

CHRISTINE M. SAKUDA
CHIEF INFORMATION OFFICER
LUNA 'ENEHANA

STATE OF HAWAI'I | KA MOKU'ĀINA O HAWAI'I DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES | KA 'OIHANA LOIHELU A LAWELAWE LAULĀ

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES | KE'ENA HO'OLANA 'ENEHANA

P.O. BOX 119, HONOLULU, HAWAII 96810-0119

September 30, 2024

The Honorable Ronald D. Kouchi President of the Senate and Members of the Senate Thirty-Second State Legislature State Capitol, Room 409 Honolulu, Hawai'i 96813

The Honorable Scott K. Saiki Speaker and Members of the House of Representatives Thirty-Second State Legislature State Capitol, Room 431 Honolulu, Hawai'i 96813

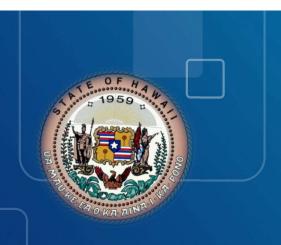
Aloha Senate President Kouchi, Speaker Saiki, and Members of the Legislature:

Pursuant to HRS section 27-43.6, which requires the Chief Information Officer to submit applicable independent verification and validation (IV&V) reports to the Legislature within 10 days of receiving the report, please find attached the report the Office of Enterprise Technology Services received for the State of Hawai'i, Department of Labor and Industrial Relations (DILR) Hawai'i Unemployment Insurance Modernization (Hui Huaka'i) Project

In accordance with HRS section 93-16, this report may be viewed electronically at http://ets.hawaii.gov (see "Reports").

Sincerely,

Christine M. Sakuda Chief Information Officer State of Hawai'i



HUI Huaka'i Project

Department of Labor and Industrial Relations (DLIR)

IV&V Monthly Status Report – [Final]

For Reporting Period: [July]

Draft Submitted: August 5, 2024

Final Approved:



Overview

- Executive Summary
- IV&V Findings and Recommendations
- Appendices
 - A IV&V Criticality Ratings
 - B IV&V Standard Inputs
 - C IV&V Details





Executive Summary

The Hawaii Unemployment Insurance Modernization (HUI Mod), HUI Huaka'i Project, is a multiyear Software as a Service (SaaS) implementation with a go-live date of March 2027. This is the first monthly status report deliverable and provides an overview of key aspects of the HUI Mod project from an IV&V perspective. The Project is in the early stages of Design, Development, and Implementation (DDI) and is currently in low-risk (green) status.

The PCG IV&V team submitted and received approval on the Project Management Plan, Assessment Report, and DED for the Monthly Status Report. During July, the team reviewed eight (8) document artifacts and provided insight and recommendations. Additionally, the team reported four (4) preliminary concerns, and three (3) project risks detailed in the IV&V Findings and Recommendations section of this report.

The PCG IV&V team will continue to attend requirement sessions, review project documentation and ADO boards, and document observations. The project RACI is currently being reviewed, and IV&V will report observations and recommendations in the August Monthly Report.



Executive Summary

[2 Months Prior]	[Prior Month]	[Current Month]	Category	IV&V Observations
			Project Organization Management	Project Management is Green with the following Observations : The HUI Huaka'i weekly status report, July 28, 2024, stated the project schedule baseline completion milestone date of 06/01/2024 has not yet been met. Baselining a project schedule ensures that the planned schedule is set as the standard for measuring progress and performance. IV&V Recommends: • Thoroughly reviewing and validating the project schedule with the project team and stakeholders. considering resource availability, constraints, and potential risks. • Obtaining stakeholder approval and setting the schedule as the baseline, i.e., the official project plan, once the schedule is approved. • Clearly documenting and communicating the baseline to all stakeholders. Related Findings: Finding #1 – Decision Maker Authority, Ownership, and Roles Finding #5 – Time Management for Extended Meetings Finding #7 – Access to the ADO Finding #9 - Baseline project schedule Finding #10 – Misalignment of Elicitation Session Agendas
			Cost and Schedule Management	The Project Schedule was trending Yellow but is now Green with the following Observations: The IV&V team reviewed the Project Schedule dated 05/22/24. IV&V Recommends: Summary tasks should not have predecessors and successors, but detailed tasks should. While not all tasks should need predecessors and successors in an agile schedule, there should be enough to demonstrate to stakeholders the flow of the project work. Including the Project Status Date, to ensure all stakeholders know how current the schedule is. Long-duration tasks should be broken down into smaller tasks. This will allow stakeholders to identify where issues are occurring. Assigning resources to the detailed tasks.

[2 Months Prior]	[Prior Month]	[Current Month]	Category	IV&V Observations
			Requirements Management	Observations: • There are anomalies with the traceability and linking of the Requirements Traceability Matrix to Feature items in Azure DevOps • UI PMO proactively addressed deficiencies in the requirements-gathering process, putting effective mitigating procedures in place. The resulting requirements Action Plan has been provided to the DDI vendor • The DDI Vendor has committed to following the Action Plan and the following best practices as required by the State: • Strict adherence to best practice. • Utilize a comprehensive and consistent requirement-gathering methodology to ensure all requirements meet or exceed planned outcomes. • Fully leveraging process flows, data flows, wireframes, mockups, and other standard design elements and artifacts to convey the proposed to-be state. • Establish a common understanding regarding current-state processes, the out-of-the-box Data Station solution, and the future state. • High levels of quality within user stories and associated artifacts. • Clarity of the requirements gathering and optimization processes. • All parties should conform their efforts to the requirements Action Plan • Including application demonstrations to provide context to requirements sessions would provide valuable context for staff and may benefit OCM Related Findings: Finding #4 − Traceability Concerns in Requirements Traceability Matrix and Azure DevOps Feature Items Finding #11 − Pace of Requirement Completion



[2 Months Prior]	[Prior Month]	[Current Month]	Category	IV&V Observations
			System Architecture and Design	IV&V reviewed and provided recommendations on the Implementation Strategy document, versions 1 and 2. Overall, the Implementation Strategy document creates a good framework for their approach and for future documentation. High-level strategy and objectives were provided, and the expectation was that more detailed plans and information would be contained in the Go Live Playbook. Until the Go Live Playbook is finalized, IV&V cannot validate many of its observations and findings. Several recommendations were made as inclusions to the Playbook. IV&V Recommends: Inclusion of physical posture for user readiness in the Go Live Playbook or future documentation. The Go Live Playbook or Implementation plan should include information regarding operational readiness.



[2 Months Prior]	[Prior Month]	[Current Month]	Category	IV&V Observations
			Testing (Sprint, Unit, System, Integration, UAT)	Testing (Sprint, Unit, System, Integration, UAT) is Green with the following Observations : IV&V reviewed and provided recommendations on version 1 of the Testing Strategy document. The strategy document created a good baseline, but IV&V expects additional information to be included, as reflected in the comments and recommendations. IV&V Recommends: Including more details about how tools will be utilized, as well as information on environments and configuration/data posture. Including additional information in future documentation regarding the traceability of requirements and how these requirements will influence the definition, creation, and execution of test cases. Including more details on methodology and phases, or planned levels, of testing that will be executed (unit testing, regression, system integration, acceptance, etc.) Including a high-level testing schedule detailing activities, milestones, and retesting activities, in future documentation.
		L	Operational Preparedness	There are no updates for this period.



[2 Months Prior]	[Prior Month]	[Curren t Month]	Category	IV&V Observations
			Data Conversion / Management	Data Conversion / Management is Green with the following Observations : IV&V reviewed the Data Conversion Strategy document, versions 1 and 2. The strategy document provided a structured approach to managing the data conversion process. Status and reporting will be provided through the Data Conversion Traceability Matrix. The project has separate weekly data conversion and data cleansing meetings, which are progressing well. Data conversion activities are currently focused on completing the Data Dictionary. The data cleansing vendor is utilizing SAP Information Steward, a comprehensive software solution that helps organizations manage and improve the quality of their data through data profiling, monitoring, and information policy management. IV&V recommends: Including a rollback plan and process is included in future documentation. Including a project schedule detailing data conversion processes in future documentation. Creating a risk to the project for the lack of legacy data documentation, such as a data dictionary. Including legacy data source information in future documentation. Including a more in-depth training approach for conversion procedures and activities in future documentation. Defining a business glossary during data conversion. While defining a business glossary is not always the primary focus of the conversion process itself, integrating one into the data conversion phase can enhance overall data management. It is a strategic and beneficial practice.
		L	Security	There are no updates for this period.



[2 Months Prior]	[Prior Month]	[Current Month]	Category	IV&V Observations
			Training / Knowledge Transfer	 Training/Knowledge Transfer is Green with the following Observations: IV&V reviewed and provided feedback on Netacent's Training Plan, Version 2. The updated version includes a high-level timeline for training analysis, training development, train-the-trainer preparations, train-the-trainer training, final training, and refresher training. IV&V Recommends: Define the scope of work to be accomplished as the project progresses and recommend including a more detailed timeline for conducting each of these activities and for when classroom, online, in-person, and webinar training classes will occur. Ensure all training participants are informed; a definitive list of prerequisites and pre-assessments should be identified and communicated to all the training participants ahead of time for effective planning. In Version 1 of the plan, a list of six (6) deliverables (Training Plan, Training Needs Assessment, Training Curriculum, Training Artifacts, Training Assessment, and Training Performance Monitoring Report) were included. However, this list was missing in version 2. The latest version should be updated to include this list and the due dates for each deliverable. Include the roles and responsibilities of key Netacent training personnel to better understand Netacent's role in providing training.
		L	Interfaces	There are no updates for this period.
		L	Quality Management	There are no updates for this period.



[2 Months Prior]	[Prior Month]	[Current Month]	Category	IV&V Observations
			Software Development	There are no updates for this period.
			Human Resources Staffing Management	Human Resources Staffing Management is Green with the following Observations: The Resource Management Plan is in development. IV&V will update this category once the document is reviewed. IV&V Recommends: • Monitoring and tracking project resourcing as resources are onboarded/offboarded and the impact onboarding/offboarding has on team dynamics, team morale, project momentum, productivity, re-assignment of responsibilities, and knowledge transfer (KT). Related Findings: Finding #3 – Monitor and Track Project Resourcing
			Scope Analysis	There are no updates for this period.



[2 Months Prior]	[Prior Month]	[Current Month]	Category	IV&V Observations
		L	Contract Management	Observations: Positive Observation The HUI Huaka'i Project gave Netacent a Vendor Improvement Action Plan early in the project to establish a common understanding of the State's expectations. Additionally, they established a weekly review process to ensure the vendor remediated issues. Delivering a Vendor Improvement Action Plan early in the project clearly establishes the expectations of the vendor so that small problems don't become larger issues as the project progresses.
		L	Communication Management	Communication Management is Green with the following Observations : IV&V reviewed the Communications Strategy and Communications Management plan documents. The documents were measured against standards including CMMI-DEV, PMBOK, and ISO/IEC. The Communications Management Plan references a Communication Tracker, which is unavailable to IV&V to validate its content. IV&V made several recommendations to bolster existing plans and future communication plans and approaches. IV&V Recommends: Details regarding dealing with sensitive and confidential information and who authorizes it to be included in the process. Including additional details regarding how Netacent communicates and disseminates updates and corrections to previously distributed materials. Additionally, they should clarify what is reviewed in their regular review of the Communication plan and how that is communicated. Including additional details on preparatory and production work for key activities, the level of effort, and approximate preparation time before delivery. Including details of how information can be accessed between scheduled communications by stakeholders.



[2 Months Prior]	[Prior Month]	[Current Month]	Category	IV&V Observations
			Organizational Change Management	There are no updates for this period
				Risk and Issue Management is Green with the following Observations : IV&V reviewed the Draft Risk Management Plan document. The Risk Management Plan was measured against standards such as the PMBOK. The document creates a good baseline, but
			Risk & Issue Management	IV&V expects additional information to be included in the final plan, as reflected in the comments and recommendations. IV&V Recommends:
		L		 Defining all relevant inputs and outputs in the risk management process in an appendix. Considering risks at two levels (i.e., individual and overall) within the project.
				 Detailing the five steps of the vendor's risk management framework and including all relevant inputs and outputs of each step.
				Incorporating stakeholder risk appetite and thresholds into the plan.
				Outlining the communication plan for risk management.
				 Listing all relevant vendors, related state agencies, and third-party administrators (TPAs) with the relevant stakeholder types when defining the different roles and responsibilities.
				Including a section that lists the tools and software used for risk management.
				 Including a section that outlines the training requirements for the project team on risk management practices and initiatives.

[2 Months Prior]	[Prior Month]	[Current Month]	Category	IV&V Observations
		L	Technical Architecture	Technical Architecture is Green with the following Observations : IVV reviewed the Technical Architecture Strategy Version 1.0 document. The Risk Management plan was measured against standards maintained by PCG's Center of Excellence. The Final Technical Architecture Strategy document should include the following: IV&V Recommends: Documenting how the technical architecture supports the business vision, business objectives, and goals. Clarifying Data Station's .NET design framework and version. Elaborating on modern Angular or React-based UI development or moving in that direction. Provide an overview of the different Data Station modules and illustrate how they interact/ flow with each other. Including an appendix with an inventory of technologies, databases, tools, services, and third-party applications to be used. Provide information about data sources. Provide examples or evidence of how scalability is achieved. Documenting how the architecture would address potential single points of failure, redundancy, unexpected traffic spikes, and failover scenarios. Providing more information about Data Management. Documenting the governance policies that would be established and the maintenance responsibilities.

Project Management

The following slides list the findings in each category (focus area) that IV&V tracks throughout the project. Criticality ratings are provided by category and finding. Findings are itemized and described, including the impact on the project and recommendations for mitigating risk. A separate findings log spreadsheet can be referenced as supporting documentation to provide greater detail on each IV&V finding.

Findings will include Issue Analysis (Open/Closed Issues), Risks/Concerns/Observations/Deficiencies, and Recommendations for Remediation.

#	Key Findings	Criticality Rating
5	Preliminary Concern – Time Management for Extended Meetings: During Elicitation/Requirements Sessions, Demos, and other Extended meetings, IV&V observed some discrepancies in time and meeting management practices. IV&V participated in several 2+ hour meetings with no breaks for participants, leading to decreased engagement and productivity. Occasionally, facilitators provided ad hoc breaks, but this was inconsistent.	Low
Rec	ommendations	Status
• IV at to do m aq ac	We will be wil	Initial Report/ Recommendation

Project Management

#	Key Findings	Criticality Rating				
7	Preliminary Concern – Access to the ADO : It has been brought to the attention of IV&V that there are boards that our team that has not been fully granted access. This hinders IV&V ability to be prepared for each meeting.	High				
Rec	ommendations	Status				
	The need to have access to newly created boards helps with transparency and communication between all parties.					
• N	 IV&V recommends: New board is created that pertains to a requirements meeting. IV&V be granted access to view the board with ample time to review the contents in the board. 					



Project Management

#	Key Findings	Criticality Rating
9	Risk – Baseline the Project Schedule: The Project Milestone Performance section in the most recent weekly UI Modernization Status Report (20240728 Project HUI Huaka'i Weekly Status Report) has the baseline completion date of the project schedule as 06/01/2024 which is not yet met.	High

Recommendations	Status
Baselining a project schedule is a critical step in project management. It ensures that the planned schedule is set as the standard for measuring progress and performance.	Initial Report/ Recommendation
 IV&V recommends: Conducting a thorough review of the schedule with the project team and stakeholders. Validating the schedule's feasibility. Resource availability, constraints, and potential risks should be considered when validating feasibility. Obtaining stakeholder approval. Setting the baseline: Once the schedule is approved, set it as the baseline, i.e., the official project plan. Ensure that the baseline is clearly documented and communicated to all stakeholders. 	



Project Management

#	Key Findings	Criticality Rating
10	Preliminary Concern – Misalignment of Elicitation Session Agendas: <i>IV&V</i> observed that the agendas provided for the elicitation/requirements sessions are not consistently provided and not consistently accurate. This often leads to misalignment with the actual discussions during the meetings. Participants are instructed to prepare by reading and familiarizing themselves with the user stories and features to be discussed. However, the sessions often diverge from the prescribed agenda. Additionally, the meeting minutes, while accurately reflecting the discussions that took place, do not match the agenda distributed beforehand. This inconsistency hinders participants' ability to engage effectively, leading to inefficiencies and a lack of productive engagement.	Medium

Recommendations	Status
 IV&V Recommends: 1. Ensuring that meeting agendas are closely followed during Elicitation sessions to provide structure and allow participants to prepare and engage effectively. 2. Communicate any changes to the agenda in advance to give participants ample time to adjust their preparations. 3. Implement feedback to gather participant input on meeting effectiveness 	Initial Report/ Recommendation



Requirements Management

#	Key Findings	Criticality Rating
4	Risk – Traceability Concerns in Requirements Traceability Matrix and Azure DevOps Feature Items: IV&V identified anomalies with the traceability and linking of Requirements Traceability Matrix items to Feature items in Azure DevOps. During the review of the tax backlog features, IV&V found that 91 out of 149 Tax Features had no link to an existing Requirement. Several features were identified with the same title as an existing Requirement but were not linked (e.g., T1.71 is not linked to a feature, yet there is a feature with the same title within the tax backlog that isn't linked, such as Feature #39125). Numerous work items in Azure DevOps displayed related items listed as "Work item not found or no permission." Lack of traceability and proper linking can lead to incomplete or inaccurate tracking of project requirements and features. Potentially corrupted links may hinder project progress and cause delays. Misalignment between requirements and features could result in unmet project objectives.	Medium

Recommendations		Status
correct any corrupted or missing process to ensure ongoing tracea additional training or guidance to	thorough review of all related items in Azure DevOps to identify and links. Additionally, IV&V recommends establishing a routine audit ability and proper linking of requirements to features. If needed, team members on the importance of maintaining accurate and ments and features in Azure DevOps could be helpful.	Initial Report/ Recommendation



Requirements Management

#	Key Findings	Criticality Rating
11	Risk – Pace of Requirement Completion: At the current pace of completing User Stories in the Tax Backlog, IV&V is concerned the team will not be able to complete all 186 user stories in the allotted 120-day duration.	
	Supporting Evidence (As of 7/24/2024): Current Progress - Current Duration Completed: 20% of 120 days = 24 [business] days - User Stories Started: 11% of 186 = 20 items - User Stories Completed: 1% of 186 = 2 items Planned (Expected Completion Rate at the current 20% duration mark, ideally): - User stories that "should" have been completed: 20% of 186 = ~37 items Required/Ideal completion rate for timeliness: - Weekly Rate: Remaining Items/Remaining Weeks = 13.5 User Stories per week (184/13.6) This rate is significantly higher than the current pace of completion. This could result in project delays and timelines and several downstream impacts to development, testing, and other project areas. IV&V understands that these metrics are based on planned and expected, or ideal, rates. The project and completion rates will realistically vary throughout the requirements phase.	High

Recommendations	Status
Recommendations found on the following slide*	



Requirements Management

Recommendations	Status
IV&V recommends: 1. Assessing the current resources and their allocation, creating a recovery plan to reach the expected progress. 2. Optimizing meeting agendas and format of elicitation sessions to allow for efficient preparation and turnaround of User Stories. 3. Ensure individuals are held accountable and responsible for different stages of the User Story, in that they are responding and approving in a timely manner.	Initial Report/ Recommendation



• Human Resource Staffing Management

#	Key Findings	Criticality Rating
3	Preliminary Concern – Monitor and track project resourcing : It is the nature of IT projects that resources can be onboarded/offboarded during the project's duration. Onboarding/offboarding impacts project areas such as team dynamics, project momentum, and productivity.	Medium

Recommendations	Status
 IV&V recommends that the HUI Huaka'i project Monitor and track project resourcing as resources are onboarded/offboarded and the impact onboarding/offboarding has on areas such as team dynamics, team morale, project momentum, productivity, re-assignment of responsibilities, and knowledge transfer (KT). Provides a Resource Management Plan. 	Initial Report/ Recommendation



Appendix A – IV&V Criticality Ratings

See definitions of Criticality Ratings below:

Criticality Rating	Definition
Н	A high rating is assigned if there is a possibility of substantial impact to product quality, scope, cost, or schedule. A major disruption is likely and the consequences would be unacceptable. A different approach is required. Mitigation strategies should be evaluated and acted upon immediately.
M	A medium rating is assigned if there is a possibility of moderate impact to product quality, scope, cost, or schedule. Some disruption is likely and a different approach may be required. Mitigation strategies should be evaluated and implemented as soon as feasible.
	A low rating is assigned if there is a possibility of slight impact to product quality, scope, cost, or schedule. Minimal disruption is likely and some oversight is most likely needed to ensure that the risk remains low. Mitigation strategies should be considered for implementation when possible.

Appendix B – IV&V Standard Inputs

Artifacts reviewed during the reporting period:

- 1. Implementation Strategy, V1
- 2. Testing Strategy, V1 & V2
- 3. Data Conversion Strategy, V1 & V2
- 4. Communications Strategy, V1 & V2
- 5. Communications Management Plan, V1
- 6. Risk Management Plan 7.8.2024
- 7. 20240728 HUI Huaka'i Weekly Status Report
- 8. 11_TechnicalArchitectureStrategy_UI_Draft_v4

To keep abreast of status throughout the project, IV&V regularly:

- Attends the project meetings
- Reviews the project documentation
- Utilizes Eclipse IV&V® Base Standards and Checklists





Appendix C – IV&V Details

- What is Independent Verification and Validation (IV&V)?
 - Oversight by an independent third party that assesses the project against industry standards to provide an unbiased view to stakeholders
 - The goal of IV&V is to help the State get the solution they want based on requirements and have it built
 according to best practices
 - IV&V helps improve design visibility and traceability and identifies (potential) problems early
 - IV&V objectively identifies risks and communicates to project leadership for risk management

PCG IV&V Methodology

- Consists of a 4-part process made up of the following areas:
 - 1. **Discovery** Discovery consists of reviewing documentation, work products and deliverables, interviewing project team members, and determining applicable standards, best practices and tools
 - 2. Research and Analysis Research and analysis is conducted in order to form an objective opinion.
 - 3. Clarification Clarification from project team members is sought to ensure agreement and concurrence of facts between the State, the Vendor, and PCG.
 - **4. Delivery of Findings** Findings, observations, and risk assessments are documented in this monthly report and the accompanying Findings and Recommendations log. These documents are then shared with project leadership on both the State and Vendor side for them to consider and take appropriate action on.

Note: This report is a point-in-time document with findings accurate as of the last day in the reporting period.



Solutions that Matter