The Advising Technology Strategic Framework serves as the guiding document for efforts that will support and enhance the work of undergraduate advisors across campus by improving the information technology (IT) tools and systems they need to do their work while also improving access to the information and data they require to best serve student needs.

The strategic framework outlines how this will be accomplished over the next one to five years:

- by providing advisors with intuitive, easy to access and easy to use systems and tools to do their work;
- by providing advisors with direct and easy access to the information and data they need for their work;
- by ensuring that the data and information provided to advisors for their work are accurate, timely, and appropriately sourced;
- by tailoring the tools and data provided to advisors to their particular needs based on their advising roles, schools, colleges, divisions, and units.

This work will be conducted along with similar efforts to simplify and improve the IT tools and access to information that students need in order to accomplish their goals over the course of their undergraduate. Because the needs of advisors and students often parallel each other, work on improving advising technology and data/information resources will also directly help efforts aimed at improving student technology and information resources and vice-versa. Both efforts will take place concurrently and will be mutually beneficial to both populations.

The overall advising technology strategic framework (see attached) includes the principles that will guide this work, five overarching advising technology goals and objectives, the processes by which the goals and objectives will be attained, and a timeline for achieving them. The work encompassed by the strategic framework will be conducted in partnership and collaboration with the advising community through the advising governance committees (AAPL, AARB, CAA, and ABfAT), the advising community at-large via regular updates and input/feedback opportunities, the Registrar’s Office, and the Division of Information Technology (DoIT).

Some of the key principles under which this work will be carried out include:

- technical systems and tools should be developed and maintained in service to the advising community and, ultimately, in service to students;
- technology should not constrain or be a barrier to advisor work, nor to the accomplishment of student goals;
- technology should, instead, enable and facilitate the work of advisors as well as student success and achievement;
- initiatives conducted under this strategic framework will be conducted under the “80% Rule” – meaning each effort will be carried out so that it will meet the greatest needs and also maximize the positive impacts on advisors and students.
- the Advising Technology Strategic Framework’s ultimate purpose is to meet the advising community’s needs so that the advising community can best meet student needs.
Strategic Objectives/Goals

1. Facilitate and assist with the creation of campus technical, data, decision-making/governance, and funding infrastructure needed to accomplish advising technology strategic objectives/goals
   a. Short- to medium-term (1-2 years)
   b. Long-term for future sustainability of efforts (3 years and beyond)

2. Reduce complexity of tools/systems needed by advisors to do their work
   a. Integrate existing system functionality into fewer (ultimately one) integrated user interface (IUI) for advisors
      i. Smart IUI (at login system “knows” what division/unit, advisor type/role an advisor is associated with and provides them with the tools/systems they need to do their work)
   b. Create an integrated (ultimately one) authorization path for access to the system(s) needed by advisors to do their work
   c. Create an integrated (ultimately one) access path to the system(s) needed by advisors to do their work

3. Reduce complexity of data/information landscape in order to provide advisors with easier, more direct access to the data/information they need to do their work
   a. Accurate data/information
   b. Timely data/information
   c. Single sourced data/information
   d. Smart IUI (at login system “knows” what division/unit, advisor type/role an advisor is in and provides them with the data/information they need to do their work or with links out to those data and information)

4. Reduce complexity of tools/systems and data/information landscape needed by students to effectively and efficiently perform the tasks they need to do in order to successfully progress through their undergraduate career
   a. Secondary priority
   b. Must be considered while addressing advising priorities so that the infrastructure can be put in place to more easily accomplish this objective going forward
   c. Similarly, the functionality, infrastructure, and interfaces created for advising could re-used, modified, or upgraded to provide the same or similar services for students as appropriate (re-use and recycle code, functionality, services, etc. rather than start from scratch)

5. Identify and resolve data gaps/needs that impede strategic objectives and goals (e.g. lack of a “flag” for the advising role in the university’s data structure)

Process

1. Advisor Foundation Data Project
   a. Identify “advisor” population
      i. Define “advisor”
      ii. 80% rule: use currently obtainable parameters/data elements to identify core advisor population (then push to tails)
   b. Identify/define advisor “roles” within overall population
      i. Create schema of advisor roles from “Core Advisor Role” (CAR) out
      ii. This schema will serve to help prioritize the work/effort
      iii. AARB in conjunction with CAA and AAPL

2. Use Advisor Core Diagram (Fig. 2) to identify common/key advising tasks (business analysis using use cases, personae, etc.) within each defined advisor role
   a. 80% rule
i. identify tasks associated with the CAR and begin there  
ii. work out to other roles that impact fewer students/more restricted populations (push to tails)  
iii. AARB in conjunction with CAA and AAPL  

b. Identify/look for overlaps in tasks between roles to help focus next prioritization stage and make broader progress  
i. AARB  

3. Prioritize tasks for CAR (broadest/most important/most impactful to narrowest/less important/least impactful)  

4. Based on business analysis beginning with the CAR and prioritization of tasks, initiate a business requirements gathering project to identify the data (EBOs, CBOs, etc.) and push/pull system components needed to accomplish the highest priority tasks  
a. Identify dependencies and engage stakeholders needed to fully understand and to define the business requirements for each task  
b. Identify and address dependencies and engage stakeholders necessary to allow for successful development and implementation of solutions  
c. Iterate process down through prioritized list (push out to the tails from the core)  
d. Iterate process within each role down through prioritized task list (push out to the tails from the core)  

5. Work toward developing a student integrated user interface (SIUI) for undergraduates based on business analysis and business requirements gathering  
a. Use Advisee Core Diagram (Fig. 3) to identify common/key student tasks (business analysis using use cases, personae, etc.)  
b. Map tasks to student lifecycle/career arc (e.g. when does a student need to know something or to do something)  
c. 80% rule  
   i. Prioritize tasks  
   ii. Work from high impact-high value down (push out to tails from core)  

Timeline  

1. Year 1  
a. Complete one-year OUA technical goals  
   i. Define, identify and understand advisors and current advising state (Advisor Foundation Project)  
   ii. Develop advisor components of advising.wisc.edu (based on prioritization; effort currently underway – Spring 2013)  
      1. Searchable contact list of advisors, advising units, and advising referral/partners with direct contact info. Including names (e.g. Admissions, McBurney, RO, etc.  
         a. Includes brief unit descriptions (missions/purpose(s)?  
      2. Event/Activity/Key academic dates-deadlines calendar (with category filtering capability, also with blog/list view in addition to graphic view/interface)  
      3. Policy  
         a. Breaking news feed  
         b. Database/repository/access path (one-stop shop and/or starting point)  
   4. “Getting started in advising” section (onboarding; new advisor content)  
      a. Tools and systems  
      b. ...  
   iii. Complete final MIU funded development/enhancements of both the ANS and SAM
1. ANS
   a. Resolve Peer Advisor ANS access question and, if necessary, develop and implement changes to the ANS to accommodate that resolution
      i. Develop/implement role based access capability for ANS for peers and other user sub-populations
      ii. If peer advisors are granted access to the ANS, develop and implement communication and training plan for peer advisor access
   b. Implement unit specific contact reason functionality in ANS
      i. Communication and training around functionality and user interface changes
         1. Delegated unit administrators
         2. ANS users
      ii. Modify current ANS Query Library query to allow for access to the new unit specific contact reason data
         1. Communicate update and capabilities to ANS user population and “advisor” Query Library role population

2. SAM
   a. Complete SAM/SOAR reporting functionality development and implementation
      i. Communication and training around functionality for delegated unit SAM administrators who will be able to run SAM reports
      ii. Communication and training for SAM users regarding need for accuracy in data entry (RO will no longer be reviewing updates via workflow, only errors/kickbacks)
   b. Complete SAM student interest functionality development and implementation
      i. Communication and training around interest list functionality for users
   c. Work with DoIT Academic Technology and InfoAccess/DataWarehouse administrators to determine optimal data view placement (within existing data view or new data view) of SAM interest data
   d. Develop Query Library query to provide user/unit access to SAM interest data (possibly student interest data more broadly)
   b. Develop and implement either transitional or more permanent user authorization path for ANS
      i. Consider this within broader context of advisor system and information/data access and authorization
      ii. Use this as first step toward developing single authorization process for advising systems and information/data
         1. Supervisor, division level, data/system custodian approval
         2. Training/orientation requirement(s)
         3. Role based
         4. Association based
   c. Work toward and facilitate the creation of the campus technical, data, decision-making/governance, and funding infrastructure needed to accomplish Strategic Objectives/Goals
      i. IT Decision-Making Futures AE Team
      ii. ITC (Information Technology Committee)
      iii. MTeam (DoIT)
d. Facilitate the AARB’s completion of the Advisor Core Diagram/Tasks and the Advisee (Student) Core Diagram/Tasks work that will later inform IUI and SIUI development projects

2. Years 2-3
   a. CAOS and subsequent technical infrastructure is emplaced to support development of IUI to meet needs identified during advisor business analysis and requirements gathering
   b. Deliver IUI v1.0
      i. Integrate ANS, SAM, and 1—3 other core (high value, high impact) functions (based on task prioritization and 80% rule)
      ii. First step on path to more complete advising system/information integration

3. Years 4-5
   a. Fully functional IUI used by most advisors on campus meeting most advisor needs
   b. Fully functional SIUI used by most students on campus meeting most student needs

Strategic Principles

1. Technology will be developed and maintained in service to the advising community
   a. Technology should not constrain or be a barrier to our work
   b. Technology should enable and facilitate our work
   c. Business (user) needs should be the driver(s) for technical development and solutions
2. The advising community will be heavily engaged in the process of improving advising technology and data/information delivery (This entire effort is about meeting the advising community’s needs so that the advising community can best meet student needs.)
3. Development will use MVC (Model, View, Controller) architecture whenever possible (Fig. 1)
4. System integration and data/information delivery will be provided through smart infrastructure/architecture (Operational Data Stores + MVC Architecture)
   a. Increases ease and decreases technical complexity of delivering integrated services and information
   b. Decreases long-term costs
   c. Allows for more nimble and faster future development, enhancements, and updates
5. Project management and system/application development will be conducted under the “80% Rule”
   a. “80% Rule”- provide IT services and support that meet the most/greatest needs and also maximize positive impact(s) on advisors and students
   b. Low frequency, low impact, and extreme or unusual cases/needs should neither drive, nor should they impede project management and development (they should be noted and documented, but should not prevent or inhibit delivery of systems, services, and information that are high impact and meet high frequency/core needs)
6. Development will work toward “smart” systems
   a. Roles (e.g. “advisor,” academic affairs dean, major advisor, pre-declaration/undecided advisor, etc.) and associations (e.g. CALS, L&S, EGR, etc.) will be present and easily accessible in the university data infrastructure
   b. Systems will draw on these roles and associations to present users with the tools and information/data they need to do their work based on their specific role(s) and association(s)
7. Data/information will be single sourced whenever possible (e.g. via EBOs, CBOs, etc.)
   a. Accurate
   b. Up to date/timely
   c. Easily accessible
d. Advisors and students should not have to worry about where data come from (e.g. which system or data source), and should be confident in the accuracy and timeliness of the data they are provided

8. Development projects will draw on existing systems to accomplish strategic objectives/goals whenever possible, but will also consider commercial and/or open source options that can be integrated into solution architecture
   a. Custom development will likely need to occur
   b. A future integrated user interface (IUI) for advisors will likely need to be custom-built, but will draw on existing, custom, commercial, and open source components as needed for functionality and data/information

9. Efforts will focus on what we have now
   a. Identify gaps and address where/when possible
   b. “No new systems!” guideline ☺ (leaves space for focus on system integration)
Figure 1: Generalized representation of Model-View-Controller (MVC) architecture (Frey 2010)
Figure 2: Advisor Core Diagram

![Advisor Core Diagram](image)

Figure 3: Advisee Core Diagram

![Advisee Core Diagram](image)