

Final



North Carolina Procurement Transformation

Technology Workstream
Ariba Buyer Recommendation
December 15, 2010

Executive Summary

Objective:

- To evaluate and provide a recommendation on whether the State of North Carolina should keep and upgrade their current Ariba Buyer platform or replace it with another procurement solution.

Approach:

- During the evaluation process, the team:
 - ✓ Gathered inputs from previous assessments, recent audit reports, system documentation and architecture diagrams, usage statistics
 - ✓ Performed External Assessment (Accenture Technology Team)
 - ✓ Conducted Internal Assessment (Various State Representatives)
 - ✓ Conducted workshops to review challenges, opportunities and confirm requirements
 - ✓ Confirmed key criteria for evaluating potential solutions with State project leadership
 - ✓ Evaluated tier-1 solutions that could meet requirements and are proven at scale for an organization as large and complex as State of North Carolina
 - ✓ Documented other opportunities in addition to the base buying tool platform
 - ✓ Developed and presented the final recommendation

Executive Summary

Recommendation:

It's recommended that Ariba Buyer be retained and upgraded as the core eProcurement system for the State of North Carolina and affiliated entities.

Rationale:

- The current system is meeting the majority of the core procurement needs, with the exception of a few areas (e.g. catalog search) that can be addressed in the upgrade.
- It is cost prohibitive to do a full-scale replacement of the current platform with a different solution when there are little to no incremental benefits.
- This recommendation best leverages existing technology investment, including the interface to NCAS, NC OpenBook as well as interface to community colleges and LEA's
- There is currently no committed plan or funding to implement a core Financial Suite such as SAP or Oracle (e.g. doing a second phase of Beacon for SAP Financials).
- Upgrading the current system, as opposed to doing a full-scale replacement, allows the State to focus effort and resources on addressing more strategic areas such as reporting and contract management.



Executive Summary

Opportunities and Supporting Recommendations

Area	Opportunity	Recommendation
Catalog Management and Search	<ul style="list-style-type: none"> Reduce the number of products available (with fewer items, content management time can be more focused and search results more effective). Implement improvements to improve search effectiveness and user experience. Opportunity to better structure role, responsibilities and training regarding catalog content management. 	<ul style="list-style-type: none"> Refine or reduce number of available products through structured strategic sourcing initiatives. As part of “Implementation Planning” phase, complete evaluation of Ariba 9r1 (upgrade) catalog features and compare against 3rd party catalog search tools such as SciQuest (for potential implementation). Potentially decouple catalog search from eProcurement (like plug-in), and implement such that catalog can be used as a potential plug-in for universities or other entities.
Workflow Simplification	<ul style="list-style-type: none"> Simplify and standardize requisition workflow. Potentially reduce number of required approvers, esp. for items that have already been competitively contracted. 	<ul style="list-style-type: none"> As part of the Ariba upgrade, evaluate opportunities to simplify and standardize the workflow and implement fewer required approvers, esp. for contracted catalog items.
System Performance	<ul style="list-style-type: none"> Evaluate current reported issues in system performance and look for both short-term (and long-term as part of upgrade) opportunities to improve the user experience. 	<ul style="list-style-type: none"> As part of the upgrade, don’t convert historical transactions, reduce number of customizations, simplify workflow (see above) and establish performance response baselines.
Training	<ul style="list-style-type: none"> Implement new training tools to improve availability and use by end users. Incorporate processes and policy information into training curriculum for users . 	<ul style="list-style-type: none"> Develop role or activity based training, accessible via the web to users as needed. Increase training for professional purchasing staff to maximize compliance and use of system.
Reporting & Analytics	<ul style="list-style-type: none"> Improve the accessibility and ease of use for various users to analyze and report on spend and payment data. 	<ul style="list-style-type: none"> Opportunities for improvement will be addressed as part of the Reporting Technology Assessment in January.
Contract Management	<ul style="list-style-type: none"> Better manage contracts and improve use and compliance by implementing a tool to track contracts, expirations, approaching limits and track use. 	<ul style="list-style-type: none"> This is currently not in scope for the Technology Assessment, but recommend addressing it in a later (near-term) phase.

Buying Tool Evaluation Approach

Technical Assessment Results

Solution Evaluation Results

Recommendation

Technology Workstream Overview

Objectives:

- Assess current E-Procurement system, solicitation systems, vendor registries and public reporting systems.
- Identify opportunities to enhance/replace current procurement tools and provide recommendations on technology roadmap.

Scope:

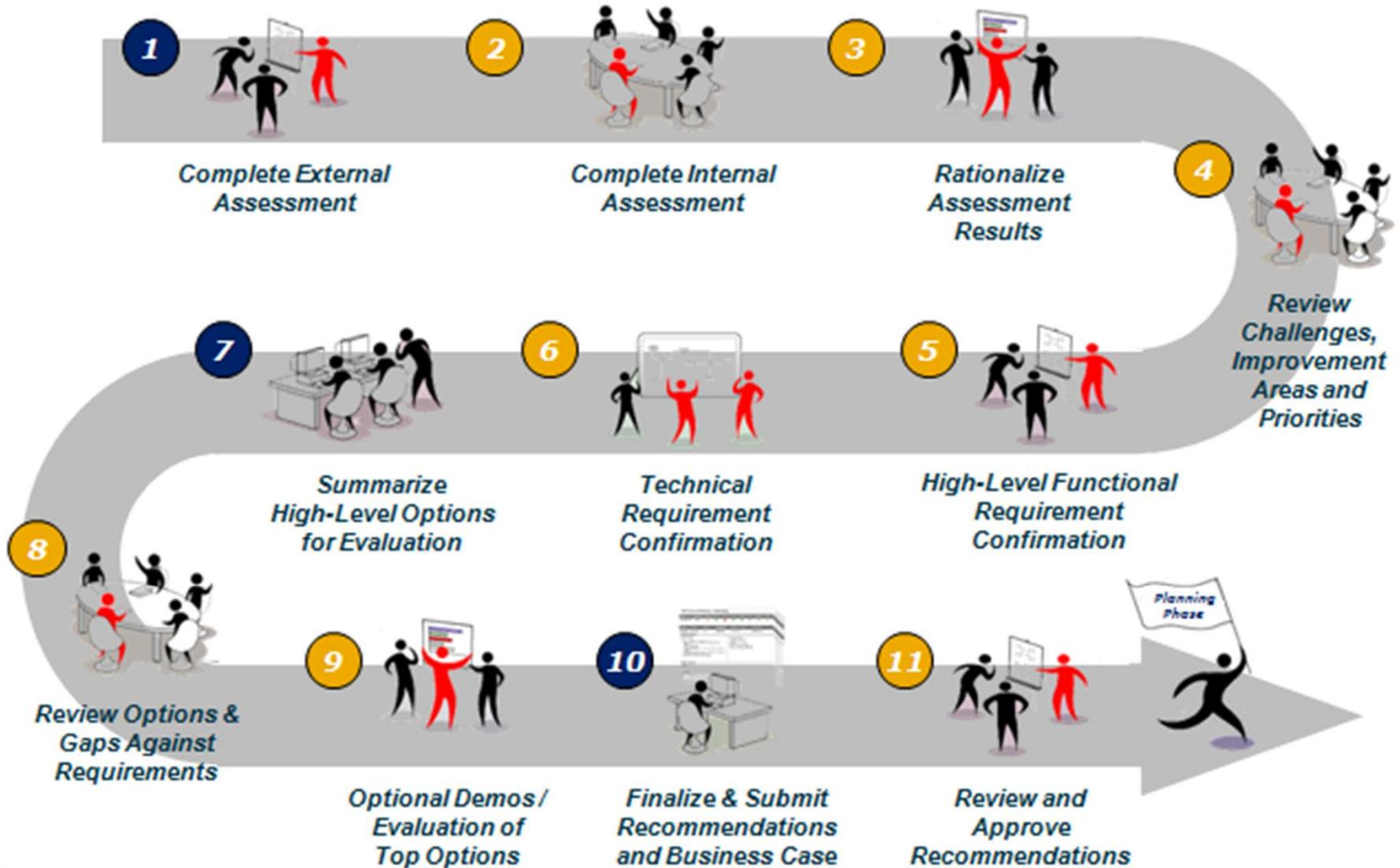
- In scope assessment areas include:
 - eProcurement Buying Tool (*focus of this deliverable*)
 - Spend Analytics and Reporting
 - Master Data Management
 - Supplier Integration



Approach:

- The purpose of this first activity was to evaluate and provide a recommendation on whether the State of North Carolina should keep and upgrade their current Ariba Buyer platform or replace with another procurement solution.
- The following slide summarizes the general approach used in completing the assessment, evaluation and recommendation.

Approach



 Activities requiring State of NC Participation

Workshop Summaries

Workshops were conducted with key stakeholders to assess the state of the current environment and gather high-level requirements. The outputs of these meetings include the Technical Assessment, the key criteria for the buying tool selection and the high-level requirements.

Workshop	Date	Attendees	Summary
Internal Technology Assessment of Buying Tool and Initial review of scores	12/02/10	Patti Bowers (DOA Office of the Secretary), Jim Macaulay (Office of the State Controller), Angie Dunaway (DOA P&C), Sherri Garte (DHHS - Purchasing), Joel Sigmon (Office of State Budget and Management), Melvin Plummer (DOA – Facility Management), Leroy Kodak (ITS Statewide IT Procurement), Releata Baker-Jones (ITS Statewide IT Procurement)	<ul style="list-style-type: none"> Facilitated walk through of the 90 questions about eProcurement functionality State scored the current solution on each of the questions Reviewed the summary of the scores Revealed scoring by Accenture and discussed
Conduct Assessment Rationalization and Challenges review session	12/06/10	Patti Bowers (DOA Office of the Secretary), Robert Zenkel (DOA MIS Division), Dell Pinkston (DOA MIS Division), Jim Macaulay (Office of the State Controller), Angie Dunaway (DOA P&C), Tina Mclamb (DOA P&C), Sherri Garte (DHHS - Purchasing), Joel Sigmon (Office of State Budget and Management), Melvin Plummer (DOA – Facility Management), Debra Wallace (Wake Technical Community College), Leroy Kodak (ITS Statewide IT Procurement), Releata Baker-Jones (ITS Statewide IT Procurement), Karen Woodall (DOA P&C), Donnie Thorne (DOT – Purchasing), Melinda Coleman (Dept. of Agriculture - Purchasing)	<ul style="list-style-type: none"> Reviewed summary scores with a 1.5 rating difference between Accenture and the State to arrive at a consensus score Reviewed detailed scores with a 3.0 rating difference between Accenture and the State to arrive at a consensus score Reviewed functional requirements, challenges, improvement options, and priorities
Technical Requirement confirmation	Week of 12/06/10	Patti Bowers (DOA Office of the Secretary), Robert Zenkel (DOA MIS Division), Dell Pinkston (DOA MIS Division), Jim Macaulay (Office of the State Controller), Don Jerman (ITS Enterprise Architecture)	<ul style="list-style-type: none"> Technical discussion to gather high level input to cover infrastructure, hosting, security, authentication, desktop standards, interfaces and other technical requirements
Confirmation of Key Criteria	12/09/10	Patti Bowers (DOA Office of the Secretary), Anne Bander (DOA Office of the Secretary), Speros Fleggias (DOA Office of the Secretary), James Staton (DOA P&C), Sam Byassee (ITS Statewide IT Procurement), Zeke, Creech (DOA Office of the Secretary), Jim Macaulay (Office of the State Controller)	<ul style="list-style-type: none"> Reviewed key criteria for buying tool decision Collaborated and adjusted key criteria based on feedback

Supporting Inputs

A variety of inputs were used as background and supporting documentation in the assessment, evaluation and recommendation for the eProcurement Buying Tool.

Input	Description	Source
Previous assessments	<ul style="list-style-type: none"> • BEACON procurement requirements and JAD session results • Due Diligence report for eProcurement 	Patti Bowers State of North Carolina
eProcurement System Architecture	<ul style="list-style-type: none"> • Current eProcurement network and interface diagrams 	eProcurement Project Team
eProcurement Usage Statistics	<ul style="list-style-type: none"> • Overview of catalogs, items, transaction and user volumes 	eProcurement Project Team
eProcurement System Online Review	<ul style="list-style-type: none"> • Accenture transformation team review of current system features and configuration 	Mike Courtney – Accenture (with non-production access provided by eProcurement Team)
NC Auditor’s Reports	<ul style="list-style-type: none"> • NC Auditor's reports from last year related to contract monitoring and management 	State Auditors Website
Feedback from Technology Workstream workshops	<ul style="list-style-type: none"> • Input and results from Technology Assessment, rationalization, challenges and opportunities and technical requirement confirmation sessions 	Accenture led meeting with key State Stakeholders
Key Decision Criteria for Buying Tool.	<ul style="list-style-type: none"> • Key inputs from State project leadership on criteria for final recommendation 	Patti Bowers and State Project Leadership Team

Buying Tool Evaluation Approach

Technical Assessment Results

Solution Evaluation Results

Recommendation



Buying Tool Technical Assessment

The Buying Tool Technical Assessment is a tool used to help evaluate both features and effective use of an organization’s eProcurement buying capabilities.

- The Buying Tool Assessment scorecard is a collection of approximately 75 “leading practice” questions that that evaluates an organization's technology utilization in 12 key categories.

Accessibility & Use	Requisitioning	Receiving
Training	Workflow and controls	Contract Compliance
Catalog Content & Management	PO Creation and Distribution	Financial (ERP) System Interfaces
Catalog Search	Change Orders	Data Management

- Three optional categories (with 16 questions) were also included for North Carolina’s Assessment to identify potential opportunities for Invoice Acceptance, Invoice Matching and Exception Processing and Travel & Expense Management.
- The final results or “score” of the assessment are subjective. However, the real benefit of the tool is assessing overall areas in which an organization is doing well with technology or could make improvements.

Buying Tool Technical Assessment

A three step process was performed to evaluate the current Buying Tool

1. External Assessment

- The Accenture Technology Workstream lead was provided access to the eProcurement system and supporting materials such as training guides and usage statistics
- Each of the answers in the assessment were evaluated and rated on a score of 0-10, where 0 is low (functionality doesn't exist) 5 is medium (feature is available, but could be improved or more effectively used) and 10 is high (fully meets the needs and no improvement opportunities identified).

2. Internal Assessment

- A facilitated session was held with State participants and included a walk through explanation of each question.
- The group discussed and agreed on a score for each question, which was done without providing visibility to the externally assessed score.
- Once each of the individual questions (including the optional areas) were scored, the group was presented the summary score by area, and did a quick review and sanity check to ensure consistency with those areas they felt should be rated higher or lower.
- In the final step, the external scores were exposed and the participants shown a comparison of internal vs. external scores and identification of "gap" areas.

3. Rationalization

- The final step in the assessment was a detailed discussion of gap areas - summary areas where internal and external scores varied by more than 1.5.
- Additional review of specific questions was done where there was gap of 3.0 or greater and a consensus scored agreed. For all others, an average of internal and external scores was calculated in the consensus column.
- In this session a final sanity check was done to confirm the areas that were rated higher or lower than others.

Buying Tool Technical Assessment

After reviewing the current system externally and with input from Key State Stakeholders the results were documented.

Assessment Results:

- A summary of the assessment scores is shown on the next two slides. The scorecard summary shows the functional areas, external, internal and consensus rating scores. It graphs the initial ratings on a scale of 1 to 10, visually showing the initial gap in ratings.
- Areas where the scores are highlighted yellow reflect scores where the Internal and External Assessments had a gap of greater than 1.5 and prompted additional discussion during the rationalization session.
- The green dotted line in the scoring summary area represents where a “leading practice” organization would be rated for a particular functional area – with a score of 8.5 or higher.
- The Buying Tool Technical Assessment (Excel Spreadsheet) is included as [Attachment A](#).

Current Technical Assessment Results

Assessment Area	Client Score Average	Accenture Score Average	Consensus Score Average	Scoring Summary
Accessibility & Use	7.3	8.0	7.7	
Training	4.7	6.3	5.0	
Catalog Content & Management	5.2	5.3	5.0	
Catalog Search	4.8	6.4	5.6	
Requisitioning	7.8	8.5	8.0	
Workflow & Controls	6.7	7.0	6.8	
Purchase Order Creation & Distribution	9.8	9.0	8.9	

Current Technical Assessment Results

Assessment Area	Client Score Average	Accenture Score Average	Consensus Score Average	Scoring Summary
Change Orders	7.1	8.3	7.8	
Receiving	3.7	5.0	4.8	
Contract Compliance	3.3	5.0	4.1	
Financial (ERP) System Integration	8.0	8.8	8.4	
Data Management	6.6	8.2	7.7	
Average Assessment Score	6.2	7.2	6.6	

Current Technical Assessment Results

The results of the assessment were analyzed and key points were identified.

Key take-aways:

- The average Internal and External Assessment scores only varied by 1.0 (10%).
- Overall feedback from the participants was that the system provides the required functionality and meets the base needs.
- Many of the challenges the group raised (with the exception of catalog search and system performance) are reflective not of the system, but with the supporting processes and how effectively the system is used.
- Although not specifically evaluated, one of the key concerns raised by participants was current system performance during peak usage times. Potential areas for investigation or improvement include historic transaction volume (10 years of history in system), number of customizations and complexity of workflow rules and high volume of catalog items.
- Several concerns were raised regarding reporting / analytics and contract management. While not specifically addressed in this first assessment of the eProcurement tool, the importance and potential benefits if addressed is recognized.
- The following four slides provide a summary of what's working well and challenges/opportunities for each of the evaluated functional areas from the Technology Assessment sessions.

Current Technical Assessment Results

Area	What's working well	Challenges / Opportunities	Priority to Address
Accessibility & Use	<ul style="list-style-type: none"> High user and transaction volumes System is easily accessible to users 	<ul style="list-style-type: none"> There's an opportunity to provide an improved portal that helps users identify preferred buying channels and contracts by category 	Low
Training	<ul style="list-style-type: none"> Training is generally available, but underutilized Training is offered regularly and covers the eProcurement system well 	<ul style="list-style-type: none"> High turnover of staff increases need for training Training could be more effective if role or activity based and available via web as needed Training should include not just system, but supporting processes and policies 	High
Catalog Content & Management	<ul style="list-style-type: none"> Suppliers manage their own catalogs and State staff focus on review and approval Catalog management tool facilitates validation and online approvals of new and updated catalogs 	<ul style="list-style-type: none"> Many eligible contracts have not been converted to catalogs and many catalogs are considered out-of-date Users have too many product options, making search (including punch-out sites) challenging. Opportunity to improve via strategic sourcing No tools are available to easily review and audit punch-out products and pricing Catalog filtering (limiting what users can see which catalogs) could be used to improve user experience 	High

Current Technical Assessment Results

Area	What's working well	Challenges / Opportunities	Priority to Address
Catalog Search	<ul style="list-style-type: none"> Product search is available using a number of attributes Catalog items mapped using standard NIGP codes Public catalog search is available for use by local governments and other affiliated entities 	<ul style="list-style-type: none"> Provide better search features such as product search refinement, product comparison and better use of pictures (more Amazon like) Improve the product hierarchy to make it more intuitive and easier to find "most common" items and punch-out sites Potentially make catalogs accessible to other eProcurement systems (e.g. those used by universities or other areas) Product descriptions and search data should be optimized based on most common searches 	High
Requisitioning	<ul style="list-style-type: none"> System provides core functionality for requisitions allowing purchase of catalog and non-catalog System provides on-line validation and ensures all required fields are complete 	<ul style="list-style-type: none"> Search for suppliers could better differentiate like suppliers (e.g. same supplier with different locations) Blanket order functionality could be introduced (different than standard requisitions) to provide better tracking of expiration dates and approaching max limits) 	Low
Workflow and controls	<ul style="list-style-type: none"> State controls for purchasing approvals are supported State effectively uses "role-based" approvals Requestors and approvers can dynamically add additional approves System keeps a detailed audit trail of transaction activities and changes 	<ul style="list-style-type: none"> System is highly customized to meet unique agency requirements. Opportunity to simplify and standardize Complexity of workflow may create system performance issues as workflow is generated Most transactions require 3 or more approvals, even if purchasing low-dollar, contracted items, lengthening approval and processing times and encouraging users to "work around" the system 	Medium

Current Technical Assessment Results

Area	What's working well	Challenges / Opportunities	Priority to Address
PO Creation and Distribution	<ul style="list-style-type: none"> System automatically generates and distributes purchase order upon full approval of requisition System provides suppliers multiple options to receive purchase orders (e.g. email, EDI, XML) 	<ul style="list-style-type: none"> Opportunity to receive and reflect order confirmation and advance ship notices, if provided by the supplier 	Low
Change Orders	<ul style="list-style-type: none"> System allows change orders and supports required approvals and tracks versions and audit history of changes 	<ul style="list-style-type: none"> Opportunity to improve when change orders are allowed (e.g. supplier preference, or based on transaction status such as not fully received or not fully invoiced) 	Low
Receiving	<ul style="list-style-type: none"> System requires users to provide receipts for items ordered via eProcurement solution System support flexible delivery models (desktop vs. centralized receiving) 	<ul style="list-style-type: none"> Opportunity to use both quantity and amount (dollar value) based receipts Ability to incorporate asset information collection / validation into the receiving process 	Medium
Contract Compliance	<ul style="list-style-type: none"> Catalog items reflect State contracted pricing, although not always up-to-date 	<ul style="list-style-type: none"> System could be used to track basic contract information, as well as generate notifications of upcoming expiration or when contract is approaching a pre-set maximum amount Contract compliance functionality could be used to ensure pricing and payment terms are met during PO processing 	Medium
Financial (ERP) System Interfaces	<ul style="list-style-type: none"> Interfaces exist between eProcurement and NCAS and additional community college and LEA systems Interfaces provides near real-time posting of PO's and Receipts as well as budget checking and encumbrance postings 	<ul style="list-style-type: none"> Better synchronization of vendor master data (from single source system) across systems Potential interface between eProcurement and DOT's SAP system should be considered 	Medium

Current Technical Assessment Results

Area	What's working well	Challenges / Opportunities	Priority to Address
Data Management	<ul style="list-style-type: none"> Agencies can manage certain role and user assignments for workflow as well as use online form for address maintenance Standardized use of NIGP codes, payment terms and other master data 	<ul style="list-style-type: none"> Opportunity to use single source for vendor master across systems as well as align NIGP code versions in different systems. This will be evaluated in more detail during the Master Data Management Assessment 	Medium
Invoice Acceptance	<ul style="list-style-type: none"> Not in scope today 	<ul style="list-style-type: none"> Electronic invoices are not accepted today Paper invoices are not received centrally and tracked from the time they are received in the State Supplier's don't have "self-service" ability to check status of invoices and payments on-line 	N/A
Invoice Matching and Exception Processing	<ul style="list-style-type: none"> Invoice matching and exception processing is managed in NCAS NCAS system provides line-item matching, exception processing and approval of non-PO (direct) invoices Payment discount optimization is managed well 	<ul style="list-style-type: none"> Solution is not fully integrated with eProcurement solution, providing order and payment data in one system. Workflow for Non-PO (direct) invoices doesn't follow same approval flow as a standard reconciliation 	N/A
Travel and Expense Management	<ul style="list-style-type: none"> Not in scope today 	<ul style="list-style-type: none"> Opportunity to implement Travel and Expense Management tool, leveraging current financial system interfaces, approval flow and master data Could provide a standardized, automated and consistent tool for T&E management to improve compliance, make review and auditing more effective and decrease overall processing time and effort 	N/A

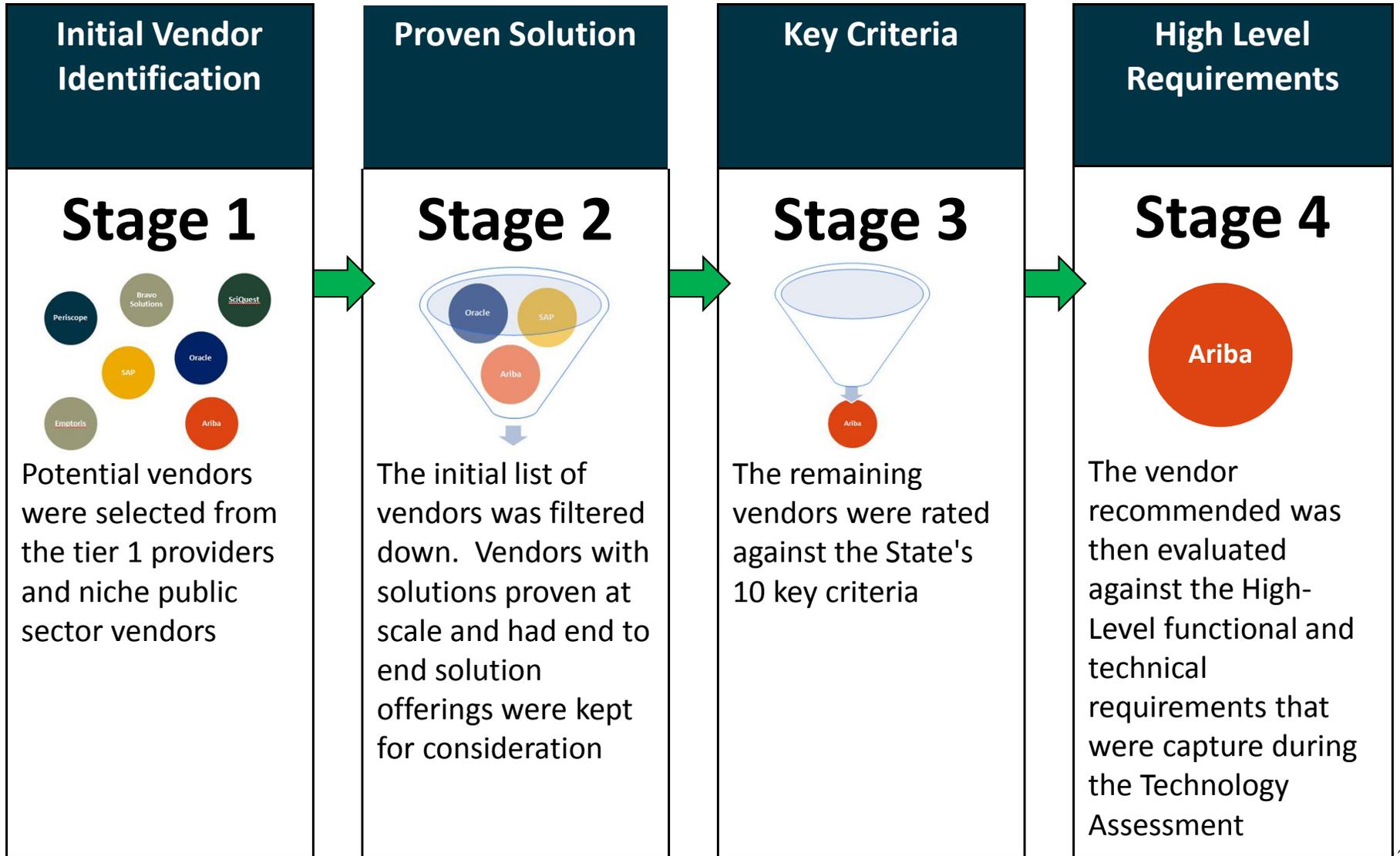
Buying Tool Evaluation Approach

Technical Assessment Results

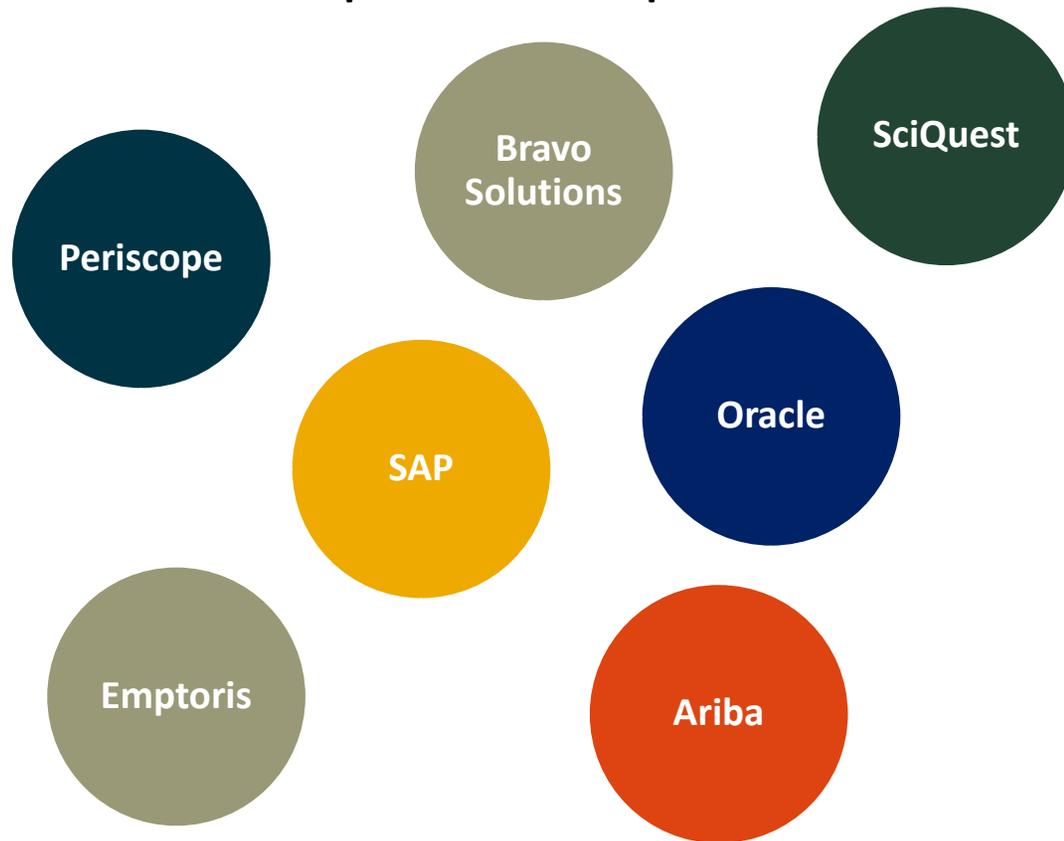
Solution Evaluation Results

Recommendation

Solution Evaluation Methodology



Initial Vendors were selected for review based on being a Tier 1 vendor and Mid to Small Tier vendor with public sector experience



Key Points

- Ariba, Oracle, SAP, and Emptoris are Tier 1 providers *
- Bravo Solutions is a mid Tier provider with several public sector clients
- SciQuest and Periscope offer solutions for public sector clients

* Through ongoing Accenture research and analysis of procurement solutions and providers, Accenture's Procurement Excellence and Technology Enablement (PETE) team identifies Tier 1 solution providers and provides that list to individual teams doing Procurement Technology Assessments.



Solution Options for Consideration - Scope

The top providers offer both stand alone modules and end to end offerings to support the source to pay process. Differentiating factors shift to usability, flexibility, vertical (industry) expertise and cost.

Vendors	Source-to-Pay Capabilities							
	Supplier Integration	Source	Contract	Buy	Pay	Manage Supplier	Performance Mgmt	Master Data Mgt.
ARIBA®	Supplier Network	Strategic Sourcing 9r1	Contract Management 9r1	Buyer 9r1	Invoice 9r1	SPM 9r1	Analysis 9r1	Procurement Content 9r1
Emptoris	X	Sourcing 7.0	Contract Mgmt 7.0	X	X	SPM 7.0	Spend Analysis 7.0	X
ORACLE®	iSupplier R12 / Supplier Network	Sourcing R12	Procurement Contracts R12	Purchasing & iProcurement R12	Accounts Payable R12	Procurement & Spend Analytics 7.9	Procurement & Spend Analytics 7.9	MDM (PIM) 11g
SAP	SRM-SUS 5.0	eSourcing 5.0	eSourcing CLM 2.0	SRM-EBP 5.0	SRM-EBP 5.0	eSourcing SIM 5.0	Spend Analysis 2.0	SRM-MDM 2.0

There are also several second tier Vendors that were not considered further due to size of existing implementations, proven scalability of solution, and/or financial stability. These include SciQuest, Periscope Holdings, and Bravo Solutions.

Solution Options for Consideration

Ariba

Company: Provider of “Best in Breed” procurement software. Solutions included enterprise “CD” installed software as well as Software as a Service.

Functions: Buying, Invoicing, Contracts, Supplier Management, Sourcing, Spend Analysis, Travel & Expense

Key Features: Ariba Supplier Network has over 160,000 suppliers providing PO and Invoice transmission between Buyer and Vendor



SAP

Company: Provides integrated ERP software for the majority of functions in the organization. Supplier Relationship Management (SRM) is their web based buying tool

Functions: Buying, Sourcing, Invoicing, Contracts, Supplier Management, Spend Analysis, General Ledger, Inventory Management, Logistics

Key Features: Robust integration between applications
Ability to handle complex spend categories



Oracle

Company: Major ERP application and Database provider. iProcurement is their web based buying tool.

Functions: Buying, Sourcing, Invoicing, Contracts, Supplier Management, Spend Analysis, General Ledger, Inventory Management, Logistics

Key Features: Robust integration between applications.
Ability to handle complex spend categories



Emptoris

Company: Provider of “Best in Breed” electronic Sourcing tools. Also a leader in contract management

Functions: Sourcing, Contracts, Supplier Management, Spend Analysis

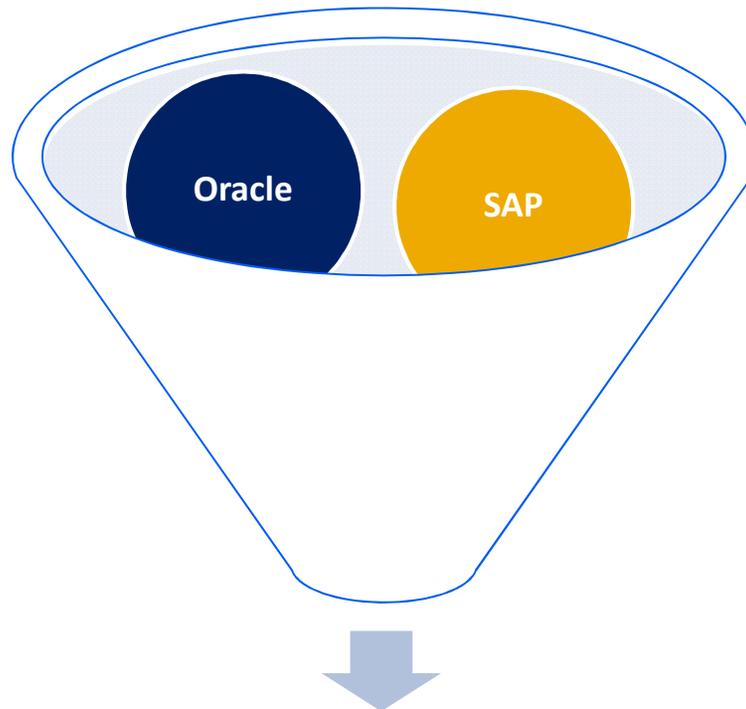
Key Features: Full spectrum sourcing: Emptoris supports the full-gamut of sourcing events, from simple reverse auctions to complex multi-stage negotiations



Solution Evaluation Process – Proven Solution

Three vendors were selected for additional consideration based on having a proven solution at scale.

Not Considered Further



Key Points

- Tier 1 vendors are selected for further assessment
- Emptoris and Bravo Solutions are removed for lack of P2P capabilities
- SciQuest and Periscope are excluded due to scale of existing implementations



Key Criteria for Buying Tool Selection

The Key Criteria included below was developed to provide a foundation for evaluating potential Buying Tool solutions. We recognize that a State Business Infrastructure Study for the State (Session Law 2001-491) was developed and accepted by the General Assembly and reflected a long-term vision including financial and procurement components that were considered in the final recommendation.

- A. The implementation of the solution must work to minimize total cost of ownership for the State.
- B. Technology is a key enabler of the State's strategic procurement initiatives. The State should focus our effort and resources in areas where requirements are not currently being met.
- C. Because of the broad user base of this application, the State wishes to leverage all its existing technology to the fullest extent possible.
- D. The State should strive to provide a solution that maximizes usability (user friendliness and performance) for all participants and minimizes technology change management for end users.
- E. The adopted solution must be able to meet public sector and North Carolina specific requirements, including support of technical validation, internal controls and compliance.
- F. The State should adopt technology solutions that are proven at scale, reflective of NC transaction, data, user, and vendor volumes, as well as related cost impacts to the State.
- G. The adopted solution should maintain current level of participation and allow for expansion, including other statutorily allowed entities (e.g. universities, local education authorities, and municipalities).
- H. The adopted solution must provide the flexibility to expand functional scope of E-Procurement (e.g. invoice processing), and to provide integrated capabilities with Sourcing tools, Contract Management and Vendor Management.
- I. The solution must support information exchange with other initiatives supporting business transparency such as NC OpenBook.
- J. The State should select established and financially stable technology providers and implement solutions that are viable for 10+ years.

Assessment of Tier-1 Providers

		Tier 1 Solution Providers		
	Guiding Principle	Ariba	SAP	Oracle
A	The implementation of the solution must work to minimize total cost of ownership for the State.			
B	Technology is a key enabler of the State's strategic procurement initiatives. The State should focus our effort and resources in areas where requirements are not currently being met.			
C	Because of the broad user base of this application, the State wishes to leverage all its existing technology to the fullest extent possible.			
D	The State should strive to provide a solution that maximizes usability (user friendliness and performance) for all participants and minimizes technology change management for end users.			
E	The adopted solution must be able to meet public sector and North Carolina specific requirements, including support of technical validation, internal controls and compliance.			
F	The State should adopt technology solutions that are proven at scale, reflective of NC transaction, data, user, and vendor volumes, as well as related cost impacts to the State.			
G	The adopted solution should maintain current level of participation and allow for expansion, including other statutorily allowed entities (e.g. universities, local education authorities, and municipalities).			
H	The adopted solution must provide the flexibility to expand functional scope of E-Procurement (e.g. invoice processing), and to provide integrated capabilities with Sourcing tools, Contract Management and Vendor Management.			
I	The solution must support information exchange with other initiatives supporting business transparency such as NC OpenBook.			
J	The State should select established and financially stable technology providers and implement solutions that are viable for 10+ years.			

Assessment - Ariba

		Tier 1 Solution Providers	
	Guiding Principle	Ariba	Justification
A	The implementation of the solution must work to minimize total cost of ownership for the State.		An Ariba upgrade leverages the states existing functional and technical investment. Many of the current extensions and interface points can be utilized. The 3 rating acknowledges that there are change management and training considerations as part of any upgrade.
B	Technology is a key enabler of the State's strategic procurement initiatives. The State should focus our effort and resources in areas where requirements are not currently being met.		An Ariba upgrade would allow the State to focus on key process improvement areas. The upgrade will require that State resources are directed at the upgrade itself and change management
C	Because of the broad user base of this application, the State wishes to leverage all its existing technology to the fullest extent possible.		The State has invested significant time and training over the years with Ariba. An upgrade will allow the State to reuse much of the existing work, while minimizing impact to users
D	The State should strive to provide a solution that maximizes usability (user friendliness and performance) for all participants and minimizes technology change management for end users.		Ariba is considered to be best in breed for its User Interface. In addition the State has already heavily customized Ariba to support State Business functions. Change Management efforts will leverage the user's existing Ariba knowledge
E	The adopted solution must be able to meet public sector and North Carolina specific requirements, including support of technical validation, internal controls and compliance.		All three applications have proven scalability for large public sector organizations, with appropriate controls

Assessment - Ariba

		Tier 1 Solution Providers	
	Guiding Principle	Ariba	Justification
F	The State should adopt technology solutions that are proven at scale, reflective of NC transaction, data, user, and vendor volumes, as well as related cost impacts to the State.		Ariba with its current enhancements meets the majority of the State needs. In addition, Ariba provides flexible extension options. The "3" recognizes that there are some issues (specifically around catalog search, performance) that could be addressed during an upgrade.
G	The adopted solution should maintain current level of participation and allow for expansion, including other statutorily allowed entities (e.g. universities, local education authorities, and municipalities).		An Ariba upgrade will allow the State to leverage their existing relationships with other State entities
H	The adopted solution must provide the flexibility to expand functional scope of E-Procurement (e.g. invoice processing), and to provide integrated capabilities with Sourcing tools, Contract Management and Vendor Management.		Ariba provides additional functionality around procurement activities, but is ultimately limited to those activities
I	The solution must support information exchange with other initiatives supporting business transparency such as NC OpenBook.		The interfaces from Ariba to the other State Systems is already built and tested. The existing infrastructure would be heavily leveraged during an upgrade.
J	The State should select established and financially stable technology providers and implement solutions that are viable for 10+ years.		Ariba is over 10 years old, and while it continues to provide a best of breed procurement suite, it has been on rocky financial ground in the past. Many in the industry continue to discuss the possibility that they will be purchased someday by SAP or Oracle.

Assessment - SAP

		Tier 1 Solution Providers	
	Guiding Principle	SAP	Justification
A	The implementation of the solution must work to minimize total cost of ownership for the State.		An SAP SRM Implementation would be more costly both from a time and resource perspective. The State could leverage some of their existing SAP experience. There would have to be a large change management and training management initiative. Any custom requirements and interfaces would have to be redesigned.
B	Technology is a key enabler of the State's strategic procurement initiatives. The State should focus our effort and resources in areas where requirements are not currently being met.		While SAP meets the majority of high level requirements, an SAP implementation and deployment would require significant state resources to implement and deploy.
C	Because of the broad user base of this application, the State wishes to leverage all its existing technology to the fullest extent possible.		The State could leverage its existing knowledge and investment with SAP to limit the impact of an SRM project. There would still be significant technical changes as well as user training impacts
D	The State should strive to provide a solution that maximizes usability (user friendliness and performance) for all participants and minimizes technology change management for end users.		The SAP SRM user interface is not as intuitive or as easy to use as Ariba. There would be significant impact to the user and extensive change management would be required.
E	The adopted solution must be able to meet public sector and North Carolina specific requirements, including support of technical validation, internal controls and compliance.		All three applications have proven scalability for large public sector organizations, with appropriate controls

Assessment - SAP

		Tier 1 Solution Providers	
	Guiding Principle	SAP	Justification
F	The State should adopt technology solutions that are proven at scale, reflective of NC transaction, data, user, and vendor volumes, as well as related cost impacts to the State.		SAP while, extensible, is not done so as easily as Ariba. The State would need to build resources to do this.
G	The adopted solution should maintain current level of participation and allow for expansion, including other statutorily allowed entities (e.g. universities, local education authorities, and municipalities).		A switch to SAP or Oracle would most likely result in a loss of some participants in the eProcurement program as a result of the change management and technical system interface effort imposed upon the different state entities.
H	The adopted solution must provide the flexibility to expand functional scope of E-Procurement (e.g. invoice processing), and to provide integrated capabilities with Sourcing tools, Contract Management and Vendor Management.		SAP provides additional functionality in procurement, as well as other enterprise areas like Accounting, Inventory Management, logistics, etc... The State is currently using SAP for the HR & Payroll system.
I	The solution must support information exchange with other initiatives supporting business transparency such as NC OpenBook.		The existing interfaces would have to be significantly re-worked for an SAP SRM solution.
J	The State should select established and financially stable technology providers and implement solutions that are viable for 10+ years.		SAP and Oracle are the remaining software vendors in the large organization ERP space. They will continue to be financially viable for many years to come.

Assessment - Oracle

		Tier 1 Solution Providers	
	Guiding Principle	Oracle	Justification
A	The implementation of the solution must work to minimize total cost of ownership for the State.		Oracle from an application perspective has very little exposure in the State. Any implementation would have to establish new capabilities. There would have to be a large change management and training management initiative. Any custom requirements and interfaces would have to be redesigned.
B	Technology is a key enabler of the State's strategic procurement initiatives. The State should focus our effort and resources in areas where requirements are not currently being met.		While Oracle meets the majority of high level requirements, an Oracle implementation and deployment would require significant state resources to implement and deploy.
C	Because of the broad user base of this application, the State wishes to leverage all its existing technology to the fullest extent possible.		The State has limited exposure to Oracle as an application platform and there would be significant technology as well as change management changes.
D	The State should strive to provide a solution that maximizes usability (user friendliness and performance) for all participants and minimizes technology change management for end users.		The Oracle iProcurement user interface is not as intuitive or as easy to use as Ariba. There would be significant impact to the user and extensive change management would be required.
E	The adopted solution must be able to meet public sector and North Carolina specific requirements, including support of technical validation, internal controls and compliance.		All three applications have proven scalability for large public sector organizations, with appropriate controls

Assessment - Oracle

		Tier 1 Solution Providers	
	Guiding Principle	Oracle	Justification
F	The State should adopt technology solutions that are proven at scale, reflective of NC transaction, data, user, and vendor volumes, as well as related cost impacts to the State.		Oracle while, extensible, is not done so as easily as Ariba. The State would need to build resources to do this.
G	The adopted solution should maintain current level of participation and allow for expansion, including other statutorily allowed entities (e.g. universities, local education authorities, and municipalities).		A switch to SAP or Oracle would most likely result in a loss of some participants in the eProcurement program as a result of the change management and technical system interface effort imposed upon the different state entities.
H	The adopted solution must provide the flexibility to expand functional scope of E-Procurement (e.g. invoice processing), and to provide integrated capabilities with Sourcing tools, Contract Management and Vendor Management.		Oracle provides the same functionality that SAP does, but an Oracle implementation would not allow the State to leverage their existing SAP HR & Payroll system, so it is ranked a "2"
I	The solution must support information exchange with other initiatives supporting business transparency such as NC OpenBook.		The existing interfaces would have to be significantly re-worked for an Oracle iProcurement solution.
J	The State should select established and financially stable technology providers and implement solutions that are viable for 10+ years.		SAP and Oracle are the remaining software vendors in the large organization ERP space. They will continue to be financially viable for many years to come.

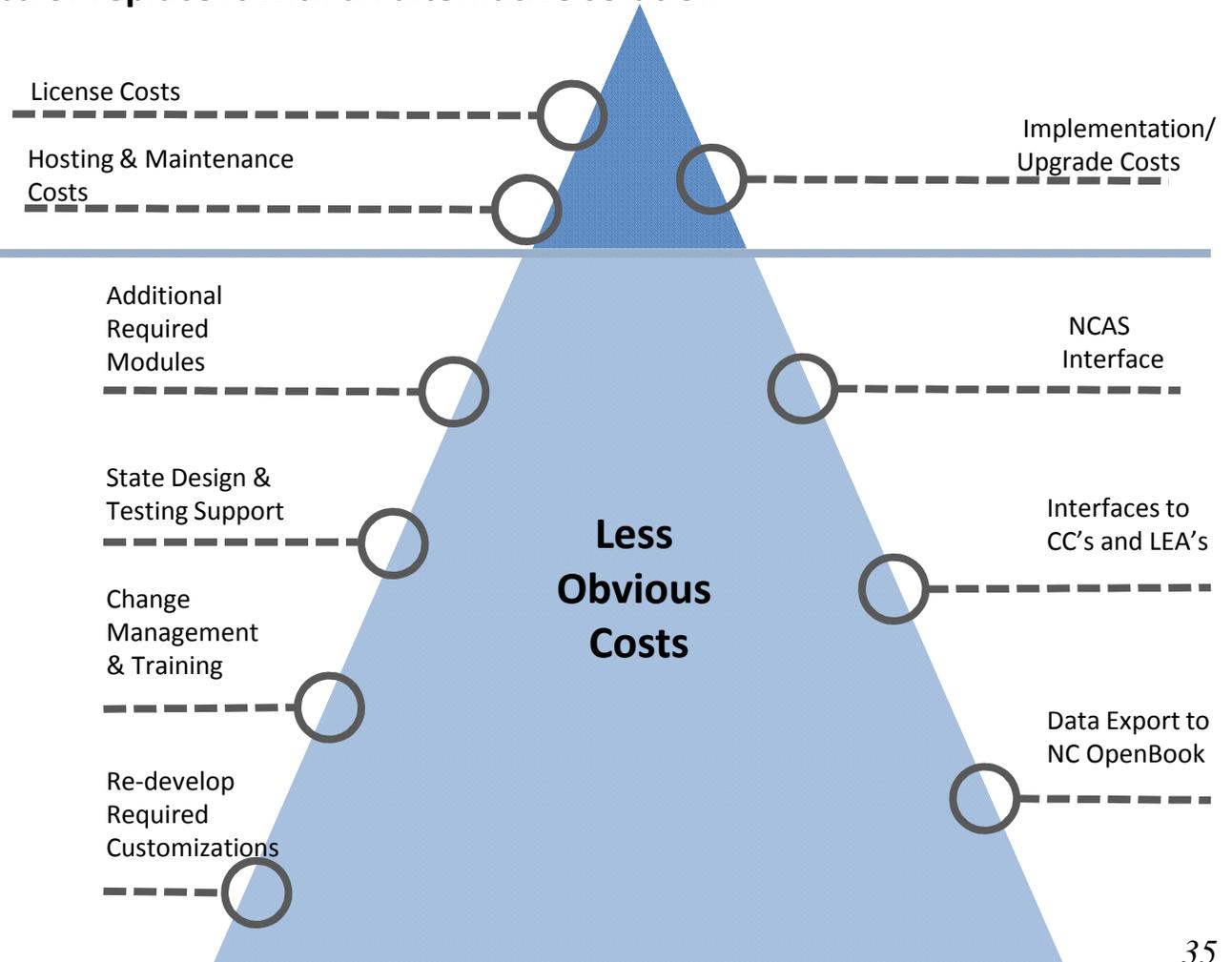
Total Cost of Ownership Considerations

Using an iceberg analogy, there are several obvious and many less obvious costs to be considered when deciding to upgrade Ariba or replace it with an alternative solution

** All costs (obvious and less obvious) apply to an Ariba upgrade but they are generally less than other options*

Less obvious cost include:

- New solutions may require additional modules to provide existing level of functionality
- A new implementation will require new design and testing development utilizing State resources
- Replacing the current system will increase change management and end user training
- Custom requirements would have to be redeveloped in SAP or Oracle
- Existing interface channels would require significant re-work vs. an Ariba upgrade which will be able to re-utilize a significant portion of the design and development work already completed



Total Cost of Ownership Considerations

In this evaluation and recommendation, the primary focus is on setting a general direction for the eProcurement Buying Tool (i.e. retain and upgrade Ariba or replace with an alternate solution). Because this evaluation and recommendation doesn't include finalized scope of solution / recommendations, as well as specific providers, licensing considerations, etc., only the cost considerations, as represented by the varying size of the arrows, can be included at this time and not fully validated costs for each option.

Confirmation Designation	Definition
	Costs are relatively equal
	The costs are significantly higher
	The costs are moderately higher
	The costs are incrementally higher

Total Cost of Ownership Considerations

Cost Component	Considerations	Ariba	SAP	Oracle
Procurement Software License Costs	<ul style="list-style-type: none"> • Base Ariba license costs already paid for, although there may be incremental licenses required if scope is expanded to add Contract Compliance (recommended), Invoicing (Optional) or T&E (Optional) • For SAP SRM or Oracle iProcurement, new or additional licenses for the procurement tool would likely need to be funded and are expected to be higher than incremental add-on's to Ariba (subject to negotiation and licensing) 	No new costs unless add-ons included.		
Implementation or Upgrade Costs	<ul style="list-style-type: none"> • There is a technology cost associated with upgrading Ariba, however the expectation is that existing designs, test scripts and many customizations can be leveraged. • For SAP and Oracle implementations, the system will need to be implemented as a net new project, with potential leverage of the list of customizations (CR's) 	Base upgrade costs.		
Hosting and Maintenance Costs	<ul style="list-style-type: none"> • The hosting costs for production and non-production instances, as well as ongoing system operation and maintenance costs are approximately the same between these systems for the "base" procurement modules. 	Continue current run costs.		

Total Cost of Ownership Considerations

Cost Component	Considerations	Ariba	SAP	Oracle
State Design & Testing Supporting	<ul style="list-style-type: none"> With an upgrade of Ariba, the impact to state agency and technology resources should be significantly less than an implementation of SAP and Oracle. If workflow standardization / simplification is started, this will require new design, development and testing, but the returns would be worth the effort 	Effort should be limited with exception of user acceptance testing and workflow redesign.	↑	↑
Re-develop required customizations	<ul style="list-style-type: none"> For Ariba, as part of the upgrade, an evaluation should be done with the State to determine which current customizations need to be retained and which ones can be retired. For those that are retained, existing designs and code can be leveraged. For SAP and Oracle, each of the required customizations will have to be rebuilt from scratch. 	Can leverage existing designs and code for required changes.	↑↑	↑↑
Change Management and Training	<ul style="list-style-type: none"> With an upgrade of Ariba, there will need to be communication of the pending changes and training developed on new or changed features. However, the fundamental processes and tool will be the same. With SAP and Oracle, the training effort will be larger as a new system and potential process changes are introduced. 	Communication and training on new features / changes.	↑	↑

Total Cost of Ownership Considerations

Cost Component	Considerations	Ariba	SAP	Oracle
NCAS Interface	<ul style="list-style-type: none"> For Ariba, the NCAS interface exists. As part of the upgrade, TIBCO will need to be replaced as middleware tool, but data exchange approach and reconciliation process can be retained, as well as posting processes and methods within NCAS. If SAP or Oracle were implemented, it would likely be accompanied with an implementation of the core financial system as well. SAP and Oracle procurement modules are rarely implemented without the same-suite corresponding backend-end financial system. If SAP or Oracle were implemented without the corresponding backend financial system, new integration for PO's, Receipts and Budget Check's / Encumbrance would have to be developed, but could potentially leverage the posting processes and methods within NCAS. 	Components of existing solutions can be re-used. Ariba support for TIBCO is deprecated in 9r1		
Interfaces to CC's and LEA's	<ul style="list-style-type: none"> For Ariba, an interface mechanism and defined data exchanges are already designed for all 115 LEAs and 58 community colleges For SAP and Oracle, new interfaces would need to be developed and Oracle provides better tools for non-Suite interfaces than SAP. 	Upgrade can leverage existing solution		
Data Export to NC OpenBook	<ul style="list-style-type: none"> For Ariba, can leverage existing exports to support NC OpenBook. For SAP or Oracle, these extracts will have to be designed and built. 	Upgrade can leverage existing solution		
Additional required modules	<ul style="list-style-type: none"> For Ariba, all components (including potential add-ons) are contained with-in the key Buyer tool. SAP SRM eProcurement requires SAP Enterprise Portal, SAP MDM for Catalogs, IMS for invoicing and SAP BI for reporting. Oracle iProcurement requires Oracle OAR tool to support reporting. 	Add-ons like Contract Compliance turned on with parameter		

Evaluation Summary

Ariba was recommended because they ranked high against the key criteria and offered the lowest Total Cost of Ownership proposition for the State:

- The current solution meets the State's core needs
- The upgrade will leverage the State's existing investment including enhancements and interface points
- The Ariba 9r1 upgrade will provide additional functionality to help the State utilize the tool more effectively (i.e. Catalog searching, Catalog management)
- Selecting Ariba reduces the change management effort and duration, allowing the user base to grow onto their existing knowledge of the system and functionality
- The upgrade provides an opportunity to investigate and potentially reduce key challenges (i.e. Catalog Search, Performance, and Workflow processing)
- An Ariba 9r1 upgrade allows the State to focus critical resources on key areas of improvement such as Sourcing, Spend Analytics, Catalog Management, Master Data Management, and Supplier Management

Evaluation Summary

SAP and Oracle were not recommended at this time because:

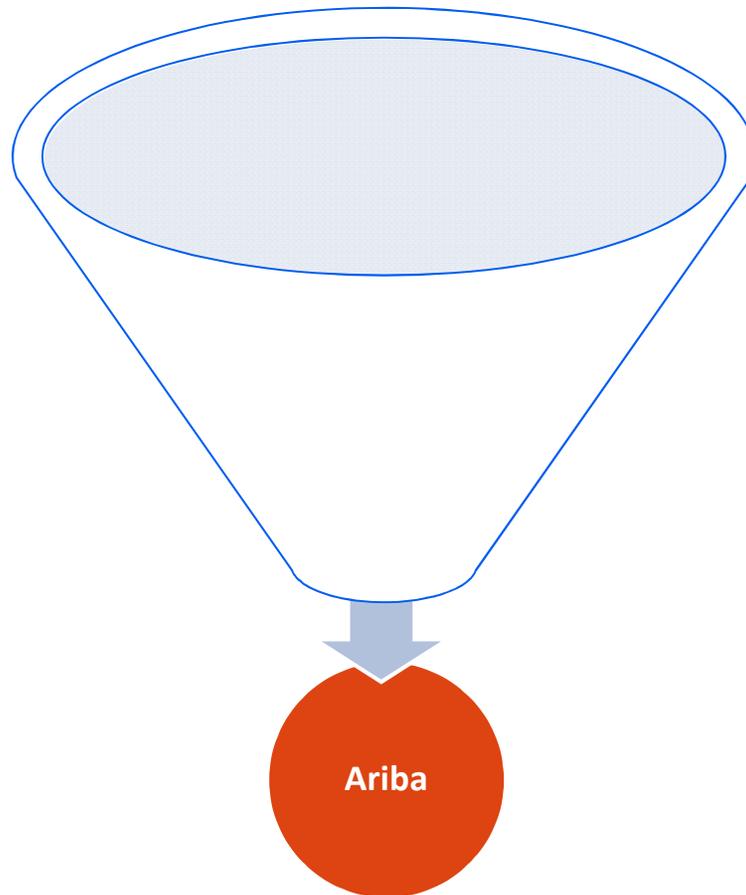
- Requires the State to focus critical resources on installing the new system with functionality that matches the existing system
- To get the same level of functionality, multiple modules must be installed
 - SAP Supplier Relationship Management (SRM) needs Master Data Management (MDM) to manage internally loaded catalogs
 - SAP Business Intelligence (BI) is needed to provide base reporting capabilities
 - SAP Portal must be installed to provide the web based interface
 - 3rd Party Add-On required for searching across punch-out catalogs
 - Oracle iProcurement requires Oracle Purchasing or Oracle Application Reporting (OAR) for minimal reporting capabilities
- Increases the State's change management effort
- Pulls critical State resources away from high value strategic efforts such as Sourcing and Contract Management
- Accenture has not seen a situation where SAP SRM was installed without SAP ERP system as the primary financial transaction system, as a result of the challenge that SAP has with interfaces to non-SAP financial systems

Solution Evaluation Process – Key Criteria

Ariba was selected as the recommended solution as it leverages the State’s existing investment and reduces total cost of ownership of the solution.

Not Considered

Further



Key Points

- Ariba is recommended based on its ranking against the 10 key criteria
- SAP and Oracle, while meeting the high level requirements, focus critical resources just to get to a “current state” on the new platform

High-Level Requirements – Result Confirmation

The Ariba 9r1 solution was confirmed against the High-Level requirements. The following slides explain the evaluation of Ariba. The table below provides definition for the confirmation designation.

Confirmation Designation	Definition
✓	The solution meets the requirements with out of the box functionality and configuration
✓ Enhancement	The system can meet the requirement with an enhancement
✓+	The system can meet the requirement with an additional module
✗	The system cannot meet the requirement



High performance. Delivered.

Result Confirmation against Functional Requirements

Req #	Requirement	Confirmation
<u>Accessibility & Use:</u>		
1	All system functions should be easily accessible via standard web-browsers through the internet or organization's intranet	✓
<u>Catalog Management:</u>		
2	System provides the ability for Vendors to maintain their catalogs online	✓+
3	System provides the ability for Administrator review and approval of new or updated catalogs	✓
4	System provides the ability for catalog filtering functionality to be configured (based on to be confirmed State of NC requirements) to limit which users to see catalogs applicable for their role	✓
<u>Catalog Search:</u>		
5	The system provides the ability to do text based search	✓
6	The system provides the ability to use hierarchy of product categories and products	✓
7	The system provides the ability to assign catalog items using a standard commodity taxonomy (e.g. UNSPSC or NIGP)	✓
8	The system provides the ability to search based on product description, supplier, supplier and manufacturer part numbers, etc.	✓
9	System provides the ability for item comparison	✓



High performance. Delivered.

Result Confirmation against Functional Requirements

Req #	Requirement	Confirmation
<u>Catalog Search:</u>		
10	System provides the ability to direct requestors to State contracted items	✓
11	System provides the ability to direct requestors to HUB vendors when price is comparable	✓ Enhancement
12	System provides the ability to search across loaded catalogs (i.e. P&C, ITS) and punch-out catalogs	✓
13	System provides the ability to display catalog items and categories with pictures	✓
14	System provides the ability to include item attributes such as "green" and "recycling"	✓ Enhancement
15	System provides the ability to display additional ordering instructions for items or commodities	✓ Enhancement
16	System should provide ability to enter additional data for certain items (e.g. business card forms, clothing sizes and colors, etc.)	✓
17	System provides the ability to "kit" or "bundle" items	✓
18	The System should provide the ability to make recommendations to requestors when purchasing an item. Much like an Amazon "You might like" or "Other requestors ordered these item as well"	✗
19	System provides the ability to alert user if item is on contract (it could potentially be a term or convenience contract)	✓ Enhancement
20	System provides the ability to identify most frequently searched items so that search results can be optimized for searching	✓ Enhancement
21	System provides the ability for Catalogs to be accessible to extended organizations that may have different procurement tools.	✓ Enhancement



High performance. Delivered.

Result Confirmation against Functional Requirements

Req #	Requirement	Confirmation
<u>Requisitioning:</u>		
22	The system provides the ability to support the purchase of goods and services using both catalog & non-catalog items	✓
23	The system provides the user with visibility to contracts when purchasing specific categories	✓ Enhancement
24	The system provides the ability for the user to select or reference an applicable contract during the creation of the requisition	✓ Enhancement
25	The system provides the ability to default financial coding information (Cost Center, GL Account, Project, etc.) from a user's profile (pre-defined selection) and can be updated at time of requisition.	✓
26	The system provides the ability to mass edit line items for common fields such as financial coding and ship-to information	✓
27	The system provides the ability to validate that all required fields have been completed before the requisition is submitted	✓
28	System provides the ability to display relevant vendor attributes during selection (i.e. HUB Data, Address)	✓ Enhancement
29	The system provides the ability to maintain required controls and approvals when users buy on behalf of another person	✓
30	The system provides the ability to support both internal and external (supplier facing) comments and attachments.	✓
31	The system provides the ability to allow users to easily access their documents or transactions requiring action or approval	✓
32	The system provides the ability to manage transactions using folders or labels approach	✓
33	The system provides the ability for qualified users to create blanket orders that are different from standard requisitions / purchase orders	✓ +
34	The system provides the capability to purchase complex categories such as temporary labor, professional services, complex print or media purchases	✓ +



High performance. Delivered.

Result Confirmation against Functional Requirements

Req #	Requirement	Confirmation
<u>Workflow & Controls:</u>		
35	The system provides the ability to have a requisition approval process that is standardized across the organization and ensure that policies are integrated into the solution	✓
36	The system provides the ability to support the segregation of duties and required controls within the procurement process, especially for requisitions and non-PO invoices	✓
37	The system provides the ability for configurable workflow including fiscal based approval (e.g. based on supervisor chain, cost center owners or "anyone at level" approaches) and commodity based approval	✓ Enhancement
38	The system provides the ability to support role based approvals for common groups such as Procurement teams, Commodity Approvers, Audit, etc. to improve processing times and reduce risk of delay if an individual is out of office	✓
39	The system provides the ability for requestors or approvers to dynamically add additional approvers to the workflow as needed	✓
40	The system provides the ability for optional approvers or "watchers" to be included in the workflow for those instances when someone needs to be notified, but approval is not required	✓
41	The system provides the ability to send notifications to approvers when there is a required action as well as to the requestor as workflow status changes	✓
42	The system provides the ability for the user (or administrator) to delegate their approval authority to keep approval times to minimum	✓
43	The system provides the ability for approvals to be escalated through a management chain when time based thresholds are exceeded	✓
44	The system provides the ability to be configured with minimized approvals while ensuring that all policy / legal requirements are met	✓
45	The system provides a visible audit trail of key activities and approvals for transactions such as requisitions, PO's, receipts and invoices	✓



Result Confirmation against Functional Requirements

Req #	Requirement	Confirmation
<u>Purchase Order:</u>		
46	System provides the ability to auto-generate PO's upon successful submission and approval of the requisition	✓
47	The system provides the ability for requisitions to include line items from different suppliers that result in multiple Purchase Orders being generated	✓
48	The system provides the ability for Suppliers to select and update their preferred method for receiving purchase orders.	✓
49	The system provides the ability for PO distribution methods including email, fax, XML, EDI, or viewing online via centralized portal	✓
50	System provides the ability to accept and post Purchase Order Acknowledgements and Advance Ship Notices if provided by the vendor	✓
51	Purchase Order should contain Buyer's information	✓ Enhancement
52	System provides the ability to support placing purchase orders where PCard is the identified payment method.	✓
53	System provides the ability to support blanket purchase orders	✓ +



High performance. Delivered.

Result Confirmation against Functional Requirements

Req #	Requirement	Confirmation
<u>Change Orders:</u>		
54	The system provides the ability to support change orders (requisitions)	✓
55	The system provides the ability to require incremental approval for additional line items, changes to accounting values, or an increase in overall cost exceeding a certain pre-set tolerance	✓ Enhancement
56	The system provides the ability to control change orders by supplier choice as well as the status of the PO (e.g. not fully received or not fully invoiced)	✓
57	The system provides the ability to version change orders and all changes and related approvals should be reflected in the audit history of the transaction	✓
<u>Receiving:</u>		
58	System provides the ability for both full and partial receiving	✓
59	System provides the ability for receiving tolerances to be set per requisition, by line item	✓ Enhancement
60	The system provides the ability to support desktop receipting for items delivered to non-warehouse locations in addition to central receiving	✓
61	The system provides the ability to support both amount and quantity based receipts by commodity code	✓
62	The system should support service receipts on completion of activities and timesheets for recording contractor time	✓
63	The system provides the ability to capture asset information at time of receipt and require additional approval for capital asset items	✓+



High performance. Delivered.

Result Confirmation against Functional Requirements

Req #	Requirement	Confirmation
<u>Contract Compliance:</u>		
64	The system provides the ability to ensure that pricing and payment terms are met during PO and Invoice processing	✓+
65	The system provides the ability to maintain basic contract information and related attachments	✓+
66	The system provides the ability to notify contract stakeholders when the contract approaches expiration or total spend is nearing the contract maximum	✓+
67	System provides the ability to support tiered pricing agreements	✓+
68	System provides the ability to update requisition item pricing when contract volumes are met	✓+
<u>Financial (ERP) System Interfaces:</u>		
69	The system provides interface channels to integrate to one or more back end systems (i.e. NCAS, Community College Colleague System, etc.)	✓ Enhancement
70	The system provides the ability to take updates from ERP Master Data no less than daily to minimize data discrepancies	✓ Enhancement
71	The system provides the ability to send Purchase Orders, Receipts, and reconciled Invoices to the ERP as needed	✓ Enhancement
72	The system provides reconciliation information to ensure the interface transaction is complete and accurate	✓ Enhancement
73	The system provides the ability to integrate with back end system to facilitate budget checking and encumbrance	✓ Enhancement



High performance. Delivered.

Result Confirmation against Functional Requirements

Req #	Requirement	Confirmation
<u>Data Management:</u>		
74	System features, controls and transaction visibility should be driven based on user assigned roles and permissions maintained in the eProcurement system	✓
75	The system provides the ability to support the consistent use of the organizational commodity code classification system (e.g. UNSPSC, NIGP, etc.)	✓
76	The system provides the ability to support a standardized set of payment terms	✓
77	The system should provide administration tools or online forms to approved data administrators to update and manual data such as commodity codes, addresses, etc	✓
78	System provides the ability to reassign an approvable (i.e. requisitions, receipts) for users who are no longer valid in the system	✓ Enhancement
79	System provides the ability to archive system transactions	✓ Enhancement



Result Confirmation against Technical Requirements

Req #	Requirement	Confirmation
1	There is a State mandate to host in one of the State Data Centers. This provides for more complete disaster recovery planning and more controlled interfaces. Requests for exceptions can be submitted.	✓
2	Software as a Service (SaaS) could be considered as an alternative but would need to follow the standard exception request process.	✓
3	The State supports Oracle, SQL, and DB2 as preferred databases. Requests for exceptions to the standard can be submitted.	✓
4	The State supports WebLogic, WebSphere, and .Net as application servers. Requests for exceptions to the standard can be submitted.	✓
5	The State supports Windows Server, Unix, and Linux. When Linux is used, Red Hat is preferred. Requests for exceptions to the standard can be submitted.	✓
6	The application should present a layer of presentation device(s) in the DMZ, and isolate the application and database layers in non-publically-addressable networks, to be accessed only via the presentation device(s).	✓
7	Applications need to have their Application and Database layers separated physically and topologically.	✓
8	Budget checking and Encumbrance posting require near real time interfaces to the Procurement system.	✓ Enhancement
9	While Internet Explorer 8 is the standard browser in the State, there are no specific browser requirements.	✓
10	Microsoft Exchange is the primary State email server with Microsoft Outlook being the State standard email client. Other legacy applications may still be in use.	✓



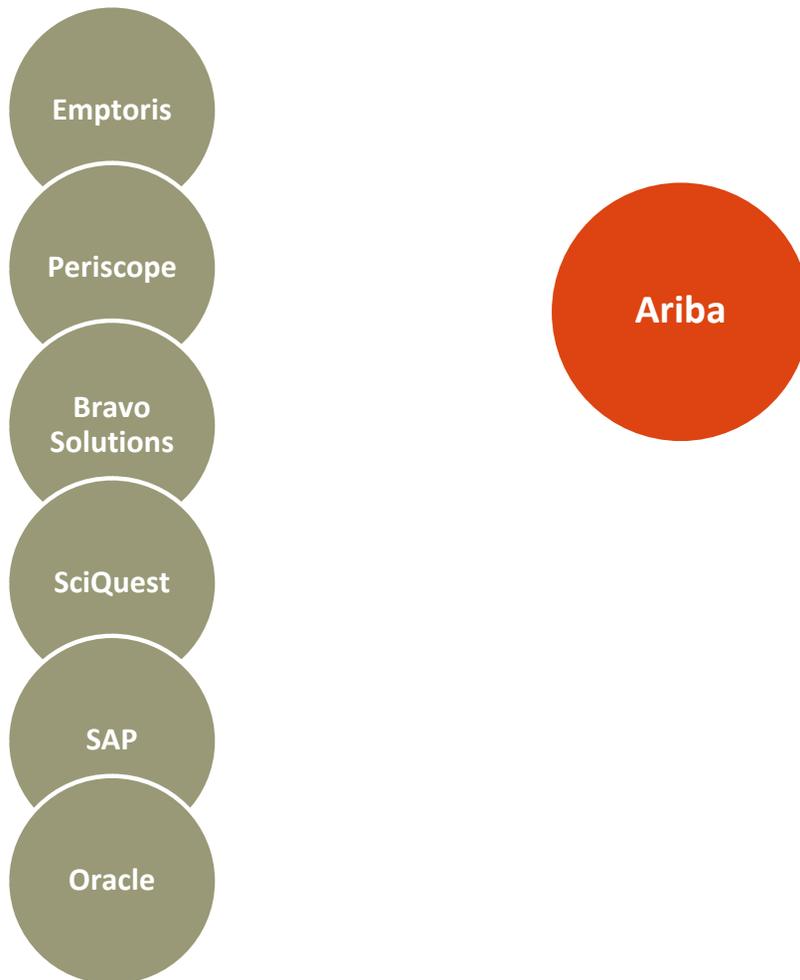
Result Confirmation against Technical Requirements

Req #	Requirement	Confirmation
11	Any system transferring personal information across the network must do so in an encrypted protocol. This includes but not limited to Vendor IDs that utilize Social Security Numbers , Tax IDs, personal address Information, and PCard Information.	✓
12	Solutions should be ADA Section 508 and/or W3C Web Accessibility Initiative (WAI) compliant.	* See Below
13	Solutions utilizing Purchasing Card data including the transmission and storage of that information must be PCI compliant.	✓
14	Solution should be able to meet varying State data retention requirements based on specific requirements per the relevant business owners.	✓
15	Documentum is the State preferred standard for a document repository.	NA
16	The solution should integrate to the State Identification system (NCID, based on Novell Directory) to authenticate users. User include State employees, affiliated State Entities, Citizens, and Vendors. LDAP and Active Directory calls can be used to integrate with this system.	✓ Enhancement

* Ariba provides a separate document that summarizes which of the ADA standards are applicable or not, and which standards are supported.

Ariba 9r1 was validated against the States High-Level requirement and met the majority of them.

Not Considered
Further



Key Points

- Some existing customization can be reused to meet enhancement based requirements
- Additional requirements such as Contract Compliance can be added via additional modules

Buying Tool Evaluation Approach

Technical Assessment Results

Solution Evaluation Results

Recommendation

Recommendation

Recommendation:

It's recommended that Ariba Buyer be retained and upgraded as the core eProcurement system for the State of North Carolina and affiliated entities.

Rationale:

- The current system is meeting the majority of the core procurement needs, with the exception of a few areas (e.g. catalog search) that can be addressed in the upgrade.
- It is cost prohibitive to do a full-scale replacement of the current platform with a different solution when there are little to no incremental benefits.
- This recommendation best leverages existing technology investment, including the interface to NCAS, NC OpenBook as well as interfaces to community colleges and LEA's
- There is currently no committed plan or funding to implement a core Financial Suite such as SAP or Oracle (e.g. doing a second phase of Beacon for SAP Financials).
- Upgrading the current system, as opposed to doing a full-scale replacement, allows the State to focus effort and resources on addressing more strategic areas such as reporting and contract management.





Recommendation – Key Improvement Areas

Opportunities and Supporting Recommendations

- As part of the proposed Ariba Buyer upgrade, the following opportunities and recommendations should be considered as part of the upcoming implementation planning phase:

Area	Opportunity	Recommendation
<p>General Upgrade Considerations</p>	<ul style="list-style-type: none"> Since the original go live in 2001, the current eProcurement system has worked well and met the base needs for requisitioning, PO processing and receiving. <p>However, it's also been subject to a lot of customizations and has accumulated 9+ years of transaction history</p> <p>There are new features of Ariba that should be considered and opportunities to refine or re-implement some customizations that will provide for easier maintenance and upgrades in the future.</p> <p>In addition, the Ariba Buyer upgrade provides a window to address interface and process improvement opportunities such as automating interfaces with DOT's SAP system</p>	<ul style="list-style-type: none"> Consider starting with a fresh installation and don't convert historical transactions (only convert open PO's not fully received or no receipt within certain time). Review and evaluate current customizations and determine which are mandatory to apply going forward. Look to simplify and standardize where possible. Implement customizations and workflow rules using new development methods and configuration options to simplify ongoing maintenance requirements and effort As part of implementation planning for the upgrade, consider adding deferred scope of Contract Management to provide full contract repository, standard terms and clause library, authoring and version features as well as new Reporting / Analytic capabilities. Evaluate opportunities to integrate with Department of Transportation's SAP system. Further detailed analysis will be required.

Recommendation – Key Improvement Areas

Area	Opportunity	Recommendation
Catalog Content & Management	<ul style="list-style-type: none"> • Many eligible contracts have not been converted to catalogs and many catalogs are considered out-of-date. • Users have too many product options, making search (including punch-out sites) challenging. Opportunity to improve via strategic sourcing. • No tools are available to easily review and audit punch-out products and pricing. • Catalog filtering (limiting what users can see which catalogs) could be used to improve user experience. 	<ul style="list-style-type: none"> • Refine or reduce number of available products through structured strategic sourcing initiatives. • Implement improved processes and internal service level agreements regarding implementing catalogs for new contracts and keeping catalog content up-to-date and reflective of expiration dates. • Consider implementing catalog filtering, effectively assigning some catalogs to all users and others to restricted groups based on role or function.
Catalog Search	<ul style="list-style-type: none"> • Provide better search features such as product search refinement, product comparison and better use of pictures (more Amazon like) • Improve the product hierarchy to make it more intuitive and easier to find “most common” items and punch-out sites. • Potentially make catalogs accessible to other eProcurement systems (e.g. those used by universities or other areas). • Product descriptions and search data should be optimized based on most common searches. 	<ul style="list-style-type: none"> • Implement tools to provide better features for catalog search to help users find contracted items more easily. • Implement a new catalog hierarchy, not based on general NIGP codes but based on simple descriptions and optimized for most commonly purchased items. • As part of “Implementation Planning” phase, complete evaluation of Ariba 9r1 (upgrade) catalog features and compare against 3rd party catalog search tools such as SciQuest (for potential implementation). • Potentially decouple catalog search from eProcurement (like plug-in), and implement such that catalog can be used as a potential plug-in for universities or other entities

Recommendation – Key Improvement Areas

Area	Opportunity	Recommendation
Workflow Simplification	<ul style="list-style-type: none"> • System is highly customized to meet unique agency requirements. Opportunity to simplify and standardize. • Complexity of workflow may create system performance issues as workflow is generated. • Most transactions require 3 or more approvals, even if purchasing low-dollar, contracted items, lengthening approval and processing times and encouraging users to “work around” the system. 	<ul style="list-style-type: none"> • As part of the Ariba upgrade, evaluate opportunities to simplify and standardize the agency workflow requirements. • Consider implementing fewer required approvers, esp. for contracted catalog items to decrease cycle times for items that have already been competitively bid and contracted.
System Performance	<ul style="list-style-type: none"> • Evaluate current reported issues in system performance and look for both short-term (and long-term as part of upgrade) opportunities to improve the user experience. 	<ul style="list-style-type: none"> • As part of the upgrade, do not convert historical transactions, reduce number of customizations, simplify workflow (see above) and establish performance response baselines.
Training	<ul style="list-style-type: none"> • High turnover of staff increases need for training • Training could be more effective if role or activity based and available via web as needed. • Training should include not just system, but supporting processes and policies. 	<ul style="list-style-type: none"> • Develop role or activity based training and make training guides and tools accessible via the web so users can access the training as needed and don’t have to wait for scheduled sessions. • Increase training for professional purchasing staff to maximize compliance and use of system. Focus on areas such as when to use catalogs, what to request from suppliers to maximize search effectiveness, when to best use punch-out sites, etc.



Recommendation – Key Improvement Areas

Area	Opportunity	Recommendation
Reporting & Analytics	<ul style="list-style-type: none">• Improve the accessibility and ease of use for various users to analyze and report on spend and payment data.	<ul style="list-style-type: none">• Opportunities for improvement will be addressed as part of the Reporting Technology Assessment in January.
Contract Management	<ul style="list-style-type: none">• System could be used to track basic contract information, as well as generate notifications of upcoming expiration or when contract is approaching a pre-set maximum amount.• Contract compliance functionality could be used to ensure pricing and payment terms are met during PO processing.	<ul style="list-style-type: none">• This is currently not in scope for the Technology Assessment, but recommend addressing it in a later phase.

Catalog Search and Content Management

Catalog Search Product Evaluation:

- In order to increase user satisfaction and maximize contract compliance, the State should evaluate the opportunity to maximize search effectiveness of online catalogs.
- Although Ariba provides new and improved capabilities as part of Ariba 9r1, it's recommended to evaluate and compare these features against similar capabilities provided by catalog-content and search providers such as SciQuest and Ariba's hosted Procurement Content solution.
- It's recommended to complete this due diligence review in the implementation planning phase.
- In addition it is recognized that the tool itself will not address all the issues and that related process changes in content management will be required.

Catalog Search Tools

- Implement tool with leading practice capabilities.
- Evaluate catalog content providers:
 - Ariba 9r1 Functionality
 - Ariba Procurement Content (APC)
 - SciQuest Content Services
- Analyze content decoupling from procurement solution to enable use across multiple systems (e.g. to enable plug-in catalog capabilities of procurement systems used by universities).

Catalog Content Management Process

- Reduce number of items in catalogs through Strategic Sourcing and Contract Management
- Consider the use of content filtering to deliver targeted results to users
- Increase use of item images to provide "more Amazon like" content
- Rebuild content hierarchy to drive users to most common items and punch-out sites
- Optimize product descriptions and search terms to improve search effectiveness.



Recommendation – Optional Areas for Consideration

Accenture also recommends that the State consider additional procurement functionality during the implementation that many leading practice organizations have implemented, subject to funding availability and impact relative to other procurement transformation priorities.

Capability	Leading Practices
Invoice Acceptance	<ul style="list-style-type: none"> • The majority of invoices (target 80+%) are received electronically via XML or EDI and transferred directly into reconciliation system • Paper invoices are received via a centralized mailbox and data entry is done centrally • Invoices are provided and captured at line item level for matching and spend visibility • System validation is completed against invoice submission rules and auto-rejects incomplete, invalid and duplicate invoices • Procurement cards are used where appropriate as payment method as replacement to individual paper invoices (e.g. ghost cards) • Suppliers should have the ability to check the status of their invoices and payments online
Invoice Matching & Exception Processing	<ul style="list-style-type: none"> • All invoices are reconciled via automated 3-way matching where matching errors trigger notification and exception processing • Only invoice exceptions (including processing of non-PO invoices) require user involvement. • Early payment discounts are actively managed to maximize cost savings • Tolerances (e.g. shipping costs) are maintained at a level to optimize the matching process
Travel & Expense Management	<ul style="list-style-type: none"> • Online system available to all staff to submit Travel Authorizations and Expense Reimbursement Requests • Travel and Expense system uses standard item categories and policy rules and limits. • Financial coding information (Cost Center, GL Account, Project, etc.) can be defaulted from a user's profile (pre-defined selection) and updated at time of travel authorization or reimbursement request. • Travel authorizations and/or expense reports are routed and approved using standard workflow rules with the same approval features as requisitions. • Travel system supports online acknowledgement of expense receipts as well as audit selection based on various criteria such as amount, policy violations, specific item categories and random selection.