OREGON DEPARTMENT OF ENERGY

IT Strategic Plan

November 17th, 2023

Executive Summary

Vision & Mission

Vision: The Oregon Department of Energy's (ODOE) IT team aspires to provide technologically advanced and seamlessly connected tools thereby empowering each of our agency-wide strategic initiatives, while fostering collaboration, efficiency, and innovation.

Mission: To leverage the power of technology to anticipate the evolving needs of our agency. To offer proactive solutions, reliable support, and a commitment to IT excellence, thereby enabling our program staff to shape the energy future of our state.

Guiding Principles

Business Centricity: Always prioritize the end goals for the business vs. IT-specific needs. Ensure that our priorities are in support of the overall business priorities and strategic goals.

Customer Service Focus: Always deliver the highest level of customer service to end users. Each interaction should leave end users feeling like they had a positive experience with our team, even if their issue was not immediately solved.

Accountability: Take ownership of the body of work and the outcomes therein. Celebrate success, learn from failure, always be responsible for the services and solutions we provide.

Documentation and Standardization: Documentation should exist for all bodies of work that identifies where, what, and how work is accomplished. Processes should be standardized to ensure IT excellence and smooth transition when there is employee turnover.

Strategic Goals for 3-5 Years

Drive Operational Efficiency and Deliver Data-Driven Insight: Modernize ODOE's data infrastructure by establishing an agency-wide data warehouse, enforcing a data governance framework, and automating key data ingestion and visualization processes.

Optimize Applications and Processes to Enhance Customer Experience and Increase Operational Agility: Address vulnerabilities and end-of-life status in existing applications and transition from low-code solutions to robust, documented, and scalable solutions.

Key Initiatives

Improved Help Desk End User Experience: Addressing the lack of documentation to improve service efficiency and our succession planning posture.

Improved Stability in End User Software Licensing: Streamlining and documenting vendor interactions to ensure no business impact to agency's software licenses.

IT Service Management Improvement: Upgrade the Help Desk tool to improve service to our internal customers and ensure a more data-driven approach to gathering operational metrics.

Enhanced Data Quality Assurance: Each data set should go through a series of validation steps to ensure that only high-quality data is stored and served from our data warehouse.

Improved Access and Availability of Data: Our data customers should have easy access to all the data they need to do their jobs on a day-to-day basis.

Metrics & Targets

While Service Level Agreements (SLAs) have been set, they are pending effective implementation through a new ODOE IT Service Management system. Key metrics include average response and resolution times, ticket volume and type, and customer satisfaction.

Each of the strategic goals and key initiatives listed in the IT Strategic Plan has its own metrics. Please see the document for further information.

Conclusion

ODOE's IT Strategy is designed to be adaptable, forward-thinking, and business-centric, ensuring that the agency remains at the forefront of technology-driven solutions. This plan is not just about improving IT infrastructure but ensuring that IT becomes the backbone of ODOE's drive to shape the energy future of the state.

Agency Drivers

Vision

The vision of the Oregon Department of Energy (ODOE) is a safe, equitable, clean, and sustainable future.

Mission

The Oregon Department of Energy helps Oregonians make informed decisions and maintain a resilient and affordable energy system. We advance solutions to shape an equitable clean energy transition, protect the environment and public health, and responsibly balance energy needs and impacts for current and future generations.

Our Values

- We listen and aspire to be inclusive and equitable in our work.
- We are ethical and conduct our work with integrity.
- We are accountable and fiscally responsible in our work and the decisions of our agency.
- We are innovative and focus on problem-solving to address the challenges and opportunities in Oregon's energy sector.
- We conduct our agency practices and processes in a transparent and fair way.

ODOE currently has five high-level strategic imperatives, each with objectives and metrics tied to it.

What We Do

In addition to updated mission, vision, and values, ODOE also clarified our "position." On behalf of Oregonians across the state, we achieve our mission by providing:

- A Central Repository of Energy Data, Information, and Analysis: We research, collect, and analyze data and information to inform state energy planning, regulation, program administration, and policy development.
- A Venue for Problem-Solving Oregon's Energy Challenges: We convene constructive conversations about Oregon's energy challenges and opportunities that consider a diverse range of perspectives, foster collaboration and innovative solutions, and facilitate the sharing of best practices with consumers and stakeholders.
- Energy Education and Technical Assistance: We provide technical assistance, educational resources, and advice to support policy makers, local governments, industry, energy stakeholders, and the general public in solving energy challenges and meeting Oregon's energy, economic, and climate goals.
- Regulation and Oversight: We manage the responsible siting of energy facilities in the state, regulate the transport and disposal of radioactive materials, and represent Oregon's interests at the Hanford Nuclear Site.
- Energy Programs and Activities: We manage and administer statutorily authorized energy programs to save energy, support the state's decarbonization efforts, make communities more resilient, and position Oregon to lead by example.

Key Strategic Imperatives

Expand and Improve Stakeholder Engagement

- Increase diversity of agency stakeholder groups, rulemaking, oversight, and advisory boards.
- Year-over-year increase in agency engagement with organizations representing historically and currently underserved populations and communities.
- Year-over-year increase in the external use of agency produced reports, studies, and presentations.

Build Practices and Processes to Achieve More Inclusive and Equitable Outcomes

- Year-over-year increase in percent of agency job applicants identifying as Black, Indigenous, and People of color.
- Year-over-year increase in the percent of historically and currently underserved populations and communities participating in ODOE programs and services.
- Increase agency Diversity, Equity, and Inclusion awareness and fluency.

Assess and Enhance Organizational Data Capabilities

- 100% of specified agency products (e.g., produced reports, studies, and analyses) use standardized agency data methodologies or tools.
- Year-over-year increase of collection, review, and analysis of data.
- Year-over-year increase in data sharing relationships.

Assess and Modernize Agency Programs and Activities

- 100% of ODOE programs and activities align with ODOE mission and position statements.
- Complete assessment of ODOE work in the context of the state’s energy ecosystem to identify redundancies and gaps.

Optimize Organizational Efficiency and Impact

- Increase average Gallup Q12 engagement score to at least 4.0 (out of 5.0)
- Increase "Efficient and effective processes & procedures" (Whole Systems Model) survey score to at least 3.5.
- Increase in Key Performance Measure customer satisfaction score to at least 95%.

Current IT Landscape

Governance

In early 2023, under DAS's guidance, ODOE decided to reform the governing bodies that oversee the IT functions in the agency. At the time, there were three governing bodies:

1. The IT Steering Committee
2. IT Governance
3. Data Governance

Agency leadership decided that in order to right size our governance structure, we would condense down to one governing body, chaired by the Director, and that all subsequent governance work could be funneled up through workgroups. The IT Governance Committee is tasked with:

- Ensuring that the agency's IT work is providing value to the agency and is aligned with the agency's mission, goals, and values.
- Ensuring that IT provides excellent customer service to the agency.
- Increasing awareness of IT projects and initiatives across the agency.
- Reviewing and approving agency-wide IT policies and procedures.
- Reviewing and approving agency-wide IT improvements.
- Reviewing and prioritizing major IT initiatives.

The first workgroup that was established was the Data Workgroup. This group is tasked with:

- Identifying data sets of interest throughout the agency or external to the agency.
- Validating data quality in new or existing data sets.
- Identifying critical data set metadata, processes, and procedures.
- Identify how critical data sets are presented (charts & graphs, widgets, tabular data, data sources, etc.)

Application Inventory

The ODOE IT team supports a wide range of line of business applications. In total, we support roughly 35 customer-facing SaaS applications, 3 custom built in-house applications, roughly 30 custom Dynamics implementations, 25+ (and growing) IT-facing applications.

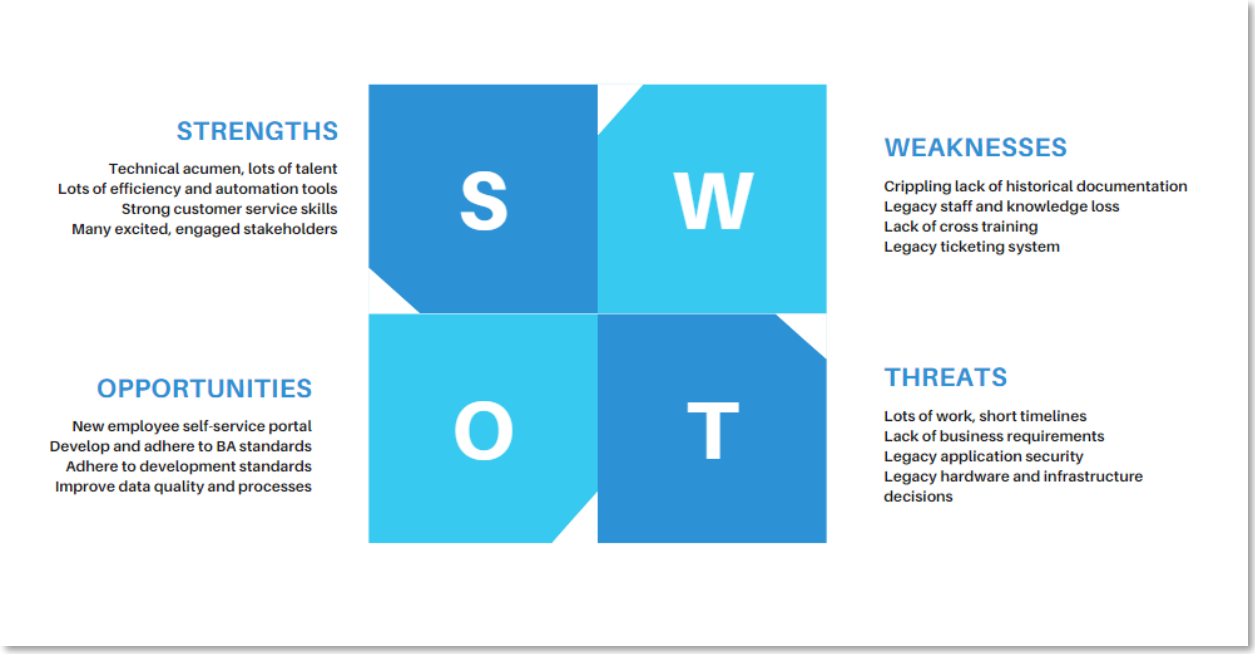
Service Catalog

We are working to define the level of service for each of the above applications. It will be defined on our Employee Self-Service Portal and a rough outline has been included as an appendix.

The core of the services we offer to the agency are as follows:

- Helpdesk Support

- Low Code / No Code Development
- Custom Web Application Development
- Cloud / On-Premises Database Services
- Business Analysis
- GIS
- Data Visualization
- Public Records Requests



IT Context

IT Vision & Mission

ODOE's IT Vision Statement: A technologically advanced and seamlessly connected agency where IT empowers every energy initiative, while fostering collaboration, efficiency, and innovation.

ODOE's IT Mission Statement: To leverage the power of technology to anticipate the evolving needs of our agency. To offer proactive solutions, reliable support, and a commitment to IT excellence, thereby enabling our program staff to shape the energy future of our state.

Guiding Principals

- **Business Centricity** – Always prioritize the end goals for the business vs. IT-specific needs. Ensure that our priorities are in support of the overall business priorities and strategic goals.
- **Customer Service Focused** – Always deliver the highest level of customer service to end users. Each interaction should leave end users feeling like they had a positive experience with our team, even if their issue was not immediately solved.
- **Accountability** – Take ownership of the body of work and the outcomes therein. Celebrate success, learn from failure, always be responsible for the services and solutions we provide.

- **Documentation and Standardization** – Documentation should exist for all bodies of work that identifies where, what, and how work is accomplished.

Goals

The biggest strategic goals for the IT team on a three-to-five-year time horizon are as follows:

- Drive Operational Efficiency and Deliver Data-Driven Insight
- Optimize Applications and Processes to Enhance Customer Experience and Increase Operational Agility

Drive Operational Efficiency and Deliver Data-Driven Insight

Description

ODOE has historically struggled to quickly produce data visualizations and analysis for the Biennial Energy Report (BER), Biennial Zero Emissions Vehicles report (BiZev), and other reports. Each time a new biennium is upon us, data sets and visualizations are manually cleaned or re-created. The IT team can utilize existing technology to streamline the data lifecycle and provide robust data pipelines for analysis and visualization to ODOE staff.

This goal aims to establish:

- An agency-wide data warehouse that makes reporting significantly easier for the business.
- Data governance framework for ingesting new data sets so that all our data is cataloged and easy to maintain.
- Automation of key data ingestion processes and visualizations for the BER and BiZEV reports, saving significant amounts of staff time.
- Automated visualizations for critical operational and agency program performance metrics.
- Introduction of operational data pipelines so that we can measure internal staff performance.
- Documented IT procedures for maintaining existing and establishing new pipelines to ensure quick turnaround and ease of maintenance.
- User guides and training resources for consumers of the data so that users are empowered to use the solutions we provide them without any confusion or UX friction.

Metrics

For all data sets that are utilized for agency-standard reports (BER - Energy by the Numbers, BiZEV, dashboards), 70% of those data sets are available via the data warehouse and have data quality assurance implementations in place.

Initiatives

Enhanced Data Quality Assurance

Improved Access and Availability of Data

Related Agency Strategic Imperative: **Assess and Enhance Organizational Data Capabilities**.

Optimize Applications and Processes to Enhance Customer Experience and Increase Operational Agility

Description

ODOE's applications and the processes for building these applications need to be improved to support rapidly changing business requirements, data sharing, and a dynamic security environment.

ODOE has two fully custom .NET applications and one Java application that are in need of a rebuild. Two out of three of these applications are at end of life. These applications will need to be replaced.

ODOE also has several SharePoint/Power Platform/Dynamics applications that need to be converted to real applications as business requirements for these products have been significantly professionalized.

The Application Modernization project aims to:

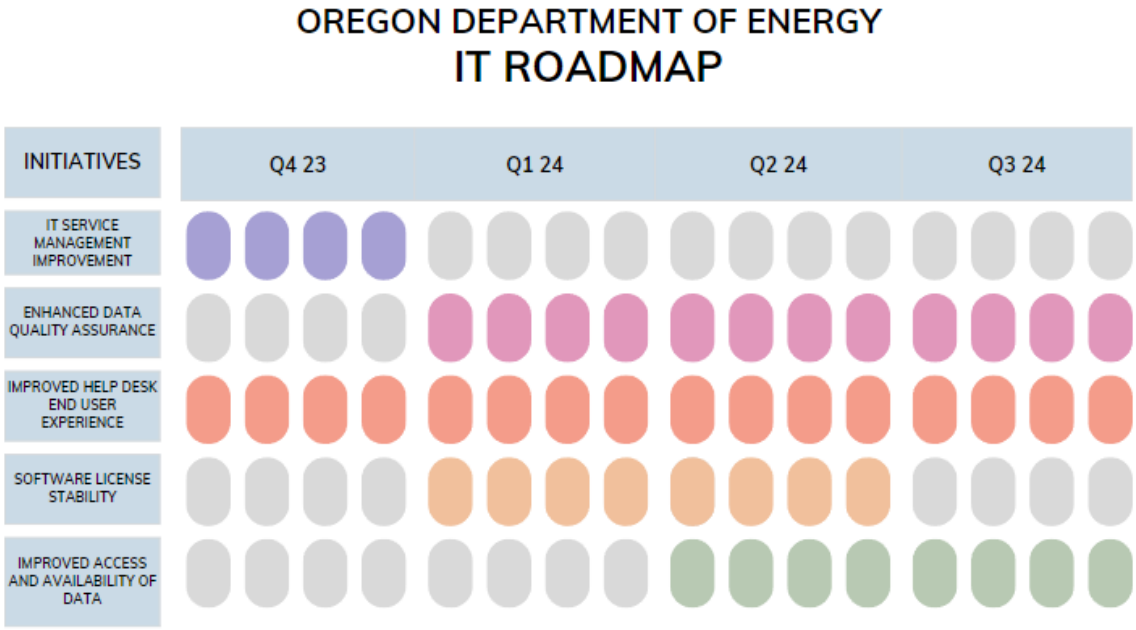
- Replace the .NET and Java based applications with modern, documented, extendable solutions. It will also make access to, and maintenance of, the data generated by the applications significantly easier for stakeholders.
- Update or replace low code solutions with modern, documented, extendable solutions. The currently implemented low-code solutions are buggy, difficult to troubleshoot, and generally, impact customer satisfaction. In a short time, at very low cost, we can replace existing implementations and make our customers happy while also improving our own workload.
- Establish development principles for low-code platforms moving forward so that the IT team can significantly shorten the time it takes to turn around a Dynamics portal web form on behalf of a program.

Related Agency Strategic Imperative: **Optimize Organizational Efficiency and Impact.**

Metrics

Improve IT CSAT (Customer Satisfaction Score) to 90% or higher.

IT Roadmap



IT Strategy Communications Plan

The communication plan around ODOE's IT Strategic Plan will involve several major steps:

- Create an executive summary deck for leadership.
- Create a customer-appropriate summary for ODOE's intranet.
- Present executive summary to ODOE's leadership team.
- Present customer-appropriate summary at an upcoming All Staff meeting or attach as an addendum to All Staff meeting notes.

Attached are screenshots of the IT Strategy Executive Summary deck.

IT Strategic Plan Maintenance Approach

The strategic plan should be re-evaluated when the following scenarios occur:

- Annual cadence, at a minimum.
- A change of governor.
- A shift in legislative direction.
- Executive leadership shift in direction.
- IT-related legislative concepts and POPs.

Below is the RACI chart that outlines IT Strategic Plan update responsibilities.

Section	CIO	System Adminstrator	Senior Engineer	Business Analyst	IT Governance
Executive Summary	AR	I	I	C	I
Agency Drivers	A	I	I	I	R
Current IT Landscape	AR*	R*	R*	C	I
IT Context	AR*	R*	R*	C	C
IT Strategic Initiatives	AR	C	C	C	C
Metrics & Targets	AR	C	C	C	I
IT Roadmap	AR	C	C	C	R
IT Communications Plan	A	I	I	R	I
Maintenance Approach	AR	I	I	C	I
IT Governance Charter	AR	I	I	I	C
Data Workgroup Summary	AR	I	I	I	C
Virtual Server Inventory	A	R	I	I	I
Application Inventory	AR	C	C	C	I
SHI Spend	AR	I	I	I	I
Service Catalog	AR	C	C	C	I
Development Standards	A	I	R	C	I
Business Requirements Standards	A	I	C	R	I
SWOT Analysis	AR*	C	C	C	CI
Executive Interview Selections	AR	I	I	I	C
Network Architecture Diagrams	A	R	C	I	I
Development Infrastructure Diagrams	A	C	R	C	I
IT Team Org Chart	AR	I	I	I	I
Hardware Inventory	A	R	I	I	I

R	Responsible
A	Accountable
C	Consulted
I	Informed
*	Indicates partial responsibility

Appendix 1: IT Governance Charter

Purpose and Scope

IT Governance is the collection of tools, processes, and methodologies that enable an organization to align business strategy and goals within the IT department. The ODOE IT Governance Committee is composed of division administrators with additional positions held by the Agency Director (chair) and Director of Human Resources. The IT Governance Committee provides oversight for agency IT projects, standards, methodologies, and expenditures.

The overall purpose of the Oregon Department of Energy's (ODOE) IT Governance Committee is to:

- Ensure that the agency's IT work is providing value to the agency and is tightly aligned with the agency's mission, goals, and values.
- Ensure that IT provides excellent customer service to the agency.
- Increase awareness of IT projects and initiatives across the agency.
- Review and approve agency-wide IT policies and procedures.
- Review and approve agency-wide IT improvements.

Membership

Membership consists of the agency Director, who will serve as the chair of the committee, as well as agency Division Administrators, the agency's Chief Information Officer, and the agency's Director of Human Resources.

- ODOE Agency Director (Chair)
- ODOE Chief Information Officer

- ODOE Associate Director, Human Resources
- Assistant Director, Energy Planning and Innovation Division
- Assistant Director, Central Services and Energy Development Services Division Administrator
- Assistant Director, Energy Facility Siting Division
- Assistant Director, Nuclear Safety and Emergency Preparedness Division
- Communications Director
- ASCIO, EIS (Non-voting member)

Policies

- The IT Governance Committee will be chaired by the Director of the agency. In the absence of the agency Director, the Chief Information Officer will chair the IT Government Committee.
- The IT Governance Committee meetings will be facilitated by the Chief Information Officer. In the absence of the Chief Information Officer, the Agency Director will facilitate the meetings.
- The committee should meet monthly for the first three months of its inception. This will help to establish a consistent methodology and approach to governance.
- After the initial three-month period, the group will meet quarterly or as needed.
- If a member of the committee cannot attend, they may not designate a proxy.
- Quorum for group decision making will be a simple majority of 50% of attendees plus one.

Desired Outcomes

- Provide an executive forum for decision making as it relates to IT Governance.
- Keep pace with industry and government IT standards, where possible.
- Reduce the time and cost of IT projects, where possible.
- Increase agency-wide visibility of IT projects and expenditure.
- Assist in communicating IT goals, progress, and changes.

Workgroup Organization

While the membership composition of the IT Governance committee is static, both static and dynamic work groups will be instantiated to support business initiatives. Dynamic workgroups will be small (5 or less participants) and, typically, time bound.

Workgroups will funnel work up to the IT Governance Committee in the form of standardized processes, methodologies, or reports. The IT Governance committee should review and, if necessary, approve (or deny) any proposals. Workgroups can be created by the Committee or the CIO.

Static Work Groups

- Data Workgroup – This group replaces the Data Governance Committee. The composition should be made up of front-line supervisors or data champions selected by a front-line supervisor with at least one representative per division or section in the agency. Workgroup

participants are expected to create standards, guidelines, and procedures for the agency about how they should handle data. This may be the one example of a workgroup that is not time bound but continuous (i.e., static).

- GIS Workgroup – This group would be a newly instantiated group with the purpose of identifying, prioritizing, and planning any GIS work across the agency. This group would likely be time bound or called to meet on an "as needed" basis.

Dynamic Work Groups

- Task-specific Workgroups – These groups will be created based on initiatives approved by the IT Governance Committee instantiated by the CIO for the purpose of identifying, prioritizing, and planning specific IT initiatives across the agency. Membership will be by invitation and with the advance approval of the supervisor. This group would likely be time bound or called to meet on an "as needed" basis.

Workgroup Decision Making

Workgroups should have some autonomy to work independently. Workgroups should be focused on high-level strategic goals such as:

- Creating standards and guidelines
- Creating documentation
- Creating processes and procedures
- Bringing these artifacts to the IT Governance committee for review

For instance, the Data Workgroup should be focused on creating a suite of data standardization rules. The Data Workgroup should put together recommendations for how phone numbers, addresses, and other types of data should be stored across the agency, while the IT Governance committee should review and approve the whole package of data standardization tools.

Appendix 2: Service Catalog

Application Development Services

- Dynamics Application Development and Administration
- SharePoint Application Development and Administration
- Teams Integration
- Native Web Application Development
- Languages Supported
    - HTML
    - CSS
    - JavaScript
    - SQL/T-SQL
    - C# and .NET

Help Desk (Tier I and Tier II)

- Tier I Help Desk Support
    - Application Support
    - PC Support
    - Phone Support
- SMS Alerts (Everbridge)
- General Technology Troubleshooting
- Workday Ticket Support and Learning Administration
- Meeting Support

Infrastructure Services

- Network Administration
    - Switches
    - Firewalls
    - Wireless Access Points
- Server Administration
- M365 Administration
- Tier II Helpdesk
- Device Management (Auto push updates, auto install apps, etc.)
- Windows 10 and Windows 11 administration.
- Records Requests & E-Discovery
- Identity Management (Active Directory)
- Security
- System Monitoring

Data Services

- SQL Server Management
    - DB Creation
    - Data Normalization
    - Query Writing
- API Integration
- Dashboard Creation and Support
    - PowerBI
    - Tableau