SOV Ecosystem of Best-of-Breed Cloud Platforms for Application Modernization

Business SaaS Tools
- Office 365
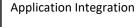- Microsoft Teams
- workday
- salesforce

Public Facing Applications
- salesforce
- NIC
- Azure App Service

Application Integration
- MuleSoft

ID Services	Doc Mgt Services	Communications	BI/Analytics	Geospatial Services	Payment Processing	Helpdesk / Customer Service
okta	OnBase by Hyland / DocuSign	nwn / everbridge / twilio	Power BI	esri / Google APIs	NIC	salesforce

Data Management/Warehousing
- Microsoft SQL Azure
- snowflake
- VITL

Cloud Infrastructure
- vmware
- paloalto NETWORKS
- Azure
- amazon web services
- Google Cloud Platform

Monitoring/
- splunk>
- vmware

Security
- paloalto NETWORKS
- CROWDSTRIKE
- Nessus vulnerability scanner

VERMONT

Where we began

- Cataloged @1500 major business applications in 2017
- Massive redundancy – e.g., more than 200 customer/case management solutions across the state.
- Data Management/Sharing Obstacles – Little to no data sharing or data governance across the catalog.
- Support/Maintenance Obstacles – Vast majority of the catalog are custom applications which require heavy investment to extend and maintain as needs evolve.
- Alignment of Technical Staff Skills - Applications written several dozen different programming languages or language frameworks. Major gaps in our workforce in some critical areas (e.g, mainframe
- High Risk Portfolio/Tech Debt – Age and fragmentation have left us open to more frequent breakages, poor general performance and more frequent and higher urgency cybersecurity vulnerabilities.

How we defined the ecosystem

- Understand what we have – Gathering and reporting on our app portfolio

- Determine what's not working optimally: Business Need, Security, Maintainability, Costs and Performance. (e.g., our Risk Ranking tools)

- Understanding Alternatives – Market-inquiry, Peer-inquiry, Industry-Analysis (e.g. Gartner Magic Quadrant)

- Review Criteria
  - Meets the need (based on business use cases)
  - Costs - Time, Money, and Productivity
  - Credibility - Longevity, Stability, Sustainability
  - Workforce Readiness – skills and available resources for adoption and ongoing support.
  - Technical Fit – Alignment with our broader Data, Network, Infrastructure
  - Security & Compliance
  - Hands on - Proof of concept, Proof of Value, Pilot efforts

What we're experiencing

- **Reduced time to benefit** – No need for infrastructure and low-code. E.g, The state has built 30 applications on the Salesforce platform in the most recent 2.5 years. The ecosystem diagram is "current state" rather than aspirational.

- **Predictable costs** – We've been able to shift IT costs from Capex to Opex. The platforms in this ecosystem are pay-as-you-go, only pay for what we use.

- **Scalability, Compatibility, Extensibility** – Because the platform is cloud-based; open/web-based methods of interaction, integration and extension are common across cloud platforms. Many of our platforms have their own "app stores" of 3rd party solutions ready-to-use web plug-ins.

- **Always Up-to-Date** – Our cloud ecosystem ensures that we no longer pay for platform upgrades. All customers are on the same/latest release.

- **Data Security** - To survive our cloud platform vendors must have a strong focus on security and data protection as a discipline. Security is a core competency. It's part of their value add as a strategic partner.

- **Our Data Gains Valuable** - Data and analytics are more easily captured and available through quick reporting tools because the information is found in shared/centralized locations.

- **Supports Business Continuity in Times of Crisis** – Vendors utilize public cloud infrastructure (Azure, AWS, Google,etc), our data is synchronized real-time in multiple locations across the country. Any site with troubles automatically redirect users to available instances.

What is ERP

What is ERP?

ERP is a collection of technologies that integrate business functions, such as finance, Human Resources, purchasing, fiscal data information, operational aspects, reporting, and distributing information through tight linkages from operational business transactions to financial records.

How is ERP being used?

There are three distinct components in ERP.

- **Financial:** The financial systems manage, track and report on the State's finances, Budget, and compliance.

- **Human Capital Management:** Human Resource systems that manage employee information, benefits, payroll, learning, and resource recruitment.
- **Grants Management:** Grants Management are tools used by Agencies and Departments for fiscally managing, tracking, and reporting on State grants.

Who uses ERP?

ERP is used by all Agencies and Departments.

Agencies using ERP

Agency	Application	Function
Dept Human Resources	PeopleSoft	Human Capital Management
Dept of Financial Management	PeopleSoft (Vision)	Financial Management
Dept of Financial Management - Budget	CGI Advantage	Budget and Planning
Agency of Transportation	IBM Mainframe (STARS)	Financial Management and Procurement
Dept of Labor	IBM Mainframe (FARS)	Financial Management and Procurement
Agency of Human Services	Salesforce	Grants Management
Dept of Environmental Conservation	Salesforce	Grants Management
Agency of Education	Salesforce	Grants Management
Agency of Agriculture	Salesforce	Grants Management
Agency of Commerce and Community Development	Salesforce	Grants Management
Public Utility Commission	Salesforce	Grants Management
Agency of Transportation	Deighton (VAMIS)	Asset Management and analysis
Dept of Buildings and General Services	Assetworks	Building, Leasing and Asset Management, Surplus Store, Fleet Management
Office Purchasing and Contracting	Ivalua	Contracting, Supplier and commodity procurement

ERP – Financials Project Request

Business Case	By modernizing the State's Finance and Management systems to a cloud-based Software as a Service (SaaS) will enjoy the following: • Support the State's workforce of 8000+ wherever they are with a system that has 99.7% availability. • Seamlessly integrate with third-party systems—no additional costs or middleware required. • Keep all fiscal information safe through contextual data security, continuous data privacy in the cloud, and always-on auditing. • Adopt new technology without rewriting code or buying a new version—innovation is built into the core of our system.
Scope	Modernize VISION by replacing the locally hosted system with a state-of-the-art, full suite of software modules as a Software-as-a-Service (SaaS) solution hosted by a selected platform vendor in the cloud. An advanced cloud-based software solution will be continuously updated, providing state-of-the-art security features as the technology changes through enhanced identification of security threats, faster and more reliable data recovery, and federal, state, local, and tax updates for proactive regulatory compliance.
Schedule	The anticipated start date for this project is State Fiscal Year 2024, with a completion date in State Fiscal Year 2026.

Implementation Costs	$11,800,000
Subscription Terms	
Option (A)	$8.5M for FIN modules for initial 5 years – if purchased separate from HCM & Budget
Option (B)	$5.97M for FIN modules for initial 5 years - if purchased with HCM Payroll & Budgeting
10 year combined savings	$4.87M combined HCM,Budget, FIN licensing savings if purchased together for 10yr term

ERP – Financials Licensing Options

5-yr term HCM Payroll & Budgeting on Workday, no move for Vision/STARS/FARS

Currently Funded	5-year total	10-year total
Workday - HCM, Payroll & Budgeting (5yr)	$ 12,000,000	$ 24,000,000
Vision Licensing (*1)	$ 5,127,548	$ 10,255,095
Vision Hosting	$ 4,147,148	$ 8,294,295
AOT STARS	$ 3,174,428	$ 6,348,855
VDOL FARS	$ 557,500	$ 1,115,000
total	$ 25,006,623	$ 50,013,245

5+2yr term HCM/Budgeting. 5yr Financials purchased at FY25, co-term together

Current HCM Budget with Start FIN in 3rd year	5-year total	10-year total
Workday - HCM, Payroll & Budgeting (5yr)	$ 12,000,000	$ 24,000,000
Workday - Finance	$ 5,100,000	$ 13,600,000
Vision Licensing (*1)	$ 3,076,529	$ 3,076,529
Vision Hosting	$ 2,488,289	$ 2,488,289
AOT STARS	$ 1,904,657	$ 1,904,657
VDOL FARS	$ 334,500	$ 334,500
total	$ 24,903,974	$ 45,403,974

10-YR HCM/Budgeting. Financials purchased FY25, co-term together

New Proposal - Option A	5-year total	10-year total
HCM, Payroll & Budgeting (10yr)	$ 8,795,000	$ 20,145,000
Financials co-term add-on mid-contract	$ 8,500,000	$ 13,600,000
Vision Licensing (*1)	$ 3,076,529	$ 3,076,529
Vision Hosting	$ 2,488,289	$ 2,488,289
AOT STARS	$ 1,904,657	$ 1,904,657
VDOL FARS	$ 334,500	$ 334,500
total	$ 17,295,000	$ 33,745,000

10-YR HCM/Budgeting and Financials purchased together.

New Proposal - Option B	5-year total	10-year total
HCM, Payroll, Budgeting & Financials (10yr)	$ 10,625,000	$ 28,875,000

Notes (*1,2,etc)	5-year Savings	10-year Savings	
1. In Fy22, Licensing model with Oracle caused an addtional $2.5m 10-yr costs due to licensing model. Additional federal funds in fy23 could cause an additional increase.		$ 16,268,245	Total savings Option A
		$ 21,138,245	Total savings Option B
		$ 4,870,000	Licensing Model Savings

ERP Licensing & Support Savings

Yrly $ 2021	Yrly $ 2031	10yr $ Yrly Avg	Product	Use	Type	Agency	Notes	Avg Yrly $ - 5y Base	Avg Yrly $ - 10y All-In	Use	Type	Agency	Notes
$825,000	$1,019,000	$922,000	DHR/Oracle PeopleSoft	Human Resources	License/Support	AOA/DHR	DHR portion of $1.49m annual ERP Oracle bills	$2,000,000	$2,887,500	Human Capital Management module	Subscription	AOA/DHR	02/2021 Quote
$258,000	$318,800	$288,400	CGI PB Advantage	Budgeting	License/Support/Host	AOA/F&M	FIN 8/19 ITABC	$240,000	Included	Budgeting module	Subscription	AOA/F&M	02/2021 Quote
		$0						$160,000	$160,000	Mulesoft Integration Platform	Subscription	AOA	ADS fee for service quote
$742,000	$916,859	$829,430	HCM/Budgeting Hosting	Peoplesoft HOSTING	On-premise hosting costs	AOA	DHR's half (other half is vision) - 2020 SLA Bill	$0	$0	Hosting	SaaS included in subscription	AOA	02/2021 Quote
$1,825,000	**$2,254,659**	**$2,039,830**	**ITABC Subtotal**					**$2,400,000**	**$3,047,500**	**ITABC Subtotal**			
			ERP IT Operational Expenses (Phase 2- Finance incl. Vision, STARS & FARS)										
$913,106	$1,137,913	$1,025,510	VIsion/Oracle PeopleSoft	Finance and Management	License/Support	AOA/F&M	Vision portion of $1.49m annual ERP Oracle bills	$1,800,000	Included	Finance and Management module	Subscription	AOA/F&M/VDOL/AOT	02/2021 Quote
$567,000	$702,771	$634,886	AOT STARS	Finance and Management	License/Support/Host	AOT		$0	Included	AOT ERP Support	Included in FIN subscription	AOT	02/2021 Quote
$100,000	$123,000	$111,500	VDOL FARS	Finance and Management	License/Support/Host	VDOL		$0	Included	VDOL ERP support	Included in FIN subscription	VDOL	02/2021 Quote
$5,000	$6,178	$5,589	Cornerstone	Learning Management	License/Support	AOA/DHR		$5,589	$5,589	Learning Mangement	Included in HCM subscription	AOA/DHR	02/2021 Quote
$150,000	$185,349	$167,675	SAP SuccessFactors	Recruiting	License/Support	AOA/DHR		$0	$0	Workday Talent Recuiting	Included in HCM subscription	AOA/DHR	02/2021 Quote
$742,000	$916,859	$829,430	Vision Hosting	Peoplesoft HOSTING			Vision's half (other half is DHR) - source 2020 SLA bill	$0	$0	Saas (included in subscription)		AOA	
$4,302,106	**$5,326,729**	**$4,814,418**	**Total Current Spend**					**$4,205,589**	**$3,053,089**	**Spend after full move**			
			Annual License Savings					**$96,517**	**$1,761,329**				

ERP – Proposed Timeline

Tasks	2022				2023				2024			
	Jan-Mar	Apr-Jun	July-Sept	Oct-Dec	Jan-Mar	Apr-Jun	July-Sept	Oct-Dec	Jan-Mar	Apr-Jun	July-Sept	Oct-Dec
Platform Initiatives												
Budget to Workday Adaptive												
RFP - Implementation			CGI Adaptive Replacement / Vision Integration									
Annual Batch Integration with Vision												
HCM to Workday												
Project Planning - Scoping												
RFP - Implementation			PS 9.1 VTHR Replacement / Vision Integration									
Integration effort to VISION												
Contract for SAP ends					SAP							
Contract for Cornerstone LMS ends					LMS							
Decision to add WD LMS & Talent Acquisition Module to HCM						WD Learning & Talent Acq. Models						
F&M, STARS, FARS												
Requirements Gathering for Workday CORE Financials						Requirements for STARS, FARS, F&M						
RFP - Implementation Workday CORE Financials						Common Financial Data Model						
RFP - Implementation Workday CORE Financials - STARS						Order of Implementation to be determined						
RFP - Implementation Workday CORE Financials - FARS												
RFP - Implementation Workday CORE Financials - F&M												

Related Procurement Efforts

2015 Consultant (Ciber) engagement to gather VISION & Stars Requirements

- **Vision_RTM.xlsx** - 4800 Requirements, 37 Major Business Functions, 200 Subfunctions

2017 KPMG Study contracted to help identify the best ERP operating model

- The best option for the operating model was determined to be a SaaS Cloud based software and infrastructure. An external vendor would be responsible for the implementation and transition of the key enterprise resource functions to a cloud based, multi-tenant, same-version-for-all platform. The State of Vermont would be not be responsible for the maintenance and hosting of the HCM application with this solution. The State believes Workday is the best offering available on the market today to help support ERP operations.

2017 VTHR RFI & 2018 VTHR RFP

- A Request for Information (RFI) is issued by the State of Vermont on behalf of the Department of Human Resources (DHR) to gather input, information and cost estimates to either maintain/upgrade or replace the current VTHR. (VTHR & Bugdet eplacement project approved last session)
- Workday Solution met all of DHR's Stated Objectives in the RFI.
    - ✓ Improve operational performance
    - ✓ Engage our people
    - ✓ Embrace growth and change
    - ✓ Positive overall budget impacts
- Workday indicated how the objectives expressed in the RFI can be met.
    - ✓ Every customer is always on the latest version and has the newest capabilities
    - ✓ There is only one version of truth that is continuously up-to-date
    - ✓ One consistent experience across the entire system
    - ✓ Security is set once and leveraged across all applications to minimize maintenance

Why Workday?

- SaaS requirement
- The solution will be built as a single system with a single source for data, single security model, and single user experience, it offers organizations a cloud-based system that evolves to meet changing business objectives in a changing world.
- The solution must be based on a flexible, business-oriented framework that bundles employees into groups based on cost centers, job specifications, reporting hierarchy, using low-code user friendly interfaces.
- as a SaaS application Workday is defined as one that is (1) sold on subscription, (2) hosted and managed by the application software vendor, and (3) delivered in a multitenant mode, which ensures that virtually all customers are using the latest version of the software. Workday only offers SaaS.
- Unified Platform requirement to support a unified data model
- Unified Platform to support ease of integration with other applications (such as our CRM, IAM, ECM, Security functions)
- Unified Platform to support maximum license/subscription reuse and savings
- Workday only unified platform (others are cobbled together and not yet mature)

Marketplace Recommendations

Forrester
ERP Systems

Gartner
Critical Capabilities for Cloud ERP

Workday States

- Maine
- Maryland
- Iowa
- Nebraska
- Nevada
- Oregon
- Oklahoma is scheduled to go live this spring.
- Washington is nearing completion and scheduling go-live.
- Independent States agencies including California Department of Justice, Texas Division of Emergency Management and California Health Benefit Exchange.
- many municipalities (e.g., City of Denver, Salt Lake City, etc)