Report of the

TECHNOLOGY ADVISORY COUNCIL

February 20, 2024

Technology Advisory Council

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We are pleased to submit the Technology Advisory Council (TAC) summary report for the year 2023.

The TAC, established as a follow-on to the Blue Ribbon Council on Information Technology (BRC-IT), has actively engaged key state agencies, state CIOs, county IT leaders, and the Minnesota Association of Professional Employees (MAPE). Monthly meetings of the full council began in late 2020 and continued through December 2023. The TAC comprises four subcommittees—Project to Product, User Experience/Self Service, Sustainable Funding, and Cybersecurity—and has been instrumental in shaping the state's technology landscape.

This report provides a brief overview of the TAC's work throughout the year. The TAC has garnered substantial agency, administration, and legislative support, making it more influential and effective. We express our gratitude for this support.

In 2023, our focus encompassed two major areas. Firstly, we collaborated with MNIT and agencies to implement past recommendations, witnessing significant progress. This collaborative effort will extend into 2024. Secondly, we listened to agencies share their stories of modernization and transformation, offering TAC's insights and expertise.

For detailed information on these focus areas, please refer to the attached report. Our assessment indicates substantial progress within agencies, facilitated by MNIT's valuable expertise. We eagerly anticipate continued collaboration and progress in 2024 which is further outlined in the "What's Coming in 2024" section of the report.

We thank the additional volunteers from agencies who supported TAC as writers, streamlining the reporting process. Administrative support within MNIT, including Michael Hainlin, Brandon Hirsch, Jeff Smith, Deputy Commissioner Jon Eichten, and others, has been invaluable.

Should you or your members have questions about the report's recommendations, please do not hesitate to contact us. We eagerly anticipate the adoption of these recommendations and the continued success of IT initiatives in the state.

Respectfully submitted,

Rick King
Chair
Technology Advisory Council

Vincent Cabansag
Vice Chair
Technology Advisory Council

TAC in 2023

The use of technology has the potential to enhance the efficiency of Minnesota government and streamline access to state and local services. Given the rapid and frequent changes in IT systems and applications, government agencies need to enhance their technology and digital products swiftly and consistently to better align with the requirements of the people of Minnesota. The TAC was created to assist agencies in addressing this challenge.

2023 was a transformational and productive year for TAC. The council saw progress on many of its 2022 recommendations for the state. Specifically, work progressed in three primary focus areas:

- Developing technology products and systems that better meet customer needs and expectations.
- Creating more efficient and sustainable operation of state IT processes and systems.
- Bolstering security to protect state IT systems and sensitive data.

Altogether, this year's efforts have helped make significant progress toward addressing decades-long modernization needs. While the work continues, the dial has moved forward in making state agencies more efficient, serving citizens and agency staff and partners better, supporting the development of stable funding and resources, and protecting our technology assets and private data.

Supporting a Shift to a Customer-Centric State Government

A customer-centric approach requires state agencies to understand both the individuals they serve and those providing services. This involves ensuring accessibility and user-friendliness in their IT systems, tools, and digital products. The true value of technology is realized in the capabilities it empowers people with. To maximize that value, state agencies have worked to:

- Forge deep understandings and relationships with the Minnesotans they serve and those who provide the services.

- Place customers and end users at the center of their work—including how they define and measure success—to align business processes and services with the needs of all users.

- Ensure all customers can access and use the information and services they provide.

Developing Improved Operational Models via the Product & Agile Center of Enablement

Being the premier state for businesses, residents, and visitors requires prioritizing customer satisfaction at the core of our endeavors. Emphasizing this, the governor has underscored customer experience as a key focus in the One Minnesota plan.

In 2021, the Minnesota Legislature established the Technology Advisory Council (TAC) as a permanent body to advise Minnesota IT Services (MNIT) and executive branch agencies on the use of technology in support of state goals. The TAC chartered several subcommittees to focus on different areas. One area is the Project-to-Product (P2P) subcommittee. The TAC P2P subcommittee was formed to help define operational changes the state's agencies, programs, service, and support teams should adopt, like Product Management & Agility.

These operational changes are expected to help the state achieve its vision of becoming hyper-customer centric, especially in the use of technology, to improve and invent digital service and value delivery solutions.

In response to this direction, the MNIT Office of Transformation & Strategy Delivery (OTSD) developed and launched the P2P Program, which was later rebranded as the Product and Agile Center of Enablement (PACE) in October 2022. The PACE program and content including a Digital Product & Agile Playbook was co-developed and published for broad statewide adoption with input from dozens of agencies. The PACE Program and Playbook provide a repeatable process aimed at helping agency programs, product teams and delivery teams learn how to gather user and customer insights and experiences, empower team data-driven decision-making, and continuously improve the user and customer experiences, while also increasing the value realized.

The official rollout of Minnesota's product approach took place in January 2023, marked by four agency early-adopter teams embarking on their journey of product and agile adoption and eventual cultural and practice transformation. As part of the early adopter program, PACE conducted workshops in March 2021, exposing leadership, management, and the early-adopter teams to new terms, practices and mindsets, preparing them for new expectations and changes. Approximately 120 individuals, including state leaders, attended these sessions.

The One Minnesota Plan is supported by Product and Agile best practices. Among the many benefits are that it:

- Improves customers' experiences, employees' experiences, and ensures we are working efficiently and effectively.
- Enables customer insight and feedback, team collaboration, and innovation.
- Ensures ongoing support and continuous improvements for our service offerings and technologies.

This approach enables agencies to respond and adapt more quickly to changes in customer needs and expectations, agency priorities, and legislation, among other factors.

Modernizing Digital Government through Investment

In May, Governor Tim Walz signed into law appropriations bills passed by the legislature that set budgets for state agencies for the next two years. With a historic budget surplus, legislative leaders agreed to fund investments in IT that exceeded the governor's budget recommendations and that will set the foundation for modernizing state government digital services for years to come. These enhancements to our digital services will ensure secure access to services for families, businesses, and communities.

The TAC has long supported the need to sustainably fund digital services provided by state agencies, and these historic investments are a significant step to meeting the need to modernize digital services.

In 2023, the Sustainable Funding Subcommittee established IT investment as a clear priority for state agencies, and further recommended changes to a statutory financial tool, the Information and Telecommunications Account, that supported product funding models and addressed cybersecurity risks. These changes provide one potential path for sustainably funding digital services initiatives. However, ongoing monitoring of implementation of investments, funding, and operating gaps is required to identify additional options to ensure digital services systems have the maintenance funding they need to keep up with rapidly evolving cybersecurity threats and are able to continually provide innovative digital services.

The TAC will maintain a focus on sustainable funding as a component in the next year. The TAC also will seek to continue collaborating with legislative partners to sustainably fund digital services in a planful way to ensure continued success, as Minnesotans increasingly seek to interact with their state government via self-service opportunities.

Partnering for Change Leadership

Transitioning to a customer-focused, product-based, technological approach is an ongoing and substantial effort. MNIT and other state agencies face the constant challenge of anticipating and addressing evolving customer needs, legal requirements, agency programs, and IT capabilities and risks. Successfully implementing these changes requires strong leadership to drive and sustain shifts in how the State of Minnesota manages its technology processes and development. Over the course of 2023, TAC and its members engaged in dialogue by being involved in public events and hosting agency presentations on modernization projects.

The recommendations from TAC and the subcommittee's operational-level work in the background have played a crucial role in acquiring essential insights into proven approaches for transitioning to a customer-centric operating model. These discussions have additionally provided valuable guidance for businesses on reimagining their operations to better serve today's clients.

Overall, the successful and ongoing partnership between MNIT and TAC and the resulting progress by the Office of Transformation is positioning the State of Minnesota as nation-leading in this space.

Bringing a Tactical Approach to Customer Experience Initiatives

MNIT was identified as the owner of the Customer Experience goal in Governor Walz's One Minnesota Plan. The Office of Transformation officially launched the goal on Aug. 2 at the Customer Experience Summit. Chris Schmitter, chief of staff, kicked off the summit with messages that focused on the importance of customer experience in improving the lives of all Minnesotans and its alignment to the One Minnesota Plan.

The morning session, which was specific for agency leaders, included a panel discussion on this topic. TAC members facilitated and participated in the discussion. Several TAC members discussed their experiences leading this work in the private sector and shared lessons learned with the audience. Representative from the Department of Human Services (DHS) shared their internal perspective in managing this change from within the state culture.

TAC's dedication and contributions to enhancing the state's technology management are distinctive to Minnesota. The collaboration between the public and private sectors, along with the involvement of key legislators, has resulted in significant enhancements by aligning MNIT's efforts with established industry best practices.

Transforming Systems with Technology Solutions

The Department of Corrections (DOC) Transformation initiative, backed by a $54 million appropriation over four years, envisions the modernization of the technology supporting the continuum of the correctional system. The investments include improvements to systems such as records management and sentence administration systems with modern, secure data solutions, among others. Modernization of these systems will enable the state to improve outcomes for individuals and communities alike.

DOC leaders, presenting to TAC in October 2023, highlighted key opportunities, including program transformation, data leverage, platform integration, and improved resource management. The new solutions aim to enhance success, reduce community resource dependency, and contribute to community vibrancy and workforce quality. This transformative shift aligns with equity and inclusion goals, emphasizing measurable results for the success of incarcerated individuals.

Navigating Emerging Opportunities and Challenges

Millions of residents and businesses depend on Minnesota's technology systems and tools to engage with government services, conduct business with the state, and fulfill tax, licensing, and other obligations. State agencies utilize the same systems to deliver government services, ensure compliance with state laws, and securely manage customer information and other records. The effective performance of these systems and tools is pivotal in establishing trust and confidence in state government.

Providing Counsel on Artificial Intelligence

No topic has dominated the technology landscape like artificial intelligence (AI). Artificial intelligence captured the attention of the TAC, Minnesota, and the world in 2023, spurred by the release of new tools that brought innovative and groundbreaking technology into the hands of anyone with a keyboard.

In June 2023, the TAC invited artificial intelligence expert Dr. Isabelle Moulinier to share her perspective on the history of artificial intelligence and its promise. Dr. Moulinier emphasized how recently released capabilities build on a long history of daily interactions with a variety of artificial intelligence tools, such as speech recognition ("Hey, Siri," "OK, Google," etc.), image recognition (searching Instagram, unlocking your phone with facial recognition), or robotic vacuums that use artificial intelligence to alleviate the burden of household tasks in everyday life.

The opportunities to improve digital service delivery with artificial intelligence are just beginning to unfold, and the TAC has formed an artificial intelligence subcommittee to support and advise MNIT and state agencies on opportunities to maximize the opportunity of responsible artificial intelligence while being mindful of risks.

Dr. Moulinier highlighted some of those risks that could impact the state's ability to deliver digital services in ways that don't exacerbate disparities as a result of biases within the models used to train artificial intelligence.

The implementation and continued incorporation of AI technologies is likely to continue the rapid evolution experienced in 2023, and the TAC, with its AI subcommittee, is well positioned to guide responsible implementation to enable MNIT and state agencies to harness the remarkable potential of AI, while identifying practices and methods for protecting agencies and Minnesotans from adverse impacts where these technologies may be implemented in state systems and services.

DATA PROTECTION

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Staying on Top of Cybersecurity Risks and Trends

In August 2023, the TAC invited cybersecurity expert Luke Dembosky to present on current risks and trends. Dembosky, having served as the deputy assistant attorney general for national security at the U.S. Department of Justice and currently working as a partner and co-chair at Debevoise & Plimpton LLP, shared valuable insights gained from his role advising some of the nation's leading companies on managing cyber risk and responding to cyber incidents.

His presentation highlighted a surge in data extortion without encryption, particularly amidst the prevalent ransomware epidemic. Threats such as systemic supply chain attacks, third-party vendors, and insider threats, were identified as significant concerns. Nation-states are increasingly targeting sensitive consumer and strategic information, while attacks on organizational leadership and public sector infrastructure, including municipal IT systems, are on the rise.

These incidents are increasingly likely to impact state and local government agencies, even if those entities are not the intended targets of attackers. Cybersecurity incidents impacting crucial, time-sensitive events like elections are also increasing. Furthermore, the landscape is marked by growing regulatory demands and litigation risks. Dembosky pointed out the use of Big Data and AI as potential sources of compromise for consumer data, posing substantial reputational risks to organizations.

Considering these trends, the TAC, supported by its dedicated cybersecurity subcommittee, is strategically positioned to guide efforts aimed at preventing cyber-attacks and empowering MNIT and state agencies to bolster their defenses, ensuring the protection of both agencies and residents of Minnesota from potential adverse impacts resulting from cyber incidents.

What's Coming in 2024

As we progress into 2024, the TAC remains steadfast in its commitment to advancing key areas that have been the cornerstone of our efforts: cyber and information security, customer and user experience, and project-to-product transformation. We have suspended one subcommittee, Sustainable Funding, to be revisited once current program investments mature. Simultaneously, recognizing the significance of artificial intelligence (AI), we have established an AI subcommittee to address its benefits and risks. Building upon this solid foundation, we are now poised to introduce a pivotal area to our agenda: the exploration of AI.

Continuing Our Core Focus

Our ongoing dedication to cyber and information security remains crucial as we continue to strengthen the digital defenses of our state's infrastructure. Equally important is our commitment to enhancing customer and user experiences, ensuring that our digital services are intuitive, accessible, and responsive to the needs of Minnesotans. The transition from project-focused to product-focused approaches in managing technology will remain a key driver in our strategy, promoting agility and sustained value in our IT initiatives.

Embracing Artificial Intelligence

In 2024, AI will emerge as a significant area of focus. Our approach will be two-fold: firstly, to build a comprehensive understanding of AI among the council and state agency leaders; and secondly, to develop a strategic framework for its adoption. This framework will identify and leverage AI opportunities while mitigating associated risks, ensuring responsible and ethical utilization of AI technologies.

As we build on focus areas in cyber and information security, customer and user experience, and project-to-product methodologies. Adding AI as a focus area will be a natural and necessary scope of what the TAC will discuss in 2024.

In conclusion, as we continue to build on our foundational work in cyber and information security, customer and user experience, and project-to-product approaches, the introduction of AI represents a natural evolution of the council's focus. We encourage open dialogue and welcome questions or discussions about our plans and recommendations. Through collaborative efforts and leadership, we are excited to navigate these new frontiers in 2024, fostering a future where technology serves as a catalyst for efficient and innovative government services.

Letter from Commissioner Tomes

February 20, 2024

Governor Tim Walz
Lt. Governor Peggy Flanagan
Speaker of the House Melissa Hortman
House Minority Leader Lisa Demuth
Senate Majority Leader Erin Murphy
Senate Minority Leader Mark Johnson

Cc:

Members of the Technology Advisory Council

Minnesota IT Services (MNIT) expresses gratitude to Chair Rick King, Vice Chair Vince Cabansag, and the Technology Advisory Council (TAC) for their ongoing support in enhancing technology for Minnesotans. The collaboration with council members, private sector leaders, public servants, and industry experts has contributed to continuous improvements in government technology, cybersecurity, and modernization.

MNIT is committed to achieving its vision of an innovative digital government that serves all citizens. Acknowledging the time and contributions of TAC members and guests, MNIT highlights the advancements, including the first full year of work for the Product & Agile Center of Development. The TAC recommendations emphasize user-centered design, Agile processes, and delivering value, promoting efficiency and responsiveness to Minnesotan's needs.

In 2024, MNIT looks forward to collaborating with TAC and legislative partners to address investment needs for ongoing progress, aligning with strategic goals for people-centered digital government services. MNIT is prepared to lead and collaborate with partners across state government, fostering agility and returning time and peace of mind to the people of Minnesota.

MNIT's existing strategic goals continue to complement these recommendations, especially as we focus on promoting people-centered digital government services. MNIT is ready to lead and share our work in this space with all of our partners across state government. TAC truly seeks to improve the way that government provides services for Minnesotans. Minnesota IT Services is eager to move this work forward with our state agency business partners, our partners in the Minnesota Legislature, and our partners in private industry so that together, we can all deliver with agility and return time, and ease of mind back to the people of Minnesota.

Sincerely,

Tarek Tomes
Commissioner, Minnesota IT Services and Minnesota State CIO

Appendices

Appendix A | 2023 TAC Speaker List

Month	Type	Speaker
January 2023		Council updates, report writing, and subcommittee discussions – no guest speaker(s)
February 2023	Agency Presentation	**Minnesota Department of Natural Resources (DNR) Technology Strategy and Overview** Katie Smith, Director of Ecological and Water Resources, DNR Jenna Covey, Chief Business Technology Officer, MNIT partnering with DNR
March 2023	Agency Presentation	**Minnesota Geospatial Information Office (MnGeo) Technology Strategy and Overview** Alison Slaats, Chief Geospatial Information Officer, MnGeo Director, MNIT
April 2023	Agency Presentation	**Minnesota Department of Human Services (DHS) Technology Strategy and Overview** Deputy Commissioner Shireen Gandhi, DHS Greg Poehling, Chief Services Transformation Officer, DHS Jeff Jorgenson, Business Transformation Officer, DHS Eric McCool, Business Integration and Analytics Division Director, DHS Vernon Rowland, Agile Coach – Service Delivery Transformation Team, DHS Additional agency and IT leaders
May 2023	Agency Presentation	**Minnesota Department of Public Safety (DPS) Driver and Vehicle Services (DVS) Language Access Project Overview** Commissioner Bob Jacobson, DPS Deputy Commissioner Cassandra O'Hern, DPS Assistant Commissioner Tim Lynaugh, DPS Pong Xiong, DVS Director, DPS Pancho Henderson, Chief Business Technology Officer, MNIT partnering with DPS Additional agency and IT leaders Vendor partners (Google)

Month	Type	Speaker
June 2023	Guest Speaker Presentation/ Discussion	**Artificial Intelligence** Isabelle Moulinier, Thomson Reuters
July 2023		Council and subcommittee updates – no guest speaker(s)
August 2023	Guest Speaker Presentation/ Discussion	**Cybersecurity** Luke Dembosky, Debevoise & Plimpton
September 2023	Guest Speaker Presentation/ Discussion	**Megatrends** Blair Sheppard, PwC
October 2023	Agency Presentation	**Minnesota Department of Corrections (DOC) Technology and Modernization Overview** Commissioner Paul Schnell, DOC Assistant Commissioner Connie Jones, DOC Bill Pal-Freeman, Chief Business Technology Officer, MNIT partnering with DOC Chris Litton, Gartner
November 2023	Agency Presentation	**Minnesota Pollution Control Agency (MPCA) Feedlot Registration Online Service Overview** Myrna Hallbach, Business Solutions Strategic Manager, MPCA Kaitlin Jamieson, Online Services Lead, MPCA
December 2023	Agency Presentation	**Minnesota Department of Veterans Affairs (MDVA) Technology Overview** Eric Meittunen, Deputy Commissioner – Healthcare, MDVA David Bellefeuille, Senior Administrative Officer, MDVA Kimberly Maturo-Hilt, Chief Business Technology Officer, MNIT partnering with MDVA Additional agency and IT leaders
January - February 2024		Council updates, report writing, and subcommittee discussions – no guest speaker(s)

Appendix B | Members of the Technology Advisory Council

Name	Organization
Rick King, Chair	Formerly Thomson Reuters
Vincent Cabansag, Vice Chair	Clockwork
Tom Butterfield	Formerly TCF Bank
Kassie Church	Minnesota Association of Professional Employees
Anjali Gandhi	Federal Reserve Bank of Minneapolis
Deputy Commissioner Shireen Gandhi	Minnesota Department of Human Services
Deputy Commissioner Lee Ho	Minnesota Department of Revenue
Jason Lenz	Minnesota Association of Counties
Assistant Commissioner Timothy Lynaugh	Minnesota Department of Public Safety
Susan Ramlet	Medtronic
Melissa Reeder	League of Minnesota Cities
Deputy Commissioner Britta Reitan	Minnesota Management & Budget
Deputy Commissioner Evan Rowe	Minnesota Department of Employment and Economic Development
Katie Smith	Department of Natural Resources
Theresa Wise	Formerly Delta Air Lines
Representative Kristin Bahner	Minnesota House
Senator Mark Koran	Minnesota Senate
Representative Jim Nash	Minnesota House
Senator Melissa Wiklund	Minnesota Senate