

2020

Hawai'i Annual Code Challenge (HACC)

Challenge Title	State of Hawaii Executive Branch IT Portfolio & Roadmap Visualization
Department / Organization	Office of Enterprise Technology Services (ETS)
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The Challenge	
Describe situation to be solved	State of Hawaii (Executive Branch) IT portfolio should be visible to the public.
Preconditions <i>(How does it work now)</i>	<ol style="list-style-type: none">1. ETS maintains a portfolio of all essential IT software systems/applications and IT projects of the State of Hawaii Executive Branch.2. This portfolio data is only visible internally - for State employees.3. There is no public view of the IT Portfolio.
Assumptions/Issues <i>(list any conditions that could impact s solution)</i>	<ol style="list-style-type: none">1. Select data on State's departments and agencies, IT applications and IT projects will be made available for HACC 2020 participants.
Current Approach <i>(how is situation currently being handled)</i>	<ol style="list-style-type: none">1. There is no public view of the IT Portfolio.
Users <i>(Who would use the application - employees or constituents or both? How many users would there be?)</i>	<ol style="list-style-type: none">1. Since the IT portfolio visualizations would be publicly available, all State of Hawaii constituents, including interested citizens as well as IT vendors, would be potential users of the visualizations.
Business Rules	<ol style="list-style-type: none">1. Data should be available via a public website; no user login is required2. Visualizations can use any of the data provided
Special Requirements	<ol style="list-style-type: none">1. Responsive web design is preferred, visualizations should be visible on computers as well as mobile devices2. Flexible and high-performing filtering of data in visualizations is preferred

<p>Technical Platforms <i>(in use or desired to be used)</i></p>	<p>Web-based design, viewable via all major web browsers</p>
<p>Data set to be used or collected</p>	<p>The following data sets, available at opendata.hawaii.gov, are expected to be used:</p> <p>Departments/Agencies <i>Data set home page:</i> https://opendata.hawaii.gov/dataset/departments-agencies <i>Direct URL:</i> https://opendata.hawaii.gov/dataset/ee25512b-82ab-43ed-a2d9-a170bf67d524/resource/50e32460-83ff-4c01-a40c-bcea5e76ae8d/download/20201019_usergroups.csv</p> <p>Data fields:</p> <ul style="list-style-type: none"> • ID • Name • Parent (for a division or an office the parent would be a department) <p>IT Applications <i>Data set home page:</i> https://opendata.hawaii.gov/dataset/applications <i>Direct URL:</i> https://opendata.hawaii.gov/dataset/9e1722fb-bbe7-4e58-a29b-2a756231d272/resource/9468a555-8d1f-42fb-b1a9-c3ae0d5c756d/download/20201022_applications.csv</p> <p>Data fields:</p> <ul style="list-style-type: none"> • ID • OwnerAgencyName (<i>can be used as a foreign key to Department/Agency</i>) • Name • Successors (<i>semi-colon-separated list of Applications, each separate application name can be used as a foreign key to Successor Applications to this Application</i>) • Business Capability • Business Criticality Possible values (1-4) in the order of increasing criticality include: <ol style="list-style-type: none"> 1. Administrative service 2. Business operational 3. Business critical 4. Mission critical • Functional Fit Possible values (1-4) in the order of increasing functional fit include: <ol style="list-style-type: none"> 1. Poor 2. Insufficient 3. Adequate 4. Excellent • Technical Fit Possible values (1-4) in the order of increasing functional fit include: <ol style="list-style-type: none"> 1. Poor

	<ul style="list-style-type: none"> 2. Insufficient 3. Adequate 4. Excellent <ul style="list-style-type: none"> • Planning Started (date) • Active (date) • End of Life (date) • TIME Recommendation (Tolerate, Invest, Migrate or Eliminate an application) • Hosting Model (On Premise, Co-Located, IaaS, PaaS, SaaS) • Major Information Systems (Yes=tag exists for the Application, No=tag does not exist for the Application) <p>IT Projects</p> <p>Data set home page: https://opendata.hawaii.gov/dataset/projects</p> <p>Direct URL: https://opendata.hawaii.gov/dataset/027f557b-12f9-47b5-9973-03b3f0525c1c/resource/3fb50c21-a7b2-4449-8368-d9061e001fb2/download/20201019_projects.csv</p> <p>Data fields:</p> <ul style="list-style-type: none"> • ID • OwnerAgencyName (<i>can be used as a foreign key to Department/Agency</i>) • Applications (<i>semi-colon-separated list of Applications, each separate application name can be used as a foreign key to Application</i>) • Name • Project Status • Business Value <p>Possible values (1-4) in the order of increasing business value include:</p> <ul style="list-style-type: none"> 1. Marginal benefit 2. Little benefit 3. Large benefit 4. Significant benefit <ul style="list-style-type: none"> • Project Risk <p>Possible values (1-4) in the order of increasing project risk include:</p> <ul style="list-style-type: none"> 1. Low risk 2. Moderate risk 3. High risk 4. Severe risk <ul style="list-style-type: none"> • Planning Started (date) • Approved (date) • Active (date) • Cancelled (date) • Completed (date)
<p>Data set calculations or reporting needs</p>	
<p>Solution Road Map</p>	

<p>Basic Flow <i>(steps of user action/system response)</i></p>	<ol style="list-style-type: none"> 1. User enters the site and sees an initial dashboard with key visualizations and metrics of the State's IT Portfolio (Applications and Projects) 2. User can navigate to more details on both Applications and Projects 3. Separately, user can navigate to a dashboard displaying data on Major Information Systems Modernization - see examples of possible visualizations in Appendix A – Major Information Systems Modernization
<p>Goal of Solution</p>	<ol style="list-style-type: none"> 1. Provide creative and insightful visualizations of the current state of the State's IT Applications and IT Projects 2. Provide creative and insightful visualizations of the State's IT Roadmap – i.e. the successor applications and those projects responsible for the transformation from the current state to the road-mapped future state of the overall IT Portfolio 3. Provide creative and insightful visualizations of the State's Major Information Systems modernization - see examples of possible visualizations in Appendix A – Major Information Systems Modernization
<p>Business Value <i>(potential financial or time savings)</i></p>	<ol style="list-style-type: none"> 1. Transparency of the State IT Portfolio for all constituents 2. Opportunity for innovation by the public and the vendor community for modernizing the State IT Portfolio
<p>Success Scenario <i>(how you know a solution is working)</i></p>	<ol style="list-style-type: none"> 1. The solution clearly demonstrates the current status of the State IT Portfolio 2. The solution demonstrates the State IT roadmap to the extent available by the data provided 3. The solution demonstrates the impact of incomplete portfolio data
<p>To be completed by the HACC Planning Committee</p>	
<p>Community/Industry Data Available</p>	
<p>Potential Community/Industry Co-Sponsors</p>	

Appendix A - Major Information Systems Modernization

Major Information Systems - Modernization Roadmap

● Eliminate
 ● Invest
 ● Migrate
 ● missing data
 ● Tolerate

