IT Innovation
DIGITAL EXPERIENCE • DATA ANALYTICS
SHARED SERVICES • COLLABORATION
2020–2022 Technology Strategic Plan
Information Technology powers the business of government. IT systems support State agencies in delivering vital services to the people of Ohio and serve as critical links with Ohioans seeking assistance to start or grow businesses, obtain services, and thrive in our state. The use of State technology assets to increase the well-being of Ohioans and their health, property, security, livelihood, and prosperity is essential.

As we look to the future, the focus is on innovation. IT is the cornerstone of the DeWine-Husted Administration’s InnovateOhio initiative to improve customer service and reduce costs. IT Innovation will streamline and modernize State IT through a focus on digital experience, data analytics, enterprise shared services, on premise or in public clouds, and collaboration.

**Digital Experience**

Ohio must view every interaction with State government from the perspective of our customers – the people of Ohio. To do this, we look at the customer’s journey through State systems and use their experience to deploy technology that delivers better customer service. Two transformative platforms that will ensure Ohio provides an optimal digital experience from an enterprise perspective are the InnovateOhio Platform (IOP) and OhioBuys.

Executive Order 2019-15D also requires all State agencies, boards, and commissions to adopt and use the InnovateOhio platform. At its core, IOP will coordinate data and resources throughout State government to improve the way Ohio tackles our most challenging problems. It also will streamline technology services across agencies to give Ohioans a better digital experience when interacting with State government.

**Future Focus**

- **Continue to build on the success of calendar year 2020 and create a roadmap to ensure internal and customer-facing applications are onboarded to IOP.**
- **Continue to develop the products and tools available on the platform to provide more self-service capability including a digital profile/wallet capability.** The digital profile/wallet will be an extension of the OH|ID profile allowing users to store relevant information to complete forms and make payments for various State services.
- **Continue to focus on the user experience and bolster our security posture through the migration of State agencies’ external facing websites to the InnovateOhio platform.**
- **Continue to grow and expand OhioBuys to all State agencies, local governments, and higher education institutions.** Additional capabilities and features will support streamlined solicitations and contract management functionality.

**Data Analytics**

The State generates massive amounts of data across its agencies, boards, and commissions through the course of serving its 11.7 million residents. This data represents a strategic asset which, when shared appropriately across agencies, will allow the State to tackle complex societal and policy problems and make Ohio a better place to live, work, and do business.

The InnovateOhio Platform (IOP) is positioned for use across State government to enable and promote data sharing in a cost-effective manner by providing a modern technology platform for all State agencies to leverage. The IOP is not a single technology (e.g., data lake and data warehouse) but rather a collection of data storage, transformation, and analytical tools which will change over time by design as advances in technology occur.

The IOP seeks to make data actionable in solving complex problems that Ohioans face through self-service data and analytics capabilities. Projects are underway seeking to aid communities, restore hope to those most in need, identify inefficiencies including potential waste, fraud, and abuse, create jobs and economic growth, adjust policies, and predict and prepare for unexpected events.

**Future Focus**

- **Continue to grow the platform and enhance catalog, metadata management, and self-service capabilities for data analytics.**

- Develop an open data portal to provide the ability for:
  - State agencies to share publicly accessible data
  - The public to access aggregate data on a wide array of topics and subjects collected by the State
  - Outside partners (through a review and approval process) to be granted data access to foster better research

- Establish relationships to partner and leverage expertise from other states and entities.
Enterprise Shared Services

Enterprise Shared Services provides an opportunity to lower operating costs, improve constituent services, and increase internal efficiencies. Where practical, the State has moved to single, enterprise platforms to serve all agencies from a common platform. We will continue to support and enhance the current catalog of enterprise shared services, including:

- Cloud Services – following the Cloud Smart approach
- Information Security and Privacy
- InnovateOhio Platform
- Ohio Business Gateway
- Ohio Benefits Program
- OAKS (financials, human capital management, time keeping, OhioLearn, business intelligence/reporting)
- Data Center Services (storage, mainframe, server, network and communications, disaster recovery, ServiceNow, Office 365)
- Document Management
- ePayment
- eSignature
- eLicense
- Geographic Information Services
- MARCS (Multi-Agency Radio Communication System)
- Next Generation 9-1-1

Future Focus

- Continue to evolve to meet the needs of our customers by establishing and growing services in these areas:
  - Information Security and Privacy – The goal of the Office of Information Security and Privacy (OISP) is to support productivity, innovation, and organizational objectives of the State of Ohio in providing secure services to the citizens of Ohio. Much of the focus in shared services innovation will be focused on continuously strengthening the State’s security posture, as security must evolve and adapt to protect the State from new cyber threats. OISP will continue to support agency security needs through the shared Information Security Officer (ISO) program expanding to all agencies. OISP continues to build upon the IT Apprentice program to ensure the State has the necessary skills and abilities on our cybersecurity team. We will continue to improve our security maturity in alignment with the NIST Cybersecurity Framework. OISP also will endeavor to improve understanding and quantifying of enterprise risk so that high-value items are prioritized and addressed.
  - Cloud Smart Center of Excellence – Focus our mindset on Cloud Smart as opposed to Cloud First. The Office of Information Technology (OIT) of the Ohio Department of Administrative Services (DAS) will support and guide agencies as they look to Infrastructure as a Service and Platform as a Service opportunities and act as a broker of these services. Cloud Smart is designed to provide a dynamic, cost-effective set of differentiating core enterprise services and innovative technologies from private and public clouds that will improve State operations and quality of services to Ohioans.
  - Mainframe Roadmap – As new or upgraded applications are being designed and delivered, the architecture has moved away from the legacy approach of utilizing the mainframe. Substantial workloads remain active on the mainframe but most plans are to move to other platforms. DAS OIT will engage mainframe customers to capture their timelines and approaches to move solutions to other platforms. A roadmap will then be developed that incorporates those agency timelines to reduce mainframe workloads into a phased plan to downsize the mainframe capabilities to contain costs for the workloads that remain.

Emerging Technologies

- Issue a Request for Proposal to engage business partners to support the implementation of emerging technologies to streamline processes, drive digital interactions, and automate or eliminate mundane tasks, so that the State can respond with a tailored approach. Agencies would be able to quickly engage a vendor partner to support projects that include blockchain, digital assistants, Internet of Things, artificial intelligence, machine learning, robotic process automation, and mobile citizen engagement.

Emergency Communications

- Continue to engage first responders to increase the MARCS user base for Ohio’s P25 network, as well as support the roll-out of FirstNet, the nationwide wireless broadband network dedicated to public safety. NG 9-1-1 will engage a vendor to develop the NG 9-1-1 network to provide Ohioans with advanced communication capabilities when calling for emergency services, including police, fire, and emergency medical services. Additionally, by leveraging the ESINet, NG 9-1-1 will become a seamless, coordinated, and efficient system available to all local 9-1-1 centers throughout Ohio.

Mainframe Roadmap

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Collaboration

Collaboration is the heart of all our efforts. Collaboration ensures that we:

- Serve the people of Ohio more effectively
- Leverage resources more efficiently
- Identify better approaches and foster teamwork
- Expand our learning and professional networks
- Work as one team with one goal for the State of Ohio

People are at the heart of collaboration. We have seen collaboration grow and evolve through the Multi-Agency CIO Council (MAC), the Technology Board, and the Joint IT Committee. The MAC has been refined over time to increase the frequency of meetings and provide more timely information as well as serve as a format to engage other stakeholders such as agency Chief Financial Officers and Human Resources Administrators. The Technology Board was created to enhance enterprise IT alignment and ensure agency interests are represented within the IT governance process and duplicative activities are minimized. The Technology Board organizes the MAC into five lines of business: Health and Human Services, Public Safety and Criminal Justice, Administration and Finance, Infrastructure and Environment, and Business and Industry.

Our most valuable asset is our employees – and retaining top talent is critical. It is our priority to show our employees we care about them and their ability to do their jobs well by arming them with the latest tools and technology.

- Training – There will be a need for training and education for successful implementation of new technologies and initiatives, requiring reskilling of
current employees in more contemporary technologies and platforms. This has started with recent training opportunities for Azure and AWS. There will be opportunities to engage with local schools and universities to identify technology needs and the development of future educational opportunities.

- **Job Classification Specifications** – IT job classification minimum qualifications were reviewed and updated in December 2018 to support the State’s ability to recruit and retain talent. An IT Apprentice classification was established to foster programs to grow a pool of qualified job candidates for future workforce opportunities. The DAS OIT Office of Information Security and Privacy was the first program and has had success recruiting candidates.

- **Non-monetary Compensation** – Opportunities to offer benefits other than just compensation is instrumental to attracting and retaining talent. Many in the IT workforce are looking for opportunities to give back to society by working in the public and non-profit sectors. To attract and retain employees, benefits to consider include options to work remotely where applicable, more flexible hours and schedules in alignment with business needs, and more flexibility in equipment and tools.

**Future Focus**

- **IT Leadership** – The success of the lines of business (LOB) confirms that this model should continue and provides an opportunity to rethink other options for management of the business of IT throughout State government. The State CIO was involved in hiring decisions for cabinet agency CIOs/IT Directors for this administration, which should help foster alignment with enterprise strategy and approach. The State CIO will continue to have a dotted line relationship with the agency CIOs and serve as a mentor. This will reinforce the State CIO’s partnership with cabinet agency directors and administration leadership advising on IT issues across agencies and platforms. Additional opportunities will focus on advisement in capital planning related to technology projects and major project governance. Consolidating the IT management of the agencies within a LOB will result in enhanced strategic alignment of IT and improved services. In addition, consolidation will reduce IT spend through application planning, improved risk management, expanded resource management across agencies, and ensure effective adoption of enterprise services and standards. The Tech Board will work together under the direction of the State CIO’s office to determine the best way this could be accomplished through continued collaboration.

- **Enterprise Project Management Office (EPMO)** – As we seek to enhance collaboration, a common approach to project and portfolio management and organizational change management will be beneficial to ensure the success of IT projects. The EPMO will guide and support the use of Agile project management methods. This is in alignment with the recent publication of the Information Technology Policy IT-16, Major Project Governance Policy. We will continue to evolve our Enterprise Planning Portfolio process to identify opportunities for enterprise shared services, cross-agency workgroups, contracts, and approaches.

- **IT Workforce** – The historic model for IT staffing has at its core the expectation that people will spend a large portion of their careers with the State. The State will need to manage an environment where it continually reskills the current workforce while attracting new technologists trained in the latest technologies. Successful implementation of new technologies requires training and education, collaboration, and planning. There also is an interest in ensuring that more State employees are supporting our most critical applications and infrastructure as opposed to staff augmentation resources. For the State to be attractive to this next generation of technologists, a rethink of training potentially to require continuing education opportunities, and exposure to newer technologies is a sign of a well-planned and well-run organization and an opportunity to serve Ohioans.

**IT Classification and Compensation - IT and HR need to stay in lock step to ensure we keep pace with changes in the industry and can attract and retain the talent we need to be successful. An annual or biennial review of the main IT classifications (database administration, information technology specialist, infrastructure specialist, software developer and information technology consultant) and related compensation is necessary to ensure their relevance into the future. The ability to offer an advanced step or other compensation for in-demand skills enhance recruitment and retention efforts.**

**Responsive Workforce Environment** – Develop a strategic approach to provide for responsive workforce environments, where applicable. In this context, a responsive workforce environment provides for end-user technology approaches that can transition from high efficiency and cost effectiveness in normal times, to remote workstations, to disaster recovery and other contingency scenarios. This would include but not be limited to review of policy, standards, and available technology to address required security, equipment, connectivity and communications, and capacity.

Together, the State CIO’s Office, DAS OIT, and State agencies will leverage technology to support the vision of the DeWine-Husted Administration to modernize interactions between the State and the public through technology and streamlined services, improved accessibility of government programs, and reduced administrative costs.