June 2019 Quarterly Report

State of MN

Blue Ribbon Council on IT

This first quarterly report of the Blue Ribbon Council on IT includes an overview of the council, a summary of the first four meetings of the full council and the preliminary plans of the three sub-committees for Cybersecurity, Data Management & Privacy, and Modernization.

June 28, 2019

Governor Tim Walz

Lt. Governor Peggy Flanagan

Speaker of the House Melissa Hortman

Senate Majority Leader Paul Gazelka

Senate Minority Leader Tom Bakk

Minority Leader Kurt Daudt

MNIT Commissioner Tarek Tomes

James Nobles, Legislative Auditor

Cc: Members of the Blue Ribbon Council on IT

On February 6, 2019, by Executive Order 19-02, Governor Walz established the Blue Ribbon Council on Information Technology (BRC-IT). I was appointed chair, and additional members were named in March 2019. Since then, all have been assigned to a sub-committee and have been participating in discussions about the current state of IT services and the council's goals.

On behalf of the BRC-IT, we hereby submit the first quarterly report containing a summary of the meetings of the full council and the sub-committees. We look forward to continued engagement from councilmembers and relevant stakeholders in the year ahead.

Sincerely,

Rick King

Chair, Blue Ribbon Council on IT

Executive Summary

The Blue Ribbon Council on IT (BRC-IT) has held four meetings to date. Members have been briefed on the current state of IT and see opportunities for improvement in the State of Minnesota. Members have been highly engaged and are enthusiastic about using this collaborative experience as an opportunity to ensure that Minnesota IT Services (MNIT) is a reliable partner for agencies, a strong proponent for citizen-centered technology and a desirable employer for talented technologists.

It should be noted that at the first Council meeting, the members decided that the full council will meet every month rather than every other month as prescribed in the Executive Order, due to the importance of the topics and the short time until the final report is due in June 2020.

Robust discussions during full council and sub-committee meetings (Cybersecurity, Data Management & Privacy, and Modernization) identified several focus areas. Each of the three sub-committees translated those focus areas into goals in their respective charters, and they have identified several areas of potential crossover and collaboration.

Blue Ribbon Council Overview

On February 6, 2019, by Executive Order 19-02, Governor Walz established the Blue Ribbon Council on Information Technology (BRC-IT), stating, "Minnesotans expect reliable, secure, and accurate information technology services when they interact with the state. That is why the Blue Ribbon Council on Information Technology was created to ensure the people of Minnesota have access to high-quality, dependable services." He appointed Rick King, Executive Vice President of Thomson Reuters, as chair. The membership of the BRC-IT and sub-committee assignments is as follows.

BRC-IT Chair Rick King	Thomson Reuters	
Renee Heinbuch	Washington County	**Cybersecurity Chair**
Tewodros "Teddy" Bekele	Land O' Lakes	Cybersecurity
Comm. Steve Grove	Dept. of Employment and Economic Development (DEED)	Cybersecurity
Laurie Martinson	Dept. of Natural Resources (DNR)	Cybersecurity
Rep. Jim Nash		Cybersecurity
Sen. Melissa Wiklund		Cybersecurity
Dep. Comm. Eric Hallstrom	Management and Budget (MMB)	**Data Mgmt & Privacy Chair**
Comm. Margaret Anderson Kelliher	MN Department of Transportation (MN DOT)	Data Mgmt & Privacy
Rep. Kristin Bahner		Data Mgmt & Privacy
Jason Lenz	Lyon County	Data Mgmt & Privacy
Nancy Lyons	Clockwork	Data Mgmt & Privacy
Mike McCullough	National Marrow Donor Program	Data Mgmt & Privacy
Theresa Wise	formerly Delta/NW Airlines	**Modernization Chair**
Tom Butterfield	TCF Bank	Modernization
Dep. Comm. Lee Ho	Dept. of Revenue (DOR)	Modernization
Dep. Comm. Chuck Johnson	Dept. of Human Services (DHS)	Modernization
Richard Kolodziejski	MN Assoc. of Professional Employees	Modernization
Sen. Mark Koran		Modernization

Chair Rick King, MNIT Commissioner Tarek Tomes and the legislators (Senator Melissa Wiklund, Senator Mark Koran, Representative Kristin Bahner and Representative Jim Nash) are serving as ex-officio members for each of the committees. They will attend meetings of primary interest.

Blue Ribbon Council Meetings

Monthly meetings were held with the full BRC-IT in March, April, May and June. The focus of the March meeting was to introduce the members of the council, share information about the three priority areas, and make assignments to the sub-committees. Members agreed in the March meeting it would be helpful to learn more about the larger agencies and hear presentations from private sector technology professionals. The selected topics and agencies are listed in the table below. Summaries of the meetings follow.

April	Presentation	**Cybersecurity** Richard Puckett, CISO, Thomson Reuters
	Agency Overview	**Department of Human Services** Deputy Commissioner Chuck Johnson
May	Presentation	**Modernization of MNIT** Commissioner Tarek Tomes
	Agency Overview	**Department of Transportation** Commissioner Margaret Anderson Kelliher
June	Discussion	**BRC-IT June 2019 Report Review**
	Agency Overview	**Management and Budget** Commissioner Myron Frans

March 2019 Meeting Summary

Council Introductions

Governor Walz kicked off the BRC-IT by thanking the members and expressing his hope that the BRC-IT will provide transparency for Minnesotans and standardize best practices for IT in MN. All members had an opportunity to introduce themselves and share their interest and hope for the council. Three subcommittees were created, and members were assigned respective to their expertise and committee choice. To maximize the productivity of the council, members agreed to meet monthly with the full council in addition to attending their assigned sub-committee meetings.

Chair Rick King provided an update on the MNLARS report. He noted that although it is not a product of the BRC-IT, it is related because he was appointed to deliver the MNLARS report in his capacity as chair of the BRC-IT.

A State Government primer was provided to ensure all members had a high-level understanding of the legislation and funding process. It was particularly useful for members from the private sector.

Agency Overview: MNIT, Deputy Commissioner Jon Eichten

Legislation passed in 2011 consolidated all executive branch IT staff under Minnesota IT Services (MNIT) and the leadership of the State CIO. MNIT has an annual budget of over $450 million and more than 2,000 staff members that provide enterprise and local agency services. Staff supports over 35,000 end users through the management of more than 2,800 applications and maintenance of nearly 6,000 servers. They are actively engaged in 350 projects and deliver over 3,000,000 emails per week.

Discussion

BRC-IT members noted that the Chief Business Technology Officers (CBTO) for agencies are not always invited to leadership meetings or included in strategy planning.

April 2019 Meeting Summary

Sub-Committee Reports

Each of the Sub-Committees reported out on the focus areas they identified in their first meeting. Discussions were held on the potential for similar scope between committees and the need for holding co-meetings.

Presentation: Cybersecurity - Richard Puckett, Acting CISO at Thomson Reuters

Cybersecurity planning and strategy requires an examination of outdated systems, an understanding of the rapid transformation of cloud technology, and inclusion of security considerations in the procurement process. Success hinges on the development of a good strategy and appropriate levels of investment as well as on end-user training, change management, and culture transformation.

Richard Puckett and Cybersecurity Subcommittee Chair Renee Heinbuch met with MNIT's Chief Information Security Officer, Aaron Call, to review the state's current work and their Information Security Strategic Plan. They concluded the state's cybersecurity team is doing well in comparison to industry best practices and has a solid strategic plan.

Agency Overview: Dept. of Human Services, Deputy Commissioner Chuck Johnson

The MN Department of Human Services (DHS) serves over`2.8 million people annually via 400 active applications including 12 major IT systems. More than 200,000 providers and 31,000

county, tribal and state workers access applications throughout each year. There are thousands of functions completed that are supported by the DHS IT infrastructure: 290,000 health care applications; 511,000 enrollee calls; 352,100 background studies and 103 million provider claims.

DHS is unique from other agencies due in part to the fact that services provided and the resulting IT required to support the department are impacted by the variety of funding sources. Federal funding streams must be kept separate for reporting purposes.

Deputy Commissioner Johnson provided examples of some major legacy or higher profile systems, and highlighted DHS's recent focus on assessment of business needs for IT. Johnson addressed the limitations of analyzing data to improve systems under regulations in data privacy laws. He expressed that DHS is working to improve programs and systems with personnel, culture, and system abilities.

Discussion

There is a wide variety of legislative policy language that impacts MNIT operations, sometimes inhibiting efficient or effective completion of projects. Also, the enabling act for MNIT was introduced during the government shutdown of 2011 and may not have gotten enough attention. Establishing clarity around MNIT's role, including by revisiting the enabling statute and summarizing relevant legislative policy language, would be helpful.

May 2019 Meeting Summary

Sub-Committee Reports

Member focus during the month of May was on the end of the legislative session. Sub-committees agreed to deliver charters after review in their June meetings.

Presentation: Innovation and Modernization at MNIT, Commissioner Tarek Tomes

Commissioner Tomes presented his observations as a new commissioner, as well as his vision and goals for modernization and innovation at the State. He started by noting that many current themes for improving IT Operations are the same as those presented in the Blue Ribbon Committee on Information Polices report from 1984. Currently, according to Commissioner Tomes, the State employs a project and portfolio management approach for 400 projects, and there is room for improvement in the process. His remarks focused on the need to facilitate an innovation mindset and culture, and he identified the following possible areas for improvement:

- **Improving communication** between agencies, sharing success to leverage more success and reimagining how agencies work together.

- Following a **human-centered design** approach, in which the designers walk in the shoes of those who rely on the systems.

- Providing employees a **space or structure to innovate** and the freedom to follow their innovative instincts.

- Rebranding generic roles within agencies as specified **innovation and technology positions**.

- Measuring the State against best practices **benchmarks** of modernization and innovation. Currently, Commissioner Tomes rates the State at 1 out of 4.

- **Reducing complexity**. For example, the State currently employs 19 customer relationship management tools.

The BRC-IT notes that State government differs from industry, in that risk mitigation often supersedes innovation. The most effective approach to address risk while also fostering innovation is to employ a strategy of doing no more harm than good. Instead of sweeping change, agencies can replace existing systems with improved and standardized systems over time as the existing versions become outdated. Eventually, the older systems will time out and realign.

Agency Overview: MnDOT, Commissioner Margaret Anderson Kelliher

The Minnesota Department of Transportation (MnDOT)'s mission is to plan, build, operate and maintain a safe, accessible, efficient and reliable multimodal transportation system that connects people to destinations and markets throughout the state, regionally and around the world. MnDOT's five core values – safety, excellence, service, integrity, and diversity and inclusion – guide the agency's work and help maximize the health of people, the environment and our economy. Commissioner Margaret Anderson Kelliher gave an overview of the agency's portfolio of technology systems. They include commuting notifications, MnPASS, location technology for parking, smart sensors on plows, drone inspections on bridges and culverts, programs for connected and automated vehicles, and truck platooning. Commissioner Anderson Kelliher noted that the agency faces IT challenges in the prioritization of cyber security investments, treatment of legacy applications, sharing of data, and technology modernization.

Commissioner Anderson Kelliher stated that MnDOT is unique, in that it relies mostly on trunk highway funds and federal funds. It draws little from the State's general fund. In addition, she and her advisor pointed out a key distinguishing element of MnDOT technology: Engineers in the industry, rather than information technology professionals, typically develop the technology employed.

"Choice and design need to be human-centered, because transportation impacts everyone in the state," Commissioner Anderson Kelliher said.

Discussion

The BRC-IT discussed several obstacles to and ideas for improving IT. Building on the experience of the Independent Expert Review of MNLARS, the BRC-IT believes that inserting restrictions or requirements around reporting and procedures into legislation can hamper an agency's ability to meet benchmarks or follow best practices. Legislators should be setting the direction and policy. Agencies, in partnership with MNIT, must take responsibility for monitoring trends and best practices, crafting reports, and adapting procedures to rapidly changing circumstances while remaining true to the policy goals established in legislation. The BRC-IT also notes that agency leaders and legislators often have limited IT experience, which sometimes poses challenges. In addition, the domain experts within the agencies often make decisions about business process improvements and related technology, without the input of MNIT. MNIT can be a co-creator with the agencies, helping to navigate the digital marketplace and curate strategic solutions.

June 2019 Meeting

Sub-Committee Reports:

The sub-committees reported on the first drafts of their charters, fielding questions and adjusting the contents based on discussion and agreement by members of the BRC-IT. In addition to various technical changes, the discussion led to a few changes with broader impact to the BRC-IT:

- A change in the Data Privacy Sub-committee name to the Data Management and Privacy Sub-committee. This reflects a shift in the understanding of the sub-committee's objective to include more consideration of where data is housed and which data the State has.
- A modification in Modernization Sub-committee language from "MNIT/Agency" to "State (MNIT/Agency)" to reflect a philosophy that recommendations should reflect the vision of the State, and not just the priorities of MNIT and individual agencies.
- The addition of "customer focus" language to the Modernization Sub-committee charter.
- A new reference to "technical debt" to the Modernization Sub-committee charter. Chair Rick King recommended that this topic be discussed further in a future meeting to make sure all parties agree on its meaning.
- Adjustments in references to stakeholders to reflect the fact that the words "citizen" or "Minnesotans" might not accurately reflect the affected parties in some cases.

Chair Rick King stated that the charters appropriately represented broad topics and objectives, and he encouraged the sub-committee members to focus now on one or two specific objectives with clear deliverables.

Agency Overview: Minnesota Management & Budget (MMB), Commissioner Myron Frans

Commissioner Frans began his presentation by stating that MMB operates much like MNIT does, in that it works closely with the other individual agencies. Consequently, MMB faces the complexity of working with multiple unique lines of business, managing 200 discreet funds that rely on authorization of some type.

Much of MMB's complexity revolves around restrictions and requirements built into the funds it manages. The State's general operating fund is somewhat flexible, but it is still subject to the format of biennial approval. The Minnesota Constitution requires that a legislative body cannot bind the next legislature. Each legislature must revisit its budget and prioritize pending.

This format creates conflict by way of restricting funding to two years for projects that often have a longer time horizon. According to Commissioner Frans, MMB faces a challenge of providing predictability and commitment for projects that span up to six years in this environment.

One mechanism available to progress effectively within the restrictive biennium structure is the Information and Telecommunications Account, also known as the "Odyssey Fund." This fund affords agencies the ability to ask for some funds to continue beyond the biennium, but it's subject to a restrictive approval process.

In addition, Commissioner Frans identified multiple challenges to its operations and processes:

- Aside from the general fund, much of MMB's managed funds come from federal and other sources, with solid restrictions and requirements.
- MMB gets many requests from agencies to fix things, and to fix them immediately. This is a challenge to the process of prioritization.
- Sometimes issues can be resolved by educating users to use systems that already exist, rather than customizing systems to meet their needs.
- For the most part, MMB does not factor inflation into its budgetary decisions.
- MMB is responsible for fiscal notes, a process of estimating the cost of proposed bills. It takes time, and it is controversial.
- MMB charges other agencies a fee to maintain the systems it uses to provide services to those agencies. It might be more efficient for the Legislature just to fund MMB for those systems.

Discussion

Funding IT for the State of MN is complex, but there may be opportunities to improve current processes, including:

- the approval process for the Information and Telecommunications Account,
- how centralized services are currently apportioned,
- knowledge sharing for agencies and entities using the same systems, and
- writing fiscal notes.

Sub-Committee Meetings

The three sub-committees plan to meet regularly until June 2020 and will be responsible for the effort associated with their respective mandates. Each has drafted a charter that outlines their goals for the year. They are included in the Appendix.

Appendices

Appendix A – Key Concepts for Further Discussion by the BRC-IT

Appendix B – Subcommittee Charters

Key Concepts for Further Discussion by the BRC-IT

- IT leaders as standing members of agency leadership team.

- MNIT CISO and the Cybersecurity Subcommittee identifying the appropriate level of investment required to execute the strategic plan.

- MNIT and BRC-IT reviewing the MNIT enabling statute, including the role of the Technology Advisory Committee, along with a review of all other legislation related to IT to recommend additions, deletions and edits.

- BRC-IT evaluating the need for and feasibility of providing IT literacy training for agency leaders and for the legislature.

- BRC-IT reviewing the State portfolio and project management process.

- Agency domain experts engaging MNIT as they explore business process improvements, especially when technology of any sort is involved.

- MNIT adopting a human-centered design approach to future IT projects.

- MNIT following best practices in project management and reporting

- MNIT communicating success stories to and share best practices across agencies.

- MNIT leveraging packaged software solutions, where appropriate and minimizing customization.

- MMB simplifying the approval process for the Information and Telecommunications Account.

- MMB providing direct funding for centralized systems and services, eliminating the need for apportionment to agencies.

- MNIT leveraging a Center of Excellence for mastery of existing systems to avoid unnecessary request for specialization - and including other governmental agencies (county, city, etc.), who use the same systems.

- MMB having adequate resources to deliver fiscal notes in a timely manner.

- MMB including inflation in its estimates.

Cybersecurity Charter

Blue Ribbon Council on IT

Problem Statement	Goal Statement
Minnesotans expect the State of Minnesota to securely manage the growing cybersecurity threat with a comprehensive strategy to ensure protection from all hackers and cybercriminals.	Provide actionable guidance related to: • How to fund and execute to the cybersecurity strategy • Education for awareness and protection of all information • Building and incorporating a governing body at the legislature level for cybersecurity • Determine ownership and expectations for Continuity of Operations and DR aligned with IT Supported Operations

Expected Benefits	Deliverables	Timeline
• Aligned and improved security at all levels within state agencies; MNIT & business partners better understanding current risks will decrease our risk exposure • Better awareness from education and definitive roles and responsibilities • Governance enabled to make the right investment and policies alignment • Minnesotans will trust the systems that manage, utilize and hold their data • Dedicated Security expert team who is influential with the State (MN.IT)	• Feedback on current MNIT Security Plan • Legislative recommendation • Public awareness education and engagement strategy • Final recommendations aligned to goals	➢ Q2-Q3 2019 ➢ Dec 2019 ➢ Q1, 2020 ➢ Q2, 2020

In Scope	Out of Scope	Committee Members	
• Fostering strategic partnerships for increased security awareness • Access control awareness aligned to risk and compliance including physical • Security service delivery model centralized and local services • Clarification of ownership for Continuity of Operations & DR	• Data management • Incident response and forensics • Data Privacy	• Renee Heinbuch -chair • Tewodros Bekele • Laurie Martinson • Steve Grove • Sen. Melissa Wiklund • Rep. Jim Nash	• *ex-officio: Rick King, Rep. Kristin Bahner,* Sen. *Mark Koran*

Anticipated Challenges	Relevant Artifacts	Assumptions
• Managing to external expectations (e.g. legislative deadlines) • Lack of cybersecurity awareness and education • Resources and funding • Situation awareness and culture changes	• MN.IT MN Information Security Policies & Standards • MN.IT MN Information Security Strategic Plan • Inventory of current IT Security projects/initiatives • Data Privacy State Statue chapter 13 Data Practices • NIST or other best practices standards for cybersecurity	• Everyone views cybersecurity as essential • Minnesotans trust State of MN systems • All State employees are better prepared and fully trained on Cybersecurity

Data Management & Privacy Charter

Blue Ribbon Council on IT

Problem Statement	Goal Statement
The State of Minnesota collects and maintains a wide variety of data necessary to carry out its duties. Minnesota IT Services is charged with providing oversight, leadership, and direction regarding the security of information and technology systems and services. Minnesotans and employees of state government expect that the state will only collect and retain data necessary to carry out government functions, will keep the data secure, and will share data appropriately.	Provide actionable guidance related to: • Securely maintaining state data • Accounting for data collection, categorization, and maintenance when undertaking information technology projects • Sharing state data between agencies and partners to accomplish state functions • Managing and valuing the sharing of state data with third parties • Retaining data in a manner that protects it and meets the needs of those who need it without creating or enhancing risk

Expected Benefits	Deliverables	Timeline

Recommendations for applying best IT practices for data privacy that will protect the citizens of Minnesota
 	
Recommendations for clear guidelines for State of Minnesota employees and third-party partners relating to data protection in the context of IT projects and initiatives
 	
Recommendations to better capture value from state data, including data shared with third parties, and the confidence to embrace such opportunities when they are presented
	• Vision statement for state data management and privacy
	• Guidelines for creating processes/policies/procedures for considering and protecting data as part of IT projects
	• Legislative and agency recommendations
		• Monthly meetings opposite full BRC-IT meetings
		• Quarterly reporting of activity
		• Key reports include:
		  o Q4 2019 – Legislative Recommendations
		  o Q2 2020 – Anticipated Final Report

In Scope	Out of Scope	Committee Members	
• Data retention, collection, categorization, and maintenance • Realizing value through data resources • Data policies related to third-party partners • Cybersecurity issues related to data • De-identification of data	• General review of Minnesota Government Data Practices Act • Policies and practices already specified and applied within individual agencies, including those required by specific state or federal law • General cybersecurity issues	• Eric Hallstrom -chair • Margaret Anderson Kelliher • Mike McCullough • Jason Lenz • Nancy Lyons	Rep. Kristin Bahner *Other ex-officio: Rick King, Sen. Mark Koran, Rep. Melissa Wiklund, Rep. Jim Nash*

Modernization Charter		
Blue Ribbon Council on IT		

Problem Statement	Goal Statement	
People of Minnesota expect greater value from the state's portfolio of IT applications, requiring a coordinated strategy to update and replace IT systems and processes.	Provide actionable guidance for MNIT and Agencies related to: • Modernization of back-end technology • Modernization of customer experience with the technology • Modernization of the Business of IT	

Expected Benefits	Deliverables	Timeline
• Improved experience of people interacting with state agencies • Reduced confusion and inefficiency from defining roles and responsibilities • Consistent, modern policies and procedures • Clearly Understood value of funding	1. Validate State Vision Statement for IT 2. Guidelines to improve delivery success for IT projects 3. Outline State staffing and business model* to leverage technology to benefit MN 4. Modernization Roadmap	➢ Q3 2019 ➢ Q4 2019 - Q1 2020 ➢ Q2 2020 ➢ Q2 2020

In Scope	Committee Members	
1. Focus on modernization, customer experience, results, MN.IT, Agency 2. Accountability standards, valuation parameters, scorecard parameters & cadence 3. Staffing, training, culture, financing, institutional barriers 4. Current inventory, Top 5, Top 20, Top 100, go forward update process, tech view, capability view, technical debt	• Theresa Wise -chair • Chuck Johnson • Tom Butterfield • Richard Kolodziejski • Lee Ho	• Sen. Mark Koran • Sen. Melissa Wiklund, *ex-officio: Rick King, Rep. Kristin Bahner, Rep. Jim Nash*

Anticipated Challenges	Relevant Artifacts	
• Managing to external expectations (e.g. legislative deadlines) • Funding process (different for different agencies, projects) • Multiple layers - Customers, agency staff, contractors, third parties, municipal governments	• MN.IT organizational structure (centralized v. federated agency coverage) • Inventory of existing agency applications • Inventory of current IT projects/initiatives • Agency standards, metrics, reports etc. • Current vision statement • Inventory of known technology risks	