IT Strategic Plan FY21-23

Introduction

This document represents L&I's response to the Office of the Chief Information Officer (OCIO) Policy 112 requirement that each agency must establish an IT strategic plan in support of the agency business plan and in alignment with the state's strategic plan. This plan will be updated biennially, at minimum.

The IT Division's vision, mission, and values described below provide context for L&I's IT Strategic Plan. The vision, mission, and values guided development of each strategic pillar in the plan to ensure the plan aligns with agency and IT standards and meets customer needs.

L&I IT Vision

***Keeping Washington safe and working
through easy, innovative, transparent, and great experiences.***

The IT division aims to provide value to L&I by adopting technology that creates a seamless user experience for every user who interacts with the agency. As L&I transforms its business to meet increasing customer demand, IT will be there to support those efforts.

L&I IT Mission

Ensure reliable day-to-day maintenance and deliver value with new solutions.

IT is a dedicated resource for L&I and is capable of supporting the products and services needed to run the agency. IT is also able to research, identify, implement, and support new solutions.

L&I IT Values

Values provide insight into what the IT division considers important in the way it operates as an organization, and how it interacts with business partners and the larger ecosystem.

Care
- Care for our customers and team members
- Validate concerns and address them authentically
- Follow up to ensure people's needs are met
- Be curious, get involved, remain open minded

Adapt
- Do what is right for our customers within our parameters
- Be flexible for our customers to provide desired results
- Provide solutions that are adaptable for our customers and for each other
- Embrace change and adjust to customer needs

Enable

- Provide exceptional service and experiences
- Support our customers to obtain their desired results
- Enable L&I employees and customers by:
    - Providing the right services, tools, and technologies
    - Allowing employees to grow with knowledge and education
- Enable leaders to make strong decisions that help our customers

Tenacity

- Be persistent in delivering high-quality results for our customers and each other
- Complete projects that enable our customers, team members, and leaders to get their desired results
- Be tenacious about providing high-quality maintenance and operations
- Seek out opportunities to innovate, improve, learn, and grow
- Be tenacious in providing our team members opportunities to innovate, improve, learn, and grow

Partnership

- Work collaboratively internally and with our customers to obtain all desired outcomes
- Own each other's outcomes
- Own the customers' results
- Hear each other as equals with a common goal
- Listen and question for understanding while addressing our customers' and each other's concerns respectively.

Agency Alignment

L&I's mission is to Keep Washington Safe and Working through its five agency goals. The Information Technology Division most often contributes to these goals indirectly. Recognizing that not all divisions at L&I contribute directly to the goals, the strategic plan for L&I established three Lines of Business, one of which is the Support Line of Business that includes IT.

The IT Strategic Plan that follows used the priorities established for the Support Line of Business to guide the contents of the strategic pillars presented in the plan. These pillars were established to help guide decision-making within the IT division, and provide baseline strategic goals to use in evaluating whether IT work requests align with L&I's strategic direction.

Support

Priorities

Create significantly better customer experience

Enhance strategic and enterprise risk governance systems to better manage top agency risks and align our strategic/financial goals with risks and opportunities

Ensure L&I can attract and retain top talent through a diverse, equitable, inclusive, thriving, and engaged culture

Focus on building the skills of our staff and leaders

Improve internal safety and return to work for L&I employees

Improve reporting and data capacity and embrace analytical tools to promote better outcomes for our customers

Maintain alignment with statewide priorities

Methodology

L&I's Business Integration Office (BIO) prepared the draft Fiscal Year (FY) 21-23 IT Strategic Plan. The BIO was selected to initiate the plan because they are responsible for shaping business needs into IT work, giving them unique insight into the holistic needs of the agency.

The BIO used two processes to gather and analyze business-driven data that supports the six strategic pillars adopted by the IT division in this plan: The Request for Change and IT Roadmapping processes.

- Request for Change: Any internal agency user can make a Request for Change (RFC). The RFC Intake process results in creation of a business case including business needs, goals, and user stories that, when analyzed, shape themes around business needs. Some examples of business case-driven strategies include:
    - o The *Distributed Workforce* strategy was driven by requests from different divisions for increased virtual capability in response to mass teleworking. Virtual needs included electronic plan reviews (Factory Assembled Structures Program), electronic signatures (agency-wide), and virtual meeting facilitation tools (agency-wide).
    - o The *Modern Systems* strategy resulted from many requests to replace outdated systems, including the current access management application (STARS), IT service management application (HEAT), and key systems in the Insurance Services division (LINIIS, et al).
- IT Roadmapping: The IT Roadmapping process involves interviewing business teams and programs across the agency to find out what services they provide, who their customers and partners are, what systems and tools they use, and what unmet needs they have. This is called the Service to System, or S25 process. The data received through these interviews is analyzed for desired capabilities and strategic themes using a process called Thematic Qualitative Analysis.

Once enough data was collected through the RFC and IT Roadmapping processes, the BIO team collaborated to review the results and create the initial draft of the strategic plan. This draft plan was presented to the following teams for additional insight and guidance:

- *IT Strategy and Architecture* to confirm that the IT strategic pillars align with the agency's technology landscape.
- *IT Leadership Team* to confirm that the pillars align with their goals for IT going forward.
- *Enterprise Data Governance Committee and Data Analytics Team* to validate the two data-related pillars and elicit additional drivers/goals.
- *IT Steering Committee* and *Office of Strategy and Performance* to validate that the pillars identified by IT align with agency strategic goals.

Executive Summary

IT Strategic Plan FY21-23 is aimed at supporting L&I as the agency transitions into a digital business, by focusing on areas that support new kinds of technology, new ways of working, and new methods for development.

IT identified six areas of focus and used them to develop strategic pillars that each have their own related goals, initiatives, and high-level success criteria defining how IT anticipates its changes will affect the agency.

Four critical success factors[1] must be supported and taken into account as new initiatives are developed:

1. **Support Workers' Compensation System Modernization (WCSM)**
   Our existing workers' compensation system, known as LINIIS, consists of more than 100 interconnected systems developed since the mid-1980s. It's outdated and uses more than 40 programming languages, some of which are obsolete. The multi-year Workers' Compensation Systems Modernization (WCSM) effort will replace most of our existing applications with a modern, cloud-based, commercial off-the-shelf solution. IT must make sure its environment, people, and processes are prepared to handle the work resulting from this project.

2. **Agile Transformation**
   IT has committed to the Agile framework for software development, and is in the process of transitioning all IT teams to product and service teams, including transition to Azure DevOps. Agile software development refers to software development methodologies centered on the idea of iterative development, where requirements and solutions evolve through collaboration between self-organizing cross-functional teams. Azure DevOps is a Microsoft product that provides version control, reporting, requirements management, project management, automated builds, testing and release management capabilities.

3. **Agency Alignment**
   Historically, business and IT at L&I have not been clearly aligned, which can lead to prioritization issues and unnecessary work. To make sure IT is always working on the highest-value items, the division will collaborate with enterprise groups like the Office of Strategy and Performance and the IT Steering Committee to put processes into place to ensure that alignment and proper prioritization is happening at all stages of work.

4. **Security**
   As our work becomes increasingly dependent on virtual tools and data, it's imperative that our security is bolstered to protect it. All IT work must consider its impact on security and take intentional steps to mitigate the risks they find, following the standards and protocols set forth by IT Security Services (ITSS) and the OCIO.

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[1] *A critical success factor is "a critical factor or activity required for ensuring the success of a company or organization…they should not be confused with success criteria" -*
https://en.wikipedia.org/wiki/Critical_success_factor

IT Strategic Plan FY21-23 Strategic Pillars

This section describes each of the six strategic pillars that make up the plan in further detail, including a summary of the major drivers, challenges, and strategic goals.

1. Distributed Workforce

L&I needs to invest in the people, processes, and technology to allow for a distributed workforce[2] model. IT can support this by prioritizing solutions that eliminate the need for printing and in-person meetings, and by implementing tools that support virtual collaboration.

Major Drivers and Challenges

- L&I's workforce went fully remote in March 2020 as a response to the COVID-19 pandemic. As telework became normalized, management became interested in developing a new operating model that supported expanded and, where appropriate, permanent teleworking for eligible staff.

- Customers expect to be able to do most of their work with L&I online, and they value self-service options.

- Many L&I programs depend on paper-driven processes. For example, Factory Assembled Structure inspectors still rely on paper plans to be submitted to the agency. These plans are often hundreds of pages long and require a plotter printer due to their size. Requiring customers to submit these on paper costs both customers and the agency money that could be saved if we move to fully digital processes.

Strategic Goals

- Reduce reliance on paper-driven processes.

- Increase the ability to virtually collaborate.

- Ensure staff work and output are tracked digitally.

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[2] *"Distributed work" is generally understood to broadly refer to work done by employees within the same organization who are separated by their geographical locations. This may include a hybrid of employees who work in a traditional office environment as well as employees who work from home, public spaces, or remote offices and mobile employees who work on the go.*

2. Modern Systems

Much of L&I's technology landscape is aging, with some mainframe systems reaching their 40-year anniversaries. In order to maintain adequate IT operations and service to all customers, L&I must be dedicated to the health and wellness of its technology while also ensuring it can be adequately supported. Continuing use and maintenance of aging and outdated technology makes it highly difficult to bring in new concepts like containerization and micro services - concepts on which new technology depends. Software vendors update their technologies to follow industry-standard best practices. L&I must do the same or risk the inability to provide critical services. The number of systems using outdated technology also puts a strain on IT teams as they try to support obsolete systems and applications.

Major Drivers and Challenges

- L&I's older systems were designed ad-hoc, using the practices, patterns, and technology that made sense at the time. As time passed, these pieces weren't updated as needed to the latest versions, making it difficult to identify commonalities and build a centralized system.

- Proliferation of aging technology and outdated versions makes it highly difficult to bring in new concepts that many newer cloud solutions depend on, such as containerization and micro services.

- Software vendors have updated their technology to follow industry-standard best practices. L&I needs to do the same in order to update aging technology to the newest versions.

- The volume of systems with outdated technology is putting a strain on the IT Portfolio Manager and product teams as they try to support the portfolio. A strategy is needed for when to contain, decommission, and retire/replace existing systems.

Strategic Goals

- Increase the health of all L&I systems and technology.

- Reduce legacy IT systems and outdated technology.

- Increase staff ability to support new technology.

- Reduce technology sprawl by consolidating and updating systems to industry standard versions.

3. Cloud Computing

Cloud technology has been the focus of the IT industry's attention recently, and is a major consideration in IT infrastructure investment. In the last 10-15 years, there has been significant evolution in cloud technology and cloud services, especially with regard to infrastructure environments and software as a service (SaaS). The cloud technology has several benefits, including no upfront capital expenditure cost investment, flexibility, high availability, and resiliency.

Major Drivers and Challenges

- The industry is moving toward cloud solutions, and most new systems available in the marketplace have at least one component that relies on cloud computing capabilities. In addition, most of our existing purchased systems rely on cloud computing in order to be upgraded, and vendor support for non-cloud solutions is almost non-existent.

- L&I does not currently have the resources necessary to support SaaS (Software as a Service) solutions.

- Existing IT staff are not properly trained in cloud computing technology.

Strategic Goals

- Increase cloud-computing competence of IT staff.

- Increase adoption of cloud-computing components.

- Reduce technology that does not support cloud-computing components.

4. Data Management

Currently, data investments are made as the need arises, which leads to a decentralized, fragmented, and inconsistent data architecture. This is not only costly and inefficient, but presents a new agency risk, as we undertake a major new system implementation.[3] IT will work to consolidate and align its data management products into an enterprise suite of tools, and establish standards to ensure alignment in the future.

Major Drivers and Challenges

- A recent review of a single application for identifying staff work locations (L.O.O.C.) discovered that at least 25 percent of the needed data was missing, incomplete, or incorrect. The assumption is that more systems have the same data issues, but they haven't been uncovered yet.

- IT artifacts are found in multiple locations, meaning sometimes the same document is duplicated across multiple locations and there is not a single retrieval source. This makes it difficult for staff to quickly find what they are looking for and be confident that what they found is the most updated and accurate version.

- Best practices for data management is in its infancy. This means when new data is created, it's not always following agreed-upon naming conventions, taxonomy, etc. A lack of standards increases the risk of incorrect and/or irretrievable data.

Strategic Goals

- Increase data consistency, availability, and standardization.

- Increase data governance's (i.e., Enterprise Data Governance Committee) role in ensuring data consistency, accuracy, and completeness of definitions.

- Minimize technical diversity by reducing the number of alternative technological choices for solutions.

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[3] Information pulled from the Enterprise Data Strategy proposal

5. Data Analytics

The agency has identified a strategic priority to improve reporting and data capacity and embrace analytical tools to promote better outcomes for our customers. To support this priority, L&I has launched an Enterprise Data Strategy (EDS) initiative. The goal of this initiative is to work with agency leaders to understand how we currently use data, define how we want to use data as an organization, develop a plan for how to build data capabilities to achieve our desired future state, and gain leadership support. The EDS will:

- Directly connect data decisions to agency results
- Coordinate data improvements across programs
- Align data management, data governance, and data use

Once the EDS is agreed to and implemented, IT will use it as guidance to provide the appropriate technology, environment, and tools to accommodate data analysis needs.

Major Drivers and Challenges
- The data and analytic environment is not optimized to meet varying levels of analytic sophistication and need.

- Research and analytic staff often follow inconsistent and inefficient processes as they develop unique solutions to address analytic environment challenges.

- Leaders and managers find it difficult to use the data-reporting environment leading to decisions based on limited available information.

- Lack of a unified vision for how the agency wants to use its data resources leads to inefficient data investments and failure to fully make use of data assets.

Strategic Goals
- Provide standardized data tools to meet varying analytic needs.

- Improve ease of use of and adoption of standard reporting tools.

- Align data investments to deliver agency results.

- Implement and support analytical tools used by agency data scientists and data analysts.

6. IT Work Management

Historically, L&I IT has struggled with work management, including work transparency and visibility, cross-team communication, and prioritization. IT is committed to resolving these gaps by clarifying its practices and implementing the necessary tools, frameworks, and standards. Currently, there are different practices in place (IT Service Management (ITSM), IT Information Library (ITIL, Agile, etc.)) to manage IT work. Because these practices have different philosophies, they can end up competing with each other and leave employees struggling to keep up - especially when new products come into the agency.

To address these issues, IT is working toward an organized style of work management that synchronizes Business and IT priorities to ensure the highest value work items are completed first. Several ongoing efforts to move IT toward that goal will continue into the near future. The next phase will be to coalesce these efforts into a single, seamless process that covers the entire lifecycle of a work item from request to delivery, and through the sun-setting of the requested functionality.

Major Drivers and Challenges
- The IT division is trying to manage a high degree of technical debt, especially in preparing for the WCSM project, and needs a more agile, faster way of working.

- IT staff are working under the assumption that certain frameworks and standards are followed, but there has been no formal implementation of those frameworks. This leads to technology sprawl and incompatible ways of performing IT work.

- Some work management tools have been chosen, but there are still unknowns about how the tools will integrate into the current landscape, and how and what they will be used for.

- Currently, there are different practices in place (ITSM, ITIL, Agile, etc.) to manage IT work. These practices have completely different philosophies, and without clarity, they can end up competing with each other and leave employees struggling to keep up, especially when new products come into the agency.

Strategic Goals
- Increase alignment to ITSM frameworks and standards

- Improve utilization of ITSM tool set and integration with Agile tools.

- Increase visibility into IT work by providing self-serve dashboards and reports.

- Increase speed of delivery, quality, and reliability of IT work by merging ITSM and Agile practices.