By their nature, specifications set limits and thereby eliminate or restrict Supplier's from proposing alternative solutions. Drafting technology specifications requires a balance between including sufficient detail to ensure appropriate responses from suppliers and encouraging, not discouraging, competition. The goal is to invite maximum reasonable competition while procuring the best value technology solution for the Commonwealth.
- Seek bids, proposals or price quotations from a number of potential suppliers, being careful to fulfill minimums established by the Virginia Public Procurement Act, set asides for small businesses and this manual.
- Evaluate bids or proposals to determine overall economy for the intended use and life cycle of the technology product, solution or services
- Develop a low-risk and legally sound and sufficient technology contract in accordance with Virginia Public Procurement Act and this manual to protect the Commonwealth and its assets and data.
- Receive/test the technology product, solution or service and verify that it meets the requirements of the contract and provides the intended technology solution before formal acceptance and payment.

2.2 Critical factors in IT procurement
The Commonwealth can maximize the value it receives from technology and reduce the risk of supplier and technology failures by using smart sourcing and contract strategies. Listed below are examples of IT sourcing and contract strategies to mitigate some potential IT procurement difficulties:

Challenge	Impact/risk	IT sourcing principles to employ	IT contract approaches to mitigate
Complexity of business functions, technology and legal issues make procurement long and difficult	major omissions from a business, technical or legal standpoint are anticipated and prevented	use a structured IT acquisition process that provides a framework to ensure all areas are part of the screening and selection process	draft a clear, easy-to-use contract that documents the business relationship, and includes only mandatory and specialized IT terms and conditions and the essence of the deal
Industry consolidation/ monopoly suppliers	key products lie with powerful suppliers	use solution-based solicitations that focus on business problems and solutions, not technical	adopt meaningful service level agreements (SLAs) and business performance commitments and measurements to monitor

Challenge	Impact/risk	IT sourcing principles to employ	IT contract approaches to mitigate
		specifications or requirements	solution continues to meet business need

assign incentives/remedies in the contract to incentivize Supplier performance |
| Products and solutions are intangibles | difficult to specify and evaluate products | collaborate in an evaluation process that incorporates all areas needed for successful IT solution: business, technical, legal and financial

include subject matter experts (SMEs) on evaluation team who will only evaluate their area(s) of expertise

provide contract template with solicitation, not prepared after selection

incorporate offeror response to contract template as part of the evaluation | use strong warranty language with significant business remedies

give significant attention to intellectual property rights and alternatives to ensure the right to use, access, transfer to other Commonwealth entities |
| Rapid and planned obsolescence | versions out of date

new entrants into market | conduct market research to evaluate market risk

evaluation based on value-to-cost ratio

include total life cycle costs in evaluation | tie contractual commitments to providing solution, not product

provide support of version and upgrades for appropriate period of time |
| Significant barriers to exit | customer is locked in to products or services | ensure that evaluation and contract negotiation are part of commitment to strong balanced | provide system data, back-up; ownership of work product or perpetual license to work product, including third party products needed to run systems/solutions |

Challenge	Impact/risk	IT sourcing principles to employ	IT contract approaches to mitigate
		decision-making process anticipate transitions/exit strategies	provide a strong transition/exit plan for agency
Complexity of IT products and services	difficult selecting the best from value solution due to complexity of needed IT good or service	collaborate in a team-based process to ensure all necessary requirements are appropriately evaluated address all project, security, data privacy and cost risk factors use data-driven evaluation processes to coalesce many different perspectives	base contract on solutions, not buying of specific product or version include protections against product splitters or bundling include risk mitigation project activities and contract language to align with risk potentialities
IT must support business function	evaluation criteria focused on business value and needs; not specification-driven process	use solution-based solicitations that focus on solving business problems and incentivizing Suppliers to offer solutions, not just meet technical specifications	include meaningful SLAs and performance commitments and measures to monitor solution continues to meet business need assign incentives/remedies in the contract
Solutions being procured are highly interdependent	no accountability for full solution the weakest component will drive your risk profile	take a full supply chain view of solutions evaluate suppliers and components on strength of solution, both independently and collectively	give prime contractor accountability for performance, but also allow Commonwealth to reach through to subcontractors to maintain services
Contracts must protect Commonwealth data and systems	compromise of sensitive Commonwealth data unauthorized disablement of	understand the data sensitivity of the procurement/project collaborate with your business	include protective contract terms to cover data privacy and security. require supplier to perform specific actions, to have special insurance coverages and to

Challenge	Impact/risk	IT sourcing principles to employ	IT contract approaches to mitigate
	Commonwealth data and citizen services	owner, project manager, information security officer and other SMEs	comply with Commonwealth data, architecture and security standards require supplier to undergo a security assessment of their cloud solution (SaaS application) prior to agency making an award VITA SCM has cloud terms available if the procurement is for Software as a Service Agency may inquire at: mailto:scminfo@vita.virginia.gov

A structured IT sourcing process provides a comprehensive framework to ensure agencies that:

- omissions from a business, technical or legal standpoint are anticipated and prevented
- the costs and resources for the IT sourcing process are appropriate and are efficiently deployed
- the business case in support of the IT procurement is reaffirmed prior to selecting a solution
- across the board executive buy-in to the new system or technology is measurable as a result of user group involvement throughout the IT sourcing process

Regardless of the nature of the anticipated IT procurement, its size, cost and complexity, the following core principles of IT sourcing apply:

- Use a structured solicitation process which incorporates multiple complex domains, e.g., legal, technical, business functionality, financial.
- Sourcing should be a data-driven business process, which incorporates and balances concerns across multiple domains.
- Contract formation and negotiation are part of the decision process. It is critical to include an appropriate contract in the solicitation. If the supplier is not committed to providing the Commonwealth with value through the negotiation process, the Supplier should be evaluated accordingly.
- Business needs must be supported in the solicitation requirements and any statement of work. Focus less on specification-driven solicitations for major systems/solutions and write solicitations that are structured for IT suppliers to offer innovative and cost effective solutions.
- The sourcing evaluation process should include a comprehensive cost analysis that includes the total cost of ownership and all cost components including maintenance and not just the price of software or hardware.
- Long-term issues such as obsolesce, technology replacement and compatibility must be part of the evaluation, negotiation and decision-making process.

- Negotiations must be conducted prior to the selection of a particular IT solution or supplier.
- Intangible rights, software ownership and other critical terms and conditions must be considered in evaluation and negotiation.
- Risk analysis and trade-offs must consider the security of Commonwealth systems/data and continuity of operations for the Commonwealth and the solution and/or supplier's potential impact on the Commonwealth's ability to protect Commonwealth assets and service its citizens without interruption.