Creating Standards through the Enterprise Architecture Program

The State of Minnesota has established a comprehensive Enterprise Architecture program to harmonize and coordinate information and telecommunications technology systems and services. The purpose of the enterprise architecture program is to align the information technology (IT) investments and implementations with the enterprise’s business strategies. The Office of Enterprise Technology accomplishes this by working with the agencies as a community.

The goal of the enterprise architecture governance process is to provide the leadership and direction that can create alignment within the IT community, close the gaps in standards development and compliance, and encourage cross-agency collaboration and integration.

The primary outputs of the architecture program are architectural “artifacts”, which are the policies, standards, guidelines, and processes that communicate the State’s information technology architecture direction and decisions. The artifacts are developed under the direction of a formal Architecture Review Board through four architecture domain groups (business; information/data; information systems/applications; and technology), using the governance process described below, before formal issuance by the State Chief Information Officer. Standards related to data transparency are developed, vetted and approved through the processes established by the Enterprise Architecture Program.

Architectural artifacts

Architectural artifacts include policies, standards and guidelines.

- A policy is a senior leadership statement that indicates the direction or intent of an organizational proposition for a given subject area.
- A standard is a general or specific directive constraining detail decisions. A standard describes what must be done. It is required (normative).
- A guideline is non-mandatory. A guideline may provide historical and background information, describe the intended use of the standard, or explain ways to meet the standard. A guideline amplifies a standard (informative).

The artifacts are created by first identifying and articulating the “need.” Potential solutions are then researched, and proposed policies, standards and guidelines (the artifacts) are formulated and vetted by agency representatives. The artifacts are made available through the Office of Enterprise Technology’s website for examination by agencies, vendors and the general public.
How the artifacts make a difference

Architectural artifacts are the specifications used by systems designers to improve the efficiency and standardization of state applications and information systems. Being established through the formal governance process and published under the statutory authority of the State CIO imparts meaning and substance to the artifacts. Standards are published on the OET website, and are referenced in procurement documents and included in state contracts. Standards are referenced by other IT governance processes, including IT budget review and project oversight.

Formal process for decision making

The formal process for establishing policies standards and guidelines is kicked off with the formation of a subject matter expert (SME) group whose job it is to identify how a particular need for IT alignment may be met. For standards related to data transparency, the SME groups are made up of individuals with specialized knowledge of metadata and geospatial data. The SME group drafts a proposed artifact which is reviewed and revised by one of the four architecture domain groups made up of agency representatives and OET enterprise architects. The architecture domain team presents the proposed artifact to the Architecture Review Board for a period of review and comment. The artifact is then presented to the All-CIO Team for review and comment before issuance by the State CIO. This formal governance process is intended to ensure that parties affected by the artifacts will have an opportunity to influence the content.

Public comment

An important aspect to the standards-creation process for transparency standards is the opportunity for public comments. After the standard has been created by subject matter experts and reviewed by their peers, the standard is posted publicly on the Office of Enterprise Technology website, giving interested parties an opportunity to submit specific comments. Please note that this aspect of the process is currently under development.