The Coalition & HESS - ERP Replacement Support Toolkit Catalog

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ERP Replacement Support Toolkit Overview

You already know that ERP investments are among the largest, most complex investments your institution will make. Staff at HESS and Coalition member institutions are typically fully engaged in day-to-day operations, leaving little time to strategically approach the digital transformation a successful ERP project can bring. As a value add to members, HESS and The Coalition have partnered with Moran Technology Consulting (MTC) to provide the services of trusted and experienced advisors, to work alongside your team (as much or as little as you need) to support your ERP transformation's success. MTC is known for successfully supporting over 300+ schools.

Due to the complexity of ERP transformation projects, and the need to closely align business and change management processes with the technology, MTC suggests that the best place to explore partnership opportunities is through an initial conversation. Experienced consultants are available for a free, no commitment required, conversation to help you think through your strategy, approach, or just to share our learnings from having worked with many other schools.

The official toolkit developed by MTC, includes several of our ***most-requested service offerings, at our HESS discounted hourly rates.*** As experts in the ERP transformation space, we have designed the Toolkit to help you understand the possibility of solutions we can provide to support your project. We have learned that following each of these steps can result in a successful ERP transformation.

If you want more detail, this packet provides additional information on each of our toolkit offerings. To explore how MTC can help you think through your strategy and approach; develop a custom support solution; or just to share our learnings from having worked with many other schools, please get in touch with us at HESS@morantechnology.com or (877) 337-7110.

Our Firm

Moran Technology Consulting (MTC) is a highly experienced and proven consulting services provider to the higher education industry. MTC offers a full range of IT and Management Consulting Advisory services to our clients. Our consultants have worked with over 300 institutions and conducted over 800 projects across both the public and private domains (39% of our clients have been private institutions). This experience currently spans 42 states and 11 countries.

Why MTC

There are a wide variety of reasons that make MTC the best choice that The Coalition & HESS members can make on their ERP pre-implementation, implementation, and post-implementation planning projects. These include:

- We are committed to the higher education community. We hire highly skilled consultants with extensive experience in working with education clients across literally hundreds of institutions across the US and Canada. Our Higher Education Consulting Practice averages over 18 years of experience in working with campuses. Our senior practice executive has been working with universities for over 46 years
- We create actionable recommendations based on our experience of what works, and what doesn't, within the needs and culture of higher education. We really understand the outstanding strengths of higher education and the challenges that inhibit even greater success
- One client described us best: "You consulted with us, not at us". Many firms come in with preconceived ideas about the challenges and the solutions. We work closely with our clients to ensure that we understand the real environment and develop pragmatic recommendations that are match the specific needs for each client

- We are a firm that is committed to the highest levels of client satisfaction as evidenced by our high level of repeat engagements with our clients
- The combination of our proven methodologies, higher education experience, and skilled consultants reduce both project risk and cost and provide the plans, disciplines, and experience to enable an actionable plan to move forward
- We have significant experience in the implementation of Higher Education application software and offer a broad range of consulting and service offerings in the areas of infrastructure design and deployment, custom applications development, and ERP systems
- We possess the project management skills and implementation methodology necessary to enable a thorough review of existing, proposed, and emerging technologies and as well as the successful implementation of our recommendations
- Our firm has the demonstrated financial and operational capacity to successfully manage projects of virtually any scale

Visit us at: www.MoranTechnology.com.

We invite you to view our client mug shots – we enjoy our clients and our projects!

We have been specializing in supporting Higher Education Institutions since the early 1990's. We are proud to invest in other organizations that also help higher education institutions to address the tactical and strategic issues that they face. Our partnerships, sponsorship investments include:

MTC is also proud to be a Gold Corporate Partner of EDUCAUSE. This group is focused on advancing higher education through the use of information technology.

https://www.educause.edu/about

We are a member of NACUBO. NACUBO specifically represents chief business and financial officers through advocacy efforts, community service, and professional development activities. The association's mission is to advance the economic viability, business practices and support for higher education institutions in fulfillment of their missions.

MTC is also proud to be a founding corporate member of IDPro. IDPro exists to globally foster ethics and excellence in the practice and profession of digital identity. For more information see: www.idpro.org

MTC is a corporate member of Internet2 and Catalysts member. The Catalysts support community efforts to improve identity and access management for research and higher education.

https://incommon.org/community/catalyst/

"Build Your Own ERP Replacement Support Toolkit"…

The following sections explain the potential ERP Replacement Support Tools that you can choose to support the success of your ERP replacement project. The "Build Your Own Toolkit" menu below describes the potential Tools that you can use to support your project. Additionally, we have provided 'a la carte' pricing at discounted rates for the Coalition & HESS institutions that are working towards a major software implementation. We are happy to work with you to create a proposal tailored to the specific offerings needed by your institution.

The list below summarizes the full suite of offerings across each phase of an ERP project– pre-implementation, during implementation, and post-implementation – and can serve as a reference (or selection menu) as you consider which options could be a good fit for your institution. We have grouped our catalog by our most requested service areas.

ERP Replacement Support Toolkit Catalog

Management Consulting Tools

Assess Your Current Environment and Understand Alternatives	Evaluate and Select Your New Platform (Direct and RFP-based selections)	Prepare for Implementation
• Define Project Drivers and Desired Outcomes • Assess Current and Future ERP Needs • ERP Vendor Marketplace Analysis • Provide Vendor Product Overview and Envisioning Sessions Assistance • Transformation Readiness Assessment • Develop Roadmap and Strategy for Future ERP Solution(s) • ERP Business Case Development	**For RFP-based selections:** • Current State Assessment with ERP Requirements Development • Development of ERP Software and System Implementation (SI) Services RFP and Docs • ERP Software Vendor Evaluation • System Implementor Vendor Evaluation • Contract Negotiation Assistance **For direct selections:** • Requirements Validation and Systems Planning • Project Governance Planning • Implementation Roles and Responsibilities Planning	• Organizational Change Management Support • Business Process Transformation/Re-design **Ensure Post Go-Live Success** • Post Go-Live Ongoing Support Model Planning • Post-Implementation Organizational Change Management Review • Post-Implementation Governance Planning

Digital Identity & Security

Cybersecurity & Privacy	IAM Strategic Planning and Platform Evaluation	IAM Virtual Teams and IAM Implementation
• Information Security and/or Compliance Program Assessment • Virtual CISO (vCISO) Strategy and Advisory Services • Cybersecurity Risk Assessment Services	• Identity and Access Management (IAM) Strategic Planning (and Platform Selection)	• Virtual IAM Team Services • IAM Implementation Services

Data and Analytics Tools

Business Intelligence (BI) & Analytics Assessment	Data Conversion Readiness and Data Quality Planning	Reporting and Integration Readiness	Data Conversion Advisory Services

Implementation Project Management and Quality Assurance Tools

Client-Side Project Management	Risk Management / Project Health Check	Risk Management / IV&V / Project Quality Assurance Support

Management Consulting Tools

In this section we have listed several of our most popular management consulting support tools for institutions preparing for, going through, or assessing the results of an ERP transformation. Streamline your ERP selection process by partnering with a firm with deep relationships and experience in all aspects of system transformation.

We have broken our work into the following categories:

- Support Tools to Assess Your Current Environment and Understand Alternatives
- Support Tools to Evaluate and Select Your New Platform
- Support Tools for Preparing for a Direct Product Selection
- Support Tools to Prepare for Implementation
- Support Tools to Ensure Post Go-Live Success

We have included typical components of the selection preparation and execution process and described our extensive credentials for supporting this work below. We are happy to work with your institution to tailor / create offerings as needed for your institution's needs.

Overview of MTC Experience and Qualifications

Since our founding in 2004 we have conducted a wide variety of ERP strategy, planning, and replacement selection projects. Over the years, we have conducted 90+ ERP assessment projects and 40+ ERP software and SI vendor selection projects. We have also supported over one hundred fifty (150) higher education institutions in doing strategic planning, transformation, and assessment projects. The following is a subset of schools where we've helped to lead the ERP assessment/strategy/project management efforts for institutions considering an ERP replacement:

- Aims Community College
- Albert Einstein College of Medicine
- Alta Colleges
- American University of Paris
- Arizona Board of Regents/Univ. of Arizona
- Art Center College of Design
- Boston University
- California State University System
- California State University, Los Angeles
- Central Michigan University
- Cincinnati State Tech. Comm. College
- City Colleges of Chicago
- College of the North Atlantic
- Columbia University, City of New York
- Columbus State Community College
- DePauw University
- Eastern Virginia Medical School
- Florida Polytechnic University
- Furman University
- Governors State University
- Iowa State University
- Johnson and Wales University
- Kansas City University
- Kutztown State University
- Logan University
- Los Angeles Community College District
- Louisiana Comm./Tech College System
- Loyola Marymount University
- Madison Area Technical College
- Michigan State University
- Montclair State University
- National University
- Nevada System of Higher Education
- Northeastern University
- Ohio University
- Otterbein University
- Palm Beach State College
- Peirce College
- Penn State Health Hershey Medical Center
- Pennsylvania State University
- Royal Melbourne Institute of Technology
- Rutgers University
- San Francisco State University
- Seattle Pacific University
- Spring Arbor University
- St. John's University
- St. Jude Graduate School of Biomedical Sciences
- St. Lawrence University
- Tennessee Board of Regents
- Trinity University
- UC Irvine Div. of Continuing Education
- UC Riverside Extension
- UCLA Extension

- University at Buffalo
- University of British Columbia
- University of California Office of the President
- University of California, Berkeley
- University of California, Irvine
- University of California, Los Angeles
- University of California, Merced
- University of California, San Diego
- University of California, San Francisco
- University of California, Santa Barbara
- University of Central Florida
- University of Florida
- University of Kentucky
- University of Massachusetts Amherst
- University of Northern Iowa
- University of Oregon
- University of Prince Edward Island
- University of Puget Sound
- University of Tennessee System
- University of Washington
- US Merchant Marine Academy
- Virginia Tech and State University
- Wabash College
- Washington State Board - SBCTC
- Western Governors University
- Wheaton College, Illinois
- Wheaton College, Massachusetts
- William James College

While our business is predominantly focused on higher education, including academic health care systems, we periodically also work with K-12 schools.

ERP Software Selection

Vendor neutral ERP consulting is a major subset of our higher education consulting practice. Approximately 61% of our total higher education consulting engagements are ERP focused (e.g., institutional readiness, RFP preparation, evaluation, and selection). We also offer internal project management services, where we work for our client and help to manage the external Systems Implementation firm and the school's internal resources. As a result, our team is highly experienced with all of the major ERP platforms.

While we are deeply experienced with the major ERP platforms, it is important to note that MTC has no business partnerships with any ERP software or systems implementation vendor. We are not systems implementors and we are explicitly vendor neutral – we do not partner with or consult for any ERP vendors. We have no ERP vendor implementation certifications and receive no income from ERP providers.

Because we are vendor neutral and are a major player in the vendor selection business, at least once a year, MTC meets with each of the major ERP vendors to arrange an update on their solution. Due to the pace of current updates, for Oracle and Workday, we tend to meet more often for these briefings. These briefings keep our team up to speed on new and emerging platform capabilities, as well.

We have been providing these services since our company was founded in 2004.

Our Perspective and Methodology

Over the years, we have supported and studied a variety of software package selection and implementation projects. This work led us to develop a set of Critical Success Factors (CSFs) that, if addressed, can significantly improve project success and outcomes. Jack Rockhart, of MIT's Sloan School, defined CSFs as *"Those few areas where things must go just right for our efforts to succeed."*

The Critical Success Factors associated with major software migrations include:

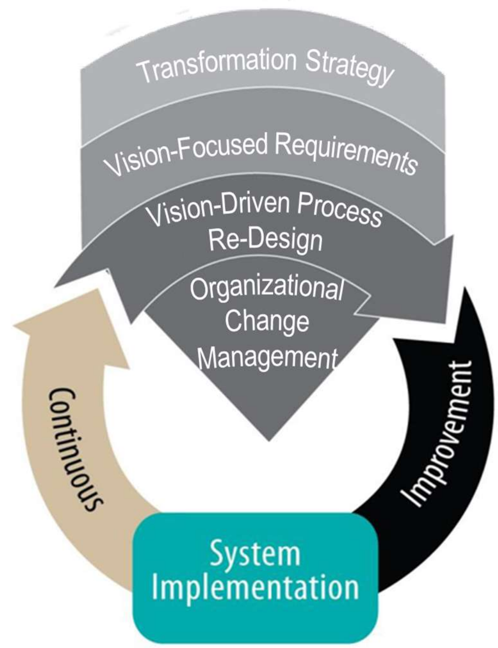
- Strong Institutional Executive Leadership and Support
- Functional Executives Own / Drive the Project
- Strong Institution Commitment to Collaboration
- Unambiguous Governance and Decision-Making Framework
- Broad Stakeholder Participation
- Active Communications Plan
- Clear Project Roles and Responsibilities

As we work with clients on selection projects, we will help them refine the governance and project structures and processes that will help the institution define and achieve its project goals.

Technology-Enabled Transformation Methodology

Our Technology-Enabled Transformation Methodology (TETM) defines outcomes for each project and utilizes structured tools and methods to achieve a successful project. Within our methodology, there are the following phases:

Transformational Roadmap Development:
ERP solutions, business processes, and data impact the entire institution. Changes to this environment result in significant opportunities for transformational change and require a strategic roadmap that identifies critical integration points, dependencies, and opportunities to add value.



- Reimagined **Delivery of Services** requires the establishment of a 'vision' for how the institution wants to transform across all business spectrums (student, finance, HR, etc.) We engage with multiple constituencies throughout the institution to develop strategies with wide-reaching impact.
- **Data, Reporting and Analytics** are all key components required to unlock the full potential in a transformation program. We work with clients in a variety of areas including preparation for data conversion, establishing data quality initiatives, and documenting the current reporting & analytics landscape in order to hit the ground running and remove key risks up-front prior to the ERP program officially kicking off.
- **Identity and Access Management (IAM)** is tightly integrated with and dependent on your ERP solutions and business requirements for student and employee lifecycles. Digital transformation requires the effective aggregation, management, and application of identity and organizational data to ensure that the right people get access to the right things at the right time. We help to identify quick wins and key opportunities to improve student experience, administrative effectiveness, and risk management programs with IAM.

Vision-Focused Requirements Development:

Utilizes broad stakeholder participation to define the tactical business and technical needs that must be addressed to achieve the transformation 'vision'. We have successfully utilized an approach to requirements gathering and package selection that enables us to focus on defining the tactical business, technical and functional needs of an organization's stakeholders.

Vision-Driven Process Re-Design

This uses the process requirements defined earlier to identify and re-engineer. The goal is to streamline any process gaps to optimize the software and reduce maintenance costs. We have helped institutions:

- To re-think how they provide services to stakeholders
- To streamline workflows to improve staff efficiency and eliminate redundant or unnecessary steps

Organizational Change Management

Any project that an institution undertakes involves some amount of process re-design and/or change management. Major ERP/SIS projects have the potential to significantly change how an institution delivers student and staff services. To achieve this potential, institutions have to look at the impact on stakeholders and organizations and develop strategies and plans to ease the transition

Successful management of this and Process Re-Design are two key components that can make or break a project. For change, we have helped institutions:

- To assess their readiness for system change and to develop strategies to improve change acceptance
- To improve stakeholder experience with self service functionality
- To accept change and take ownership of new processes

Support Tools for All Projects

All projects with MTC require a project kickoff and planning step to ensure alignment on project scope, goals, plans, etc.

Support Tool: Project Planning and Kickoff (Required)

Objectives:

- Work with the institution to complete all project startup/planning activities
- Establish a clear understanding on the part of the MTC and institution project teams and stakeholders regarding the objectives and scope of the project and the approach that will be taken
- Establish an effective working relationship among all team members, including both the MTC and institutional staff
- To gain an understanding of the institution's organization and culture to create a productive project work environment
- Create a project plan

Approach:

- Work with the institution's designated project manager or project admin to complete all project startup/planning activities, such as:
    - Providing MTC with any applicable existing documentation for pre-project review; MTC will review documents provided in advance of project kickoff to inform our work
    - Providing the institution with a list of needed workshops and coordinating with the institution's PM who will be scheduling these workshops
    - Coordinating with the institution on setting any needed recurring meetings (e.g., project management, steering committees)

  NOTE: Our pricing assumes that the client is responsible for handling internal scheduling activities and internal project management. MTC assumes projects will involve project management and steering committee meetings no more than once every two weeks. If more meetings and/or MTC support are required or desired for these activities then we are happy to adjust our pricing to reflect the additional time required. Final project pricing will include two hours of project coordination support per project week.

- Conduct a one-hour meeting with the project executive steering committee (if project includes this group) to:
    - Validate and refine the basics of scope, objectives, and approach that were proposed and review/refine the project work plan
    - Discuss potential risks and hot buttons with the project sponsors / owners to develop communication and risk mitigation plans
- Conduct one joint meeting with the project working team to:
    - Conduct the project kickoff workshop
    - Validate and refine the project work plan
    - Provide an overview of the methodology that will be used for the project
    - Discuss potential project risks and hot buttons to develop communication and risk mitigation plans
    - Establish the project management procedures and schedules, clear roles and responsibilities, as well as policies and procedures regarding communications, status reporting and meetings, quality assurance reviews, and project management

- MTC will develop a draft project plan for our work

Deliverables:

- Completed project pre-work activities
- Project plan with major milestones
- Project team assembled and kickoff meeting held
- Project management processes

Support Tools to Assess Your Current Environment and Understand Alternatives

For institutions that are beginning to consider ERP replacement, tools in this category help institutions assess their current ERP environments and readiness to transition to a new platform(s), understand alternative platforms that could help meet their needs, and determine the appropriate way forward. Tools include:

- Define Project Drivers and Desired Outcomes
- Assess Current and Future ERP Needs
- ERP Vendor Marketplace Analysis
- Provide Vendor Product Overview Sessions Assistance
- Develop Roadmap and Strategy for Future ERP Software Solution(s)
- Transformation Readiness Assessment
- ERP Business Case Development

Support Tool: Define Project Drivers and Desired Outcomes

Objectives:

- Develop robust project drivers and desired outcomes based on input from the project kickoff to ensure key needs are addressed and decision points that will impact the project timing, structure, etc., are confirmed and incorporated

Approach:

- Working with your institution's core project team and other stakeholders as needed, we will review common decision points, establish desired goals and outcomes, develop a communications plan framework, and consider/confirm decision points that will influence subsequent project activities (e.g., selection approach or RFP / SOW structure, if applicable)

  Assumption: This is intended to be a brief step to ensure any project decision points and framing items that are needed – particularly based on key decisions that have to happen as part of your specific project – are addressed and accounted for. Additional support for project framing activities is available on a time and materials basis.

Deliverables:

- Project Driver and Desired Outcomes items such as desired project goals and outcomes, Guiding Principles, a Communications Plan, documented project decisions, etc., based on the needs of your institution

Support Tool: Assess Current and Future ERP Needs

Objectives:

- Develop high level needs for in-scope ERP areas, including documentation of existing pain points

Approach:

- Review any existing needs documentation, including key reports used by functional users
- Conduct interviews and workshops with selected functional and IT staff and managers, as well as other stakeholder groups (e.g., users, students, faculty) to gather current and future state needs

  Assumption: The number of workshops will vary based on institution size, though each workshop will be about 1 – 2 hours.

  Note: for the purposes of scoping this step, we are assuming a focus on processes across the entire traditional ERP suite (e.g., Finance, HR/HCM, Payroll, and SIS).

- Develop draft needs and pain points analysis based on interviews and workshops
- Conduct up to two (2) sessions with appropriate representatives to review and finalize the draft needs analysis

Deliverables:

- Documented current and future state ERP needs and pain points analysis

Support Tool: ERP Vendor Marketplace Analysis

Objective:

- Provide an analysis of the current state of the market for applicable aspects of ERP software systems for similar schools

Approach:

- MTC will facilitate a discussion with your team to select the vendors that will be reviewed in this market assessment

  Assumption: We will conduct vendor analysis for up to four (4) vendor solutions to be selected after discussion with your institution.

  NOTE: This step is typically paired with some version of a current state assessment and provides your institution with an analysis of the current marketplace.

- MTC will conduct a comprehensive review of the market to identify each vendor's:
  - Strengths, weaknesses and differences with regard to the in-scope software applications, with particular focus on your stated challenges
  - Current status in marketplace, strategic direction, and potential risks
  - Technology architecture and planning roadmap (including cloud vs. on-site)
- Develop draft market assessment document
- Review and finalize marketplace assessment documentation

  Assumption: This will involve one (1) review workshop for this task.

Deliverable:

- Documented Current State of the Higher Education Relevant ERP Software Market

Support Tool: Provide Vendor Product Overview and Envisioning Sessions Assistance

Objectives:

- Coordinate software demonstrations for ERP vendor product overview and envisioning sessions to get a sense for the capabilities of other platforms

Approach:

- MTC will coordinate four (4) hour vendor demonstrations for up to three vendors. This would include helping to schedule the demonstrations and managing the vendors during their demonstrations.

Deliverables:

- Demonstration meeting coordination and management

Support Tool: Transformation Readiness Assessment

Objectives:

- Assess the readiness of the community to move to new ERP solutions

Approach:

- MTC will conduct Readiness Assessment meetings with selected stakeholder groups to analyze the institution's readiness to deploy the new replacement system. This will be accomplished by meeting with key stakeholders and gathering input on readiness to support the project. These meetings may include:
    - Various executive sponsors / owners for the project as well as other interested or impacted executives. These interviews are focused on understanding issues such as cost, time, commitment, etc.
    - Focus group/meetings with selected stakeholder groups to discuss past project success/failures, skills, training capabilities and needs, communication, etc.

  Assumption: The number of workshops will vary based on institution size, though each workshop will be about 1 – 2 hours. See pricing for details on costs by institution size.

- MTC will conduct one Readiness Assessment review meeting with project stakeholders to review and refine the assessment's findings and recommendations. The sections of the Readiness Assessment often vary, but may include:
    - Sponsorship /Ownership and Campus Commitment
    - Project Funding
    - Internal and External Communications
    - Project Management
    - Campus Functional Area Participation
    - Information Technology Support
    - Data Governance
    - Training

Deliverables:

- Readiness Assessment report section including key project status findings, change readiness inhibitors, and mitigation strategies

Support Tool: Develop Roadmap and Strategy for Future ERP Software Solution(s)

Objectives:

- Provide a going forward roadmap and strategy recommendation for your institution's future ERP environment

  NOTE: This step is typically conducted after a current state assessment and marketplace analysis (see support tools above)

Approach:

- The MTC team will develop a roadmap that includes up to four (4) high-level draft scenarios for how your institution could proceed to make improvements to its ERP environment, based on the challenges and opportunities identified
  - Scenarios will include strengths, weaknesses, resource needs, timeline, and a range of potential costs for scenario options
- Conduct a 'walk-through' meeting with appropriate stakeholders to review and refine the draft scenarios and recommendations
- Conduct a workshop to review and refine the recommendations with appropriate functional and IT department management

Deliverables:

- Documented recommended roadmap and strategy for the future state ERP environment

Support Tool: ERP Business Case Development

Objective:

- Provide a Business Case Analysis using information gathered from your procurement process or other decision-making process as well as information about major initiatives in your institution's strategic plan to produce a report providing the benefits, risks, implementation roadmap, and cost impacts of implementing your new software

Approach:

- The MTC team will develop a business case that includes, but is not limited to the following:
    - An executive summary implementation risk analysis, and recommendations for risk mitigation
    - A high-level implementation roadmap which prioritizes and sequences software component implementation
        - This roadmap may reflect institutional priorities established in your strategic plan, software provider recommendations, change readiness, and other factors
    - An estimate of one-time implementation costs (internal and external resources) over a minimum five-year period or the recommended period of implementation, whichever is shorter
        - Internal resources will include, but not be limited to: IT, functional, change management, project management, training, and backfill for core project team
    - A comparison of actual operating costs of the current system(s) with estimated operating costs of the new system over a minimum five-year period
    - An analysis of the benefits of improvement via migration to the new software system
- MTC will work with your project manager to develop a document outline for the business case
- MTC will conduct follow-up discussions with your stakeholders as needed to address any questions or clarifications from the information you provide from your ERP decision making process and institutional strategic plan
- MTC will develop a draft business case based on the outline agreed upon with the project manager
- MTC will review and finalize the draft business case with appropriate representatives

Deliverable:

- Documented business case stating the need for your new ERP for your institution

Support Tools to Evaluate and Select Your New Platform

When institutions are ready to transition to a new platform, MTC can help with the complicated evaluation and selection process for these major systems. We support both direct and RFP-based ERP product selection approaches and can help wherever you are in your evaluation and selection journey. Support tools include:

- Current State Assessment with ERP Requirements Development
- Development of ERP Software and System Implementation (SI) Services RFP and Docs
- ERP Software and System Implementor Vendor Evaluation
- Contract Negotiation Assistance

Some of the tools above can be broken into smaller pieces for institutions pursuing a direct product selection, such as:

- Requirements validation (if requirements have already been developed)
- Project Governance Planning
- Implementation Roles and Responsibilities Planning

Support Tool: Current State Assessment with ERP Requirements Development

Objectives:

- Identify critical business objectives, decisions, and other initiatives that may govern/constrain potential solutions
- Define the RFP functional and technical requirements, ensuring an emphasis on institutional context (e.g., goals, process objectives, current challenges) to create the foundation for a context-rich RFP
- Review the current selected business processes and identify opportunities for improvement

Approach:

- Collect and review any documentation related to the current state processes, technology and organization as well as any work that may have been done regarding future state needs (organization charts, past surveys, studies and reports)
- Facilitate Requirements workshops with applicable stakeholders and MTC Subject Matter Experts (SMEs) to gain an understanding of the functional and technical requirements for the core processes that are within scope and identify relevant pain points with the current state systems

  Assumption: Some processes are large and will take extensive levels of work; other processes are relatively small and can be combined into a single workshop. Time commitments for workshops will vary based on the functional areas included in requirements development. See pricing for details on costs by functional area.

- Conduct a requirements validation/refinement survey of all appropriate stakeholders. MTC will use a tool from Advantiv (DecisionDirector) to manage the survey data collection process. MTC will serve as the contact point for stakeholder questions about the survey and manage the interactions with Advantiv

  Assumption: The survey completion period will last 2 weeks and Advantiv will have one week to provide a final set of data to MTC

- MTC will analyze the survey results and create a prioritized set of final requirements for each area
- Stakeholders will review and finalize the draft documentation and final set of requirements so that they can be used within the RFP
- MTC will conduct a finale review workshop to review the final set of requirements

Deliverables:

- For each major in-scope functional area, MTC will produce the final set of RFP requirements

A Note on Our Workshops…

We have found that our consultative and conversational style in interviews and workshops is most effective. We typically provide agendas & interview guides in advance so participants know what to expect coming into the session.

We find that workshops are most effective when we have at least two consulting team members available to co-facilitate workshops. Typically, one consultant takes point in a session while a second takes notes, tracks parking lot/follow-up items, flags additional discussion topics or questions, and serves as a general resource to the primary facilitator and session participants.

We also provide options for attendees to provide us confidential feedback if they are not comfortable sharing in a group environment. If additional follow-up is needed, we will take care of that outside of the workshop schedule.

Support Tool: Development of ERP Software and System Implementation (SI) Services RFP and Docs

NOTE: MTC will team up with the client institution's Purchasing group to get the RFP developed and released. This step assumes a single RFP for ERP software and systems implementation vendors. This approach can yield either a Time and Materials proposal from SI bidders (Part D) or a fixed-price systems implementation contract (Parts D and E), or other extra items that are not included in this single RFP approach, we are happy to handle that with additional tasks/hours. Part E is not required for the process, but the other support tool components (Parts A, B, C, D) are.

Part A: Establish Evaluation Process Methodology

Objectives:
- Work with the appropriate representatives to develop the methodology for evaluating the software and SI bidder RFP responses

Approach:
- MTC will customize our vendor evaluation tool to create a draft evaluation tool for the client
- MTC will conduct up to two workshops with Purchasing and the project team to discuss ideas for how the software and SI RFP responses should be evaluated. We will introduce best practices that have been used for this kind of evaluation and share MTC experiences with evaluation models
- Based on the software workshop MTC will develop a draft evaluation methodology and scoring model for the software RFP proposals, including typical components such as:
    - Functional criteria
    - Data compatibility and migration criteria
    - Technology environment/Requirements criteria
    - Vendor / Product references
    - Vendor Financial Viability
    - Vendor Customer Service Record
- Based on the SI workshop, MTC will develop a draft evaluation methodology and scoring model for the SI RFP proposals, including typical components such as:
    - SI Responder Team Evaluation
    - SOW Evaluation
    - Resource Plan Evaluation
    - SI Presentations/Orals
    - RFP and Addendum Evaluation
    - Reference Call Evaluation
- MTC will conduct up to two workshops with appropriate representatives (including Purchasing) to finalize the evaluation methodology and model for the software and SI RFPs

Deliverables:
- Documented evaluation methodology and scoring model using various MS Office tools

Part B: Develop Implementation Strategy and Timeline

Objectives:

- Develop a consensus across major stakeholder groups on the best implementation approach and timeline for deploying the new system
- Develop an ERP Implementation Governance Model that incorporates broad institution-wide participation and strong project decision-making support

Approach:

- MTC will conduct up to two (2) workshops with various stakeholder groups to develop a cost-effective approach for the implementation of the new solution
    - These workshops could run 2-3 hours each
    - MTC will document and refine the implementation strategy after each workshop, creating a composite strategy document at the end of this task

    Note: The implementation strategy and timeline will be used as input to the software and implementation services RFPs.

- Using best practice models, and interviews with selected staff, MTC will develop a draft Project Governance model. MTC will conduct up to four (4) interviews and two (2) workshops to develop the draft governance model. The major components include:
    - Project Sponsor / Owner
    - Executive Steering Committee
    - Functional and Technical Teams
    - Decision-making Framework

Note: Although this step will begin early in the system selection process, it will typically not be completed until after the implementation firm has been selected. The draft model will be used as input to the implementation services RFP.

Later, after the implementation systems integration /consulting firm and associated methodology has been selected, the Governance Model will be refined to align with the chosen implementation methodology.

Deliverables:

- A documented high-level implementation strategy and timeline for deploying the new solution
- Documented high-level Draft Project Governance Model

Part C: Develop Proposed Implementation Staffing Model

Objectives:

- Develop a proposed Implementation Staffing Model that includes technical, functional and project management roles

Approach:

- Using best practice models and interviews with selected staff, MTC will develop a draft implementation staffing model with four components:
    - Technical Roles
    - Functional Roles
    - Project Management Roles
    - Backfill Strategies
- MTC will conduct interviews and workshops to develop the draft model
- Later in the project, after the implementation systems integration /consulting firm and associated methodology has been selected, the Staffing Model will be refined to align with the chosen implementation methodology
- *Note: Although this step will begin early in the system selection process, it will not be completed until after the implementation firm has been selected. The draft model will be used as input to the implementation services RFP.*
- MTC will coordinate a final review session with the appropriate client representatives to complete the draft model

Deliverables:

- Documented proposed Implementation Staffing Model

Part D: Development of RFP and System Implementer Materials

Objectives:

- Develop a Software and Implementation Services RFP using the final set of technical and business requirements

Approach:

- Leverage MTC-provided software, consulting, and pricing templates, help to draft an RFP that includes all the needed functionality and resources that are in scope
- Assist client in editing and finalizing the RFP documents
- The client's Purchasing team will be responsible for creating and editing all standard RFP contractual sections of the RFP. MTC can advise Purchasing, as requested
- Jointly develop the table of contents for the RFP, which typically includes:

  Section 0 Overview of client institution
  Section 1 Overview of RFP
  Section 2 Schedule of Events
  Section 3 Contractor Requirements and Qualifications
  Section 4 Deliverables Responsibility Matrix
  Section 5 Evaluation and Selection Criteria
  Section 6 RFP Instructions and Provisions
  Section 7 Proposal Contents and Format
  Section 8 Pricing Sheets
  Appendices

Deliverables:

- Customized Word and Excel templates for Purchasing to include within the RFP
- Requirements stored in DecisionDirector
- SOW and SI RFP word documents

A Note on "Best Practice" as a Term in ERP software and SI Sales…

*Our approach asks prospective software and SI bidders to focus on the RIGHT practice for your institution, not the "best practice". Our RFP and SOW approach provides software and SI bidders with – and has them respond based on - the institutional context-informed requirements we develop with you so that you receive proposals that address the needs and challenges at **your institution.***

With 40+ completed ERP selection projects we have found that "best practice" is a poorly defined and inconsistently understood term in the ERP software and systems implementation space. Best practice for who? Often when we ask bidders to explain or elaborate on the term, we find:

- *"Best practice" is based on clients from across all business sectors – doesn't translate to higher ed!*
- *"Best practice" is based on the way they want the software used – full of assumptions instead of problem-solving!*
- *"Best practices" is based on a subset of higher ed clients that are not like your institution – context matters!*

Part E: Develop Fixed Price/Fixed Scope SI RFP and Contract Materials

This part is optional if clients wish to pursue a fixed price / fixed scope SI approach.

Objectives:

- Develop a Standardized Systems Implementation Services Statement of Work and a corresponding Systems Implementation Services Professional Services Contract

Approach:

- Leverage MTC proprietary templates, help to draft a standardized Statement of Work
- Conduct a series of workshops with client staff to define the roles and responsibilities (Vendor/client) for all major project tasks and deliverables

Deliverables:

- Standardized client Systems Implementation Services Statement of Work for all Systems Implementation bidders
- Standardized Professional Services contract for all Systems Implementation bidders

Standardized Stement of Work
Finance and HR/Payroll Replacement Project

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Attachment A – Systems Implementation Statement of Work *Page 2 of 112*

Sample Table of Contents for fixed price Systems Implementation Services SOW

Support Tool: ERP Software Vendor Evaluation

- **Step A: Evaluate Software Bidders and Establish Bidder Shortlist**
  - MTC will support the client as team members review and evaluate proposals so that the client can create a bidder shortlist (if applicable) for subsequent steps
- **Step B: Software Demonstrations and Assistance**
  - Utilizing any opportunities for improvements identified previously, the MTC team will assist functional representatives as they develop demonstration scripts based on the selected business processes and will help the client manage the invited software demonstrations. MTC will also help the client manage the invited software bidders with planning, scheduling, and facilitation of the software demonstrations. We have assumed that this will include up to two (2) vendors doing up to three (3) days each of demonstrations
    - *Note: Many vendors want to wander off topic to avoid showing functionality that you will need and they can't provide – we will work to keep the vendors on task. The client may include as many community members to the invited, facilitated demonstrations as desired.*
- **Step C: Software Vendor Firm Reference Checks**
  - MTC will take our reference check interview guide templates, customize them, and provide them to the client for their use in checking software vendor references
    - *Assumption: MTC will have no active involvement in the actual calls.*
- **Step D: Software Financial Bids Comparison**
  - This effort involves dissecting the costs provided by the vendors, developing an apples-to-apples comparison across the vendors, and reviewing this analysis with appropriate representatives to refine the analysis
- **Step E: Software Vendor Selection Facilitation**
  - MTC will facilitate a series of decision making and final criteria weighting conversations

Deliverables

- Demonstration meeting coordination and management
- Customized Reference Check Guides
- Documented Vendor Interview Guides
- Documented comparison of costs across the short-listed vendors

Support Tool: SI Vendor Evaluation

- **Step A: Evaluate SI Bidders and Establish Bidder Shortlist**
  - MTC will support the client as team members review and evaluate proposals so that the client can create a bidder shortlist (if applicable) for subsequent steps
- **Step B: SI Vendor Firm Reference Checks**
  - MTC will take our reference check interview guide templates, customize them, and provide them to the client for its use in checking SI vendor references
    - *Assumption: MTC will have no active involvement in the actual calls.*
- **Step C: Systems Implementation Team Interviews**
  - Once the client has selected its ERP software vendor, MTC will work with the project team to develop vendor interview guides for the short-list implementation firms/teams. These guides will include common questions for all vendors and unique questions for each vendor, based on their RFP response. We will facilitate a ½ day briefing for each SI bidder before their interviews to familiarize them with the client
    - *Assumption: To estimate this step, we have assumed that the vendor 'short-list' will have up to two (2) software vendors and four (4) integration vendors to be interviewed.*
- **Step D: SI Financial Bids Comparison**
  - This effort involves dissecting the costs provided by the vendors, developing an apples-to-apples comparison across the vendors, and reviewing this analysis with appropriate representatives to refine the analysis
- **Step E: SI Vendor Selection Facilitation**
  - MTC will facilitate a series of decision making and final criteria weighting conversations

Deliverables

- Customized Reference Check Guides
- Documented Vendor Interview Guides
- SI Vendor team interview meeting coordination and management
- Documented comparison of costs across the short-listed vendors

Support Tool: Contract Negotiation Assistance

A key service that we provide to many of our package selection clients is support during the contract negotiations process. Your institution may need two types of contract negotiations external support:

1. **Legal:** Focused on the unique contract terms and conditions of both the software vendor and the systems implementations firm.
2. **Technical and implementation consulting services:** Focused on software warranties and functional fit/gaps, but predominately on the systems implementation approach.

MTC does not provide legal support; however, we do provide professional services focused on the technical and functional issues associated with procuring the applications software and the systems implementation costs.

The software support issues focus on package capabilities and the vendor's representation of those capabilities. As an example, on our Nevada System of Higher Education project, we worked closed with the vendors to ensure that the features and functionality representations of the vendors were included within the contract and that the product warranties covered issues where the vendor representations did not match reality.

A more important role that we provided on that project was structuring the collaborative environment of the campuses and then working with the vendor community to identify common cost area and then to drive down the implementation costs where incremental value to the client was not being delivered. On that project, we were able to remove, at one vendor's estimate, 50% of the systems integration cost. This amount took a project that was not affordable for this institution and made it affordable.

In the event that we are asked to attend further discussions about our proposal, we can discuss some of the specifics of that project that helped make it affordable.

NOTE: We have provided fixed rate pricing for ERP Software and SI vendor contracts that are not fixed price contracts. For fixed price SI contract negotiations, any additional time needed to review and negotiate will be done on a time and materials basis at our HESS discounted hourly rates.

Should your institution desire legal support, we have a few firms that we work with that could provide the institution with this support.

Support Tools for Preparing for a Direct Product Selection

For institutions that already know which platform they want to pursue (e.g., the HESS Collaborative Oracle package) and are looking for help validating requirements, creating a staffing and/or governance plan, etc., some of our tools can be broken into smaller pieces. These include:

- Requirements validation (if requirements have already been developed)
- Project Governance Planning
- Implementation Roles and Responsibilities Planning

Support Tool: Requirements Validation and Systems Planning

Objectives:

- Review your institution's previously gathered ERP requirements
- Provide written recommendations and feedback to improve the requirements section, drawing on MTC's technical expertise, best practices knowledge from prior engagements, our proprietary database, and industry standards
- Provide an analysis of the new platform's ability to address your validated requirements

Approach:

- MTC will review your gathered requirements and provide written recommendations and feedback to improve them – including identifying omissions that you may wish to include in your requirements or adjustments to improve the requirements to better meet your needs in the implementation, business process redesign/transformation conceptualization, etc.
- MTC will conduct a walk-through meeting with appropriate stakeholders to review and refine the requirements recommendations
- MTC will conduct a workshop to review and refine the recommendations with appropriate functional and IT department management, as desired
- MTC will then compare your validated requirements to the requirements response you received from your new platform vendor (or work with you to procure one from your new platform vendor) to analyze what is going to be met by your new platform and what areas need to be addressed in some other way
- MTC will develop a summary report identifying the major challenges and how you might proceed with the migration in light of those challenges
- We will conduct one (1) review session with appropriate representatives to review and finalize the high-level results

Deliverables:

- Institutional Requirements Recommendations and Feedback
- Documented capability of the new platform to meet the identified needs of your institution

Support Tool: Project Governance Planning

Objectives:

- Gain consensus for a framework for Project Governance, including overall roles and responsibilities of Governance groups in working with the project team and the institution's community

Approach:

- MTC will develop a high-level draft framework that will serve as the basis for the institution's Project Governance
    - This will include various roles and responsibilities of the sponsors / owners and other leadership and communities
- MTC will conduct a one-hour meeting with the appropriate representatives to:
    - Discuss and refine the draft framework
    - Discuss and refine potential roles and responsibilities of the project team, as well as the campus community that will support the projects
- MTC will develop a set of metrics to manage project risks and issues that will arrive
- MTC will develop a set of meeting structures, meeting timings and 'rules' for conducting meetings
- MTC will conduct a one-hour meeting to:
    - Discuss and refine the project risks and issues metrics
    - Discuss and refine the meeting structures, meeting timings and meeting rules

Deliverables:

- Project governance framework
- Project risks and issues' metrics

Support Tool: Implementation Roles and Responsibilities Planning

Objectives:

- Develop an ERP Implementation Project Responsibility (RACI) Model that incorporates broad institution-wide participation and strong project decision-making support

Approach:

- Using best practice models and interviews with selected staff, MTC will develop a draft project model. MTC will conduct up to four (4) interviews and two (2) workshops to develop the draft model. The major components include:
    - Project Sponsor / Owner
    - Executive Steering Committee
    - Functional and Technical Teams
    - Decision-making Framework

Deliverables:

- A documented high-level project model for implementing the new ERP platform

Support Tools to Prepare for Implementation

Major changes to an institution may stress the IT organization's effectiveness and necessitate major transformation or programmatic changes. MTC has assisted many clients in effecting these changes as part of preparing for an ERP transformation. We have included our most popular organizational transformation services below, which can be completed independently or as part of a larger assessment/evaluation/selection project.

Support Tool: Organizational Change Management Support

Objectives:

- Create an Integrated OCM Strategy from pre- to post-implementation that aligns with any existing change management and project plans (where applicable). We will leverage our extensive experience leading organizational change management initiatives as well as industry best practices such as the Prosci ADKAR model to provide your institution with comprehensive OCM support.

  NOTE: If desired, MTC can provide your institution with support in designing, developing and executing the activities and events identified in the OCM Strategy. If this tool is paired with a change readiness assessment, this tool should come first to establish the foundation and context for the readiness assessment

Approach:

- MTC will work with your institution to understand anticipated stakeholders and existing change management planning that has happened to date (both with your systems implementor and with your project team, as applicable)
  - MTC will tailor our plans and templates based on the selection process / chosen vendor at your institution
- Leveraging meetings and workshops with applicable stakeholders, MTC will work with your institution to create the Integrated Organizational Change Management Strategy, which will focus on the following:
  - Stakeholder Management
  - Communications Strategy and Delivery
  - Education and Training
  - Change Resistance Identification and Mitigation
  - Monitoring and Measuring Change Effectiveness and Adoption
- MTC will conduct review workshops with appropriate stakeholders to refine and evolve each area of the integrated strategy
- Your institution will launch and follow the defined OCM actions and complete applicable templates contained in the delivered OCM strategy

Deliverables:

- An Integrated OCM Strategy and templates for your institution, which may include
  - A Stakeholder Management Support Plan
  - A Communications Strategy and Implementation Plan
  - An Education and Training Strategy and Plan
  - A Change Resistance Plan
  - A Change Monitoring and Effectiveness Measurement Plan

Support Tool: Business Process Transformation/Re-design

Often, institutions considering an ERP replacement have been providing campus-wide services for many years and may have evolved to using business processes that are rooted in old methods and approaches that no longer support the current and future needs of the institution. Streamlining these processes creates a wide range of benefits for students, faculty, and staff. Additionally, if done prior to the implementation of the new administrative software, it can result in a significantly cheaper and faster implementation.

One concept that often arises is to implement the software and go back later to streamline the processes. The fatal flaw with this approach is this: after all the work involved with deploying new administrative systems, no institution has the institutional energy or focus to go back and streamline processes. We've never seen it done… Ever…

In determining whether to conduct a BPR effort as part of this project or not, we think your institution should answer one strategic question: Do you want to deliver services to students, faculty, and staff for the next 20 years in the same manner that they were delivered in the past 20 years? If yes, then skip BPR. If you would like to improve services for these stakeholders, then figure out how to get BPR done.

To minimize cost, we typically recommend a BPR model that leverages the skills of our consultant team to begin the BPR effort and then skill transfer to assigned staff at your institution on the methods and tools for finishing the BPR effort. This model has three phases:

- **Demonstrate Phase**: During this period, MTC will lead the effort to conduct BPR sessions for a defined number of topics. During this period, - assigned staff will participate in the sessions and learn many of the tools and approaches.

  NOTE: Topics cover operational components of functional areas (e.g., position management may have many processes that contribute to ultimate "topic", such as position approval, creating new positions, updating existing positions, and deleting/making positions inactive).

- **Mentor Phase**: During this period, your institution will lead the effort to conduct BPR sessions for a defined period and an MTC consultant will participate in guiding the team as they manage the sessions.

  NOTE: MTC will provide one trained consultant for up to a two (2) week period.

- **As-Needed Phase**: During this period, MTC will support the team on an as needed basis. Your institution's staff will be completely responsible for managing the remaining BPR work.

  NOTE: MTC will provide additional consulting support on an 'as needed' basis at our HESS discounted hourly rates.

BPR Approach

Objectives:

- Develop ideal state processes for selected topics that incorporate well known best practices, where appropriate

  NOTE: By re-designing each major service area separately, it's critical that all participants understand that no individual process area re-designs are 'finished' until all the major process re-designs are completed and in some cases until the ERP system is selected. Changes in a later process may require that changes be made to an earlier process.

Approach:

- MTC will lead the development of high-level ideal state business process diagrams using a four-part approach:
  - Part A: Planning
    - Review any previously submitted information from your new ERP and systems implementation vendors related to requirements/re: capabilities impacting in-scope processes
    - Provide timeline estimates based on the number of processes in-scope
  - Part B: Analysis
    - Conduct workshops with the appropriate functional representatives to review the in-scope current-state processes and process governance
    - Identify, categorize, and prioritize pain points
  - Part C: Ideation and Design
    - Conduct workshops to identify process improvements and develop ideal-state processes that address key pain points
      - Incorporate MTC awareness of best practices for in-scope business processes when proposing future state business processes
      - Document the future-state business process based on workshop output. We will create future-state process flow documentation, utilizing "swim lanes" to show all the participants involved in each process and how the process moves across participants to complete the process. These high-level documents will try to show all major step tasks.
      - "Participants" may be individuals or departments
    - Conduct review sessions with appropriate functional area representatives to finalize the ideal state process documentation
    - MTC will review/refine the documents with the functional team to validate and finalize the actual process flows and participants
  - Part D: BPR Close-out
    - Propose next steps in the action/migration plan to implement process improvements, which will enable
      - Transitioning to the ideal state business process model,
      - Identifying changes that can be made before the implementation of a new ERP platform and those that would require validation with the implementation partner based on the software configuration to be implemented
    - Conduct workshops with the appropriate functional representatives to review and refine the draft action/migration plan
    - Finalize the action/migration plan based on workshop feedback

    NOTE: *All business process changes do not necessarily need to be made at the same time. Part D develops a logical plan to migrate from the current to the future state.*

    Assumption: MTC will lead the adaptation of the number of topics selected by your institution (Demonstrate Phase). Your staff will lead the adaptation of the remaining processes (Mentor Phase).

This service is provided on a Time & Materials basis, so MTC can easily adapt the number of topics and the depth of focus based on the client's needs.

Deliverables:

- Current state process documentation and pain points
- Documented ideal state process documentation
- Documented action/migration plan to the future state business process model

Support Tools to Ensure Post Go-Live Success

The following section explains our Post-Implementation Support Tools, which institutions have found to be helpful for ensuring ongoing support structures, change management plans, and governance models after the implementation project structures are no longer appropriate.

Support Tool: Post Go-Live Ongoing Support Model Planning

Objectives:

- Develop a virtual organizational support model that defines responsibilities and staffing requirements for the institution to effectively support the ongoing software updates and configuration changes that may be desired. The support model will include user organizations as well as the IT organization
- Utilize experiences and best practices from other comparable institutions that have transitioned from implementation project to ongoing maintenance and support as input to the development of the on-going support model

Approach:

- Utilize experiences and best practices from other comparable institutions that have transitioned from implementation project to ongoing maintenance and support as input to the development of IT responsibilities
- MTC will develop a draft responsibilities matrix to use in initial discussions
- Develop a virtual organizational model that can be used to support the responsibilities matrix
- MTC will conduct meetings with the various units to understand their perspective on the capabilities within their units
- Based on the additional input gathered, MTC will update the draft responsibilities matrix
- MTC will conduct one review session to refine and finalize the responsibilities matrix
- MTC will then develop a draft organizational structure, along with job responsibilities for each position with reporting lines delineated
- MTC will conduct one meeting to review the draft organizational structure
- MTC will finalize the organizational structure based on review meeting feedback
- MTC will review the draft service level agreement framework with the various business units

  Assumption: We anticipate up to four hours of meetings to review the draft service level agreement framework.

Deliverables:

- Documented responsibilities matrix
- Documented virtual support structure with job descriptions and reporting lines

Support Tool: Post-Implementation Organizational Change Management Review

Objectives:

- Review OCM work that took place during the ERP implementation
- Develop lessons learned and mitigation/improvement strategies that your institution can use to guide the post-implementation period and future projects

  NOTE: All items within this step can be packaged as individual components (e.g., communications planning, training planning, providing communications support, providing training support).

Approach:

- Review each OCM project component from the ERP implementation, which may include:
    - Project Guiding Principles (if not developed in a step focused on establishing project drivers)
    - The communications plan and calendar
    - Your sponsor / owner action plan that describes OCM action items that will be completed by sponsors / owners during the course of the project period (e.g., events to attend, communications they will be responsible for sending)
    - Your training plan and calendar
    - Your management support plan that prepares resources for leadership messaging and managing the change with their teams
    - Your plan to proactively mitigate and reactively address resistance to change that arose during the implementation
- Conduct up to twenty-four hours of interviews with appropriate stakeholders to understand the perceived effectiveness of your OCM approach during the implementation
- Draft a "lessons learned" and mitigation/improvement strategies report for the post-implementation period and subsequent major projects at your institution
- Conduct review workshops with appropriate stakeholders to refine and evolve findings

Deliverables:

- OCM lessons learned and mitigation/improvement strategies for the post-implementation period and future major projects

Support Tool: Post-Implementation Governance Planning

Objectives:

- Develop a governance model and charter to ensure the new ERP investment has appropriate oversight and new initiatives are vetted and prioritized in the post-implementation ERP environment
- Utilize experiences and best practices from other comparable higher education institutions that have transitioned from implementation project to ongoing maintenance and support as input to the development of a governance model and charter

Approach:

- MTC will review the Implementation Governance Model and interview staff regarding what worked and what was a challenge.
- MTC will then develop a draft governance model and charter and will meet with functional and IT staff as needed to gather input needed for the draft, including:
    - Discuss and refine the draft framework
    - Discuss and refine potential roles and responsibilities of the functional and technical communities who will utilize and support the new system
- MTC will conduct up to three (3) meetings to refine and finalize the governance model and charter

Deliverables:

- Governance model and charter for your institution

Digital Identity & Security Tools

In this section we have listed several cybersecurity and Identity and Access Management (IAM) support tools that we have found to be especially helpful for institutions considering and/or pursuing an ERP transformation. These support tools can be combined as desired to create a project or MTC can create a custom proposal based on your scope needs. Our support tools are broken into the following service categories:

- Cybersecurity & Privacy Tools
- IAM Strategic Planning and Platform Evaluation Tools
- IAM Virtual Teams and IAM Implementation Tools

Cybersecurity & Privacy

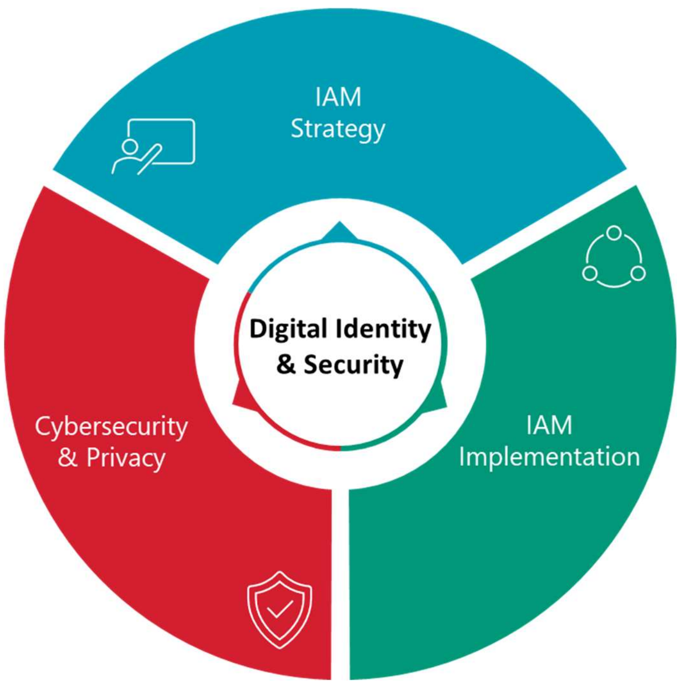
Build tailored IT Security & Compliance Programs to ably handle the most pressing institutional risks in research and higher education

IAM Strategy

Develop human-centered IAM Programs capable of delivering continuous improvement and transforming the digital campus

IAM Implementation

Deliver IAM technical solutions designed to address the most strategic goals and significant challenges of higher education



RESULTS

- ❑ Improve Student Digital Experience
- ❑ Protect Privacy
- ❑ Reduce Cyber & Operational Risk
- ❑ Drive Administrative Efficiency

Cybersecurity & Privacy Tools

We build tailored IT security and compliance programs to ably handle the most pressing institutional risks in higher education.

Higher education institutions have come under increasing scrutiny from regulators, underwriters, boards, and government agencies. Cyber threats are on the rise as higher education has become a target of financially motivated criminal organizations, as well as nation states. In response the U.S. Department of Education has notified and advised that institutions need to implement prudent security controls to protect against evolving threats.

Support Tool: Information Security and/or Compliance Program Assessment

Assess your institution's security and compliance program for readiness in preparation for an ERP replacement. MTC will identify any gaps that may need to be addressed and develop a tailored roadmap for addressing those gaps. The gap analysis gives an honest view of current state, and the roadmap offers decision makers a path forward that is actionable and tailored to the needs and context of the institution.

Objectives:

- Identify gaps in the program against best practice frameworks.
- Assess scoped environment for reasonably foreseeable risks.
- Recommend reasonable and tailored changes to the program for improvement.
- Develop a roadmap on how to best achieve recommendations and program maturity.

Deliverables:

- Gap Analysis Report
- Recommendations and Roadmap documentation
- *Optional technical assessment for vulnerabilities and penetration test. Additional costs associated.

Support Tool: Virtual CISO (vCISO) Strategy and Advisory Services

Any major technology change has information security implications. Having a vCISO available during project planning can be very valuable. In addition, there are points through project execution that present security challenges and questions. MTC vCISO services can expand your team of experts in providing advice and solutions to challenges.

Objectives:
- Provide information security advisory services.
- Contribute expertise towards program development and specific project outcomes.
- Program oversight for security and/or compliance programs

Deliverables:
- To be defined in final statement of work

Support Tool: Cybersecurity Risk Assessment Services

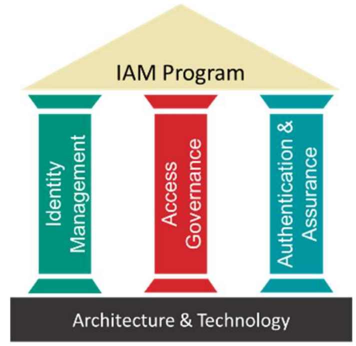
Risk assessments can help identify any potential cybersecurity threats to your institution prior to an ERP change. Risk assessments not only identify threats and vulnerabilities, but they also provide focus for decision makers. After a risk assessment, decision makers have clarity on risks that fall outside of their risk tolerance and can then incorporate solutions to address them in their project or long-term strategy.

Objectives:
- Identify threats to the confidentiality, integrity, and availability of sensitive information and the systems, devices, personnel, and facilities that support the security and compliance program
- Categorize and assess risks for likelihood and impact

Deliverables:
- A complete risk register documenting and categorizing identified risks
- A Risk assessment, including threat analysis

IAM Strategic Planning and Platform Evaluation Tools

Identity and Access Management (IAM) isn't a technical problem, it is a business opportunity with a technical component.

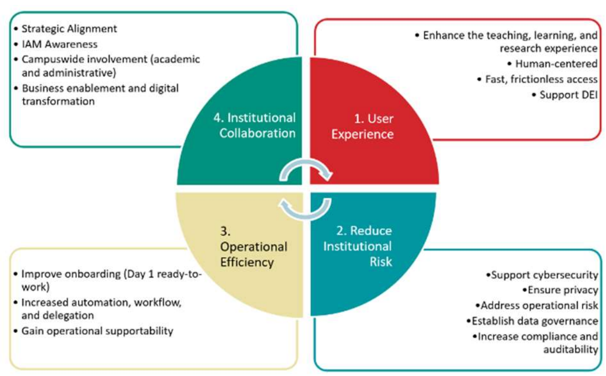


Many higher education institutions are faced with the growing challenge of reducing institutional risk (by improving its cybersecurity posture) while also providing a diverse user community with faster and more flexible access (i.e., improve user experience). MTC IAM strategic planning projects aim to provide our higher education clients with prioritized and actionable recommendations for improving their IAM Programs: awareness, alignment, organization, operational model, policies, business processes, and technology.

An effective and mature IAM program is a critical part of your digital transformation strategy. Effective aggregation, management, and application of identity and access information is not only critical to a robust risk management program but can transform your student and employee digital experience.

METHODOLOGY - MTC IAM Assessment Framework

We believe that the success or failure of technology investments is based on an institution's ability to strategically align its technology resources with its strategic goals and drivers. To be a success, identity and access management roadmaps need to better leverage and focus investments in technology on its strategic goals.



Our proven higher education strategic planning methodology utilizes a Strategic Alignment Framework to guide our project and to keep technology focused on the long-term needs of the institution and its stakeholders. This framework assesses the current alignment of technology resources and priorities with strategic goals, tactical needs, and "quick wins" that deliver significant value to the institution.

Our IAM strategic planning initiative is guided by the MTC IAM Assessment Framework.

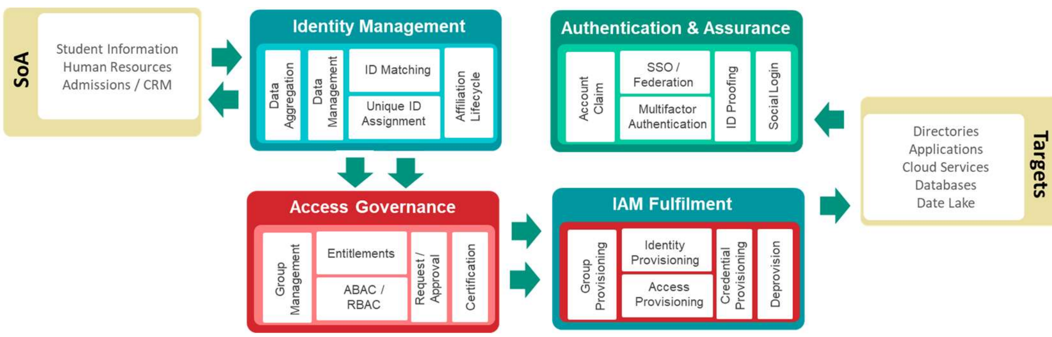
Our framework is derived from ISO/IEC (24760, 29146, and 29115) as well as from NIST 800-53 standards for the three core functional pillars of IAM: Identity Management, Access Governance, and Authentication & Assurance.

Each of the core IAM functional areas are supported by architecture and technology and directed by an IAM Program: alignment, awareness, and collaboration.

The MTC IAM Assessment Framework organizes discovery, findings, and recommendations into these five categories:

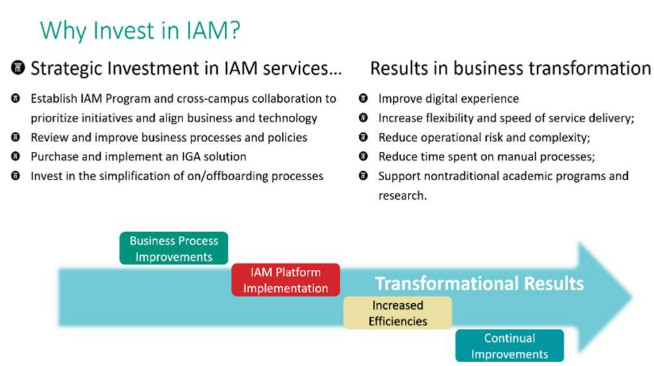
1. IAM Program
2. Identity Management
3. Access Governance
4. Authentication & Assurance
5. Architecture & Technology

The MTC IAM Assessment Framework leverages the MTC IAM Reference Architecture* to surgically identify strengths and gaps (opportunities for improvement) in the current state IAM environment as well as to evaluate IAM platforms/tools (opensource and commercial) that might effectively supplement or replace existing technology.



*The MTC IAM Reference Architecture borrows from and expands upon the Internet2 / InCommon Trusted Access Platform (TAP) Reference Architecture. For more information on TAP Reference Architecture see: https://spaces.at.internet2.edu/pages/viewpage.action?pageId=98306902

Ultimately, our detailed recommendations are prioritized (aligned to the client's institutional and IT business objectives) and presented in a multi-year, multi-phased IAM Roadmap. The roadmap enables our clients to develop mature IAM Programs capable of providing continuous and transformational improvements to their digital campus.



We are vendor neutral and IAM solution experts. Our team has over 20 years of experience assessing IAM programs as well as selecting and implementing over a dozen IAM opensource and commercial solutions. While we are not a reseller of any solution, we partner with and have hands-on experience planning, designing, implementing, and supporting a wide variety of IAM platforms that include:

- Internet2 / InCommon TAP open source IAM solutions (CoManage, MidPoint, Grouper, and Shibboleth)
- Market Leading IAM solutions (SailPoint, Okta, and Microsoft)
- Higher Education focused IAM solutions (Cirrus Identity, Fischer Identity, and Identity Automation The client selected IAM solution)

Support Tool: Identity and Access Management (IAM) Strategic Planning (and Platform Selection)

The implementation of an enterprise system replacement project poses significant challenges to maintaining your current identity and access management (IAM) services. Finance, HR, and SIS systems are typically the system of record that stores and feeds identity data that is processed to manage system access. We recommend that you take the time to better align these services with the strategic objectives of your institution. This Support Tool assesses your current IAM environment and delivers a strategic plan and roadmap.

An effective IAM project is a critical part of your digital transformation strategy. Effective aggregation, management, and application of identity and access information is not only critical to a robust risk management project but can transform your student and employee digital experience.

Objective:

- The MTC IAM Assessment Framework will be used to work with client technical resources and functional stakeholders to identify, review, and finalize current state and future requirements for IAM
- Utilize the data and requirements identified to develop assessment and recommendations for IAM governance, organization, process improvements, architecture, and technology
- Develop an IAM Strategic Plan and Roadmap for your institution aligned to support your ERP replacement effort
- Utilize the MTC IAM Decision Matrix to analyze / evaluate IAM platforms:
    - MTC will assist client team with identifying viable options for an IAM solutions based upon architectural, technical, functional, and budgetary requirements, and compare and score each option utilizing MTC's IAM Decision Matrix and platform scorecard methodology

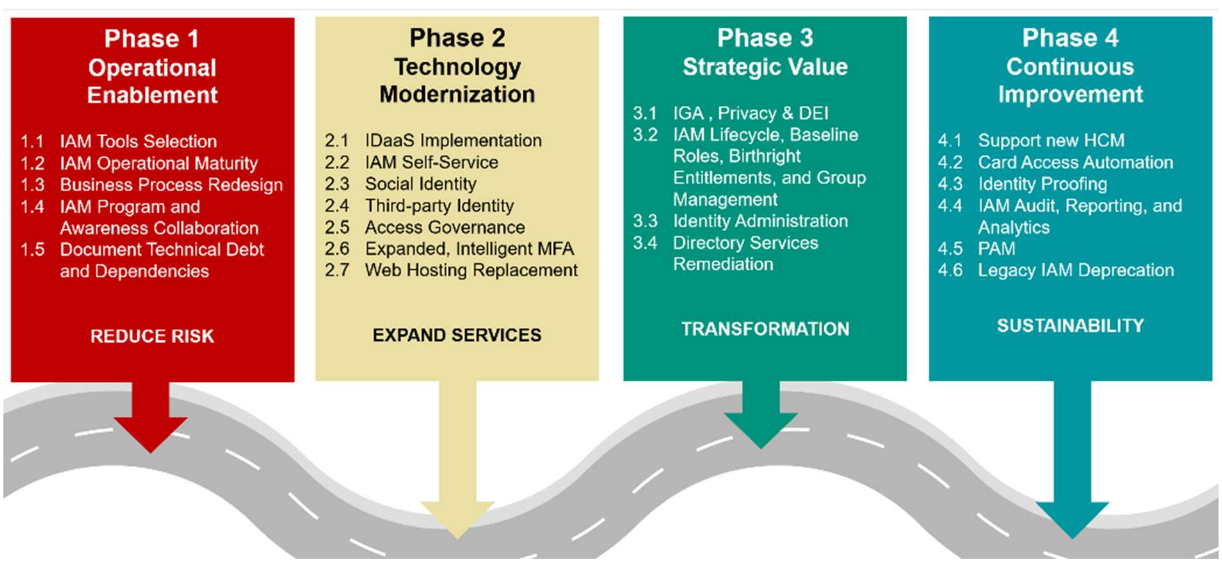
Approach:

- For the IAM Strategic Plan and Roadmap component:
    - Collect and review existing documentation
    - **Executive Sponsor Kick-off–** conduct a meeting with key project executive sponsors to introduce the project, review approach, identify project success factors and IAM strategic objectives and business drivers
    - **Workshops & Interviews**-meet with IAM stakeholders to review current state and gather current and future requirements for IAM. Meetings/topics include:
        - Current state identity management services and architecture, including:
            - Identity Management
            - Access Management
            - Enterprise authentication, assurance, and directory services
        - Employee Lifecycle Management
        - Student Lifecycle Management
        - Guest/Affiliate Lifecycle Management
        - Password Management & Account Claim
        - Account Administration and Service Desk/Customer Service
        - Identity infrastructure, high availability, disaster recovery and cloud strategy
        - IAM Operations, Roles, and Responsibilities
    - Develop and distribute an assessment including a prioritized list of findings (strengths and gaps) and recommendations that are actionable and realistic (based on organizational and budgeting constraints)
    - Review draft assessment with client team members to solicit feedback and suggestions
    - Review assessment spreadsheet based upon client feedback
    - Develop and distribute phased roadmap to client team members for their review. Roadmap will include quick-wins and long-term strategic initiative organized and prioritized by phased projects aligned to business drivers
    - Review draft roadmap with client team members to solicit feedback and suggestions

    - Revise roadmap document based upon client feedback
- For the IAM Platform / Vendor Evaluation component:
    - Utilize the MTC IAM Decision Matrix to present client with draft requirements based upon the outcomes of the IAM Strategic Plan
    - MTC to conduct additional requirements definition workshops (as needed) with key client identity stakeholders to clearly define:
        - Key architectural and technical requirements for future IAM solutions
        - Key functional requirements for future IAM solutions
        - Budgetary and operational considerations to be included as requirements for IAM
        - Leading IAM platform/solutions to be considered
    - Present draft prioritized and weighted MTC IAM Decision Matrix to client to finalize prioritization and weighting
    - Based upon MTC's experience with and knowledge of solutions, the IAM marketplace, higher education best practices, MTC will develop draft scoring for each solution per requirement and review draft scorecard and analysis with client team to finalize scoring
    - The MTC Decision Matrix can be used (when appropriate) to solicit vendor feedback, RFP responses, and scripted demonstrations

Deliverables:

- IAM Assessment Tool including detailed and prioritized findings and recommendations
- IAM Strategic Plan and Roadmap for implementing IAM program improvements (awareness, collaboration, governance, operations, business processes, and technology)
- IAM Platform Decision Matrix with prioritized and weighted requirements and IAM solution scoring, including:
    - Estimated costs for licensing/support and implementation
    - Operations models for each solution and associated costs



Example IAM Platform Decision Matrix

logo	INSTITUTION NAME		Platform 1		Platform 2		Platform 3		Platform 4		Platform 5		MORAN TECHNOLOGY CONSULTING
			SaaS, On Premise, Open Source, Managed Service, Custom		SaaS, On Premise, Open Source, Managed Service, Custom		SaaS, On Premise, Open Source, Managed Service, Custom		SaaS, On Premise, Open Source, Managed Service, Custom		SaaS, On Premise, Open Source, Managed Service, Custom		
	IAM Scorecard	Weight	Rating	Weighted Score	Rating	Weighted Score	Rating	Weighted Score	Rating	Weighted Score	Rating	Weighted Score	Description
COST	Year 1 - Initial Cost (Implementation Services)	1.00		0.00		0.00		0.00		0.00		0.00	Annual costs of licensing, maintenance and vendor software/service support
	Annual (Licensing and Support)	1.00		0.00		0.00		0.00		0.00		0.00	Implementation costs and other one time costs
	5 year annualized	1.00		0.00		0.00		0.00		0.00		0.00	5 year annualized costs including implementation, software/licensing and maintenance fees
	Annual Cost of Operations	1.00		0.00		0.00		0.00		0.00		0.00	Annual cost of internal resources required to support the IAM platform and services
	Cost Subtotal	**4.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	
ARCHITECTURE	Platform Strategy: Flexibility	1.00		0.00		0.00		0.00		0.00		0.00	Platform conforms with architectural strategy (e.g., preference for Custom Developed vs. Open Source vs. CoTS)
	Platform Strategy: Supportability	1.00		0.00		0.00		0.00		0.00		0.00	Platform conforms with architectural strategy (e.g., preference for Custom Developed vs. Open Source vs. CoTS)
	Platform Cloud Architecture	1.00		0.00		0.00		0.00		0.00		0.00	Platform architecture supports cloud preferences
	Platform Security	1.00		0.00		0.00		0.00		0.00		0.00	Platform has been proven to be secure without incident.
	Platform Reliability	1.00		0.00		0.00		0.00		0.00		0.00	Platform provides adequate tools/services/infrastructure for maintaining business continuity and SLAs meet institutional requirements/objectives.
	Platform Scalability	1.00		0.00		0.00		0.00		0.00		0.00	Platform has been demonstrated to support implementations of sufficient scale.
	Platform References	1.00		0.00		0.00		0.00		0.00		0.00	Platform has been proven to be successful among peers.
	Architecture Subtotal	**7.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	
IDENTITY MANAGEMENT	Source Data and Integration	1.00		0.00		0.00		0.00		0.00		0.00	The degree and flexibility by which the platform is able to support requirements for integrating with source systems.
	Identity Matching	1.00		0.00		0.00		0.00		0.00		0.00	The degree and flexibility by which the platform is able to match incoming records against existing principals.
	UniqueID & Identifier Assignment	1.00		0.00		0.00		0.00		0.00		0.00	The degree and flexibility by which the platform is able to assign and maintain unique identifiers.
	Identity Data Aggregation	1.00		0.00		0.00		0.00		0.00		0.00	The degree and flexibility by which the platform is able to aggregate and prioritize conflicting data from multiple sources.
	Identity Data Hygiene	1.00		0.00		0.00		0.00		0.00		0.00	The degree and flexibility by which the platform is able to normalize and massage data for the principal identity record.
	Identity Store	1.00		0.00		0.00		0.00		0.00		0.00	The degree and flexibility by which the platform is able to securely store identity principals and related metadata.
	Baseline Affiliation and Lifecycle Management	1.00		0.00		0.00		0.00		0.00		0.00	The degree and flexibility by which the platform is able to assign and manage baseline affiliations/roles.
	Identity Fulfillment	1.00		0.00		0.00		0.00		0.00		0.00	The degree and flexibility by which the platform is able to provision/manage identity objects, including joiner, leaver, mover scenarios with a variety of downstream directories and applications.
	Account Admin Tools	1.00		0.00		0.00		0.00		0.00		0.00	The degree and flexibility by which the platform is able to provide tools to facilitate the management of ongoing account administration, as well as the granularity by which tools can be delegated.
													The degree and flexibility by which the platform is able to facilitate the management of identities that do not originate from any external source of

IAM Virtual Teams and IAM Implementation Tools

The MTC IAM Implementation practice is comprised of IAM solution experts. Our team has over 20 years of experience implementing over a dozen IAM opensource and commercial solutions. While we are not a reseller of any solution, we partner with and have hands-on experience planning, designing, implementing, and supporting a wide variety of IAM platforms that include:

- Internet2 / InCommon TAP open source IAM solutions (CoManage, MidPoint, Grouper, and Shibboleth)
- Market Leading IAM solutions (SailPoint, Okta, and Microsoft)
- Higher Education focused IAM solutions (Cirrus Identity, Fischer Identity, and Identity Automation Rapid Identity Cloud)

Support Tool: Virtual IAM Team Services

Many higher education institutions are faced with the growing challenge of reducing institutional risk (by improving its IT security posture) while also providing a diverse user community with faster and more flexible access to a greater number and range of IT resources and services. Major system replacements and implementations create additional skill and staffing challenges. Most IAM technology vendors are not prepared to provide turnkey implementation services. Our Virtual IAM (vIAM) Teams supplement client PMO and technical resources to reduce project risk and ensure timely and successful IAM implementations.

Objectives:

- MTC will work with your institution to determine the desired level of support needed and provide a team of consultants with deep knowledge and experience with IAM and higher education
- Provide part-time or full-time consultants to fill or supplement the following critical IAM implementation team roles:
    - IAM Architect
    - IAM Project Manager
    - IAM Senior Consultants - Technical Specialists
    - IAM Senior Consultants - Business Analyst

Approach:

- Using MTC higher education optimized IAM implementation methodology, work collaboratively with client IAM project team and IAM technology vendor to perform all or some of the following tasks:
    - Develop detailed implementation project plan and schedule
    - Institute project controls such as project charters, RAID logs (risks, actions, issues, and decisions), risk matrix, escalation processes, status reporting, and budget reporting
    - Document and validate business requirements
    - Document and validate technical requirements
    - Review and improvement of business processes related to IAM improvements
    - Design and design review
    - Develop test plans, test cases, and testing
    - Bug tracking and bug fixes
    - Deployment planning
    - Communications planning
    - IAM operational and support redesign
    - Training and knowledge transfer planning
    - Deployment and post go-live support
    - Training and knowledge transfer
    - IAM planning and roadmaps for next steps and IAM continuous improvements
    - Implement IAM governance and cross institutional collaboration

Support Tool: IAM Implementation Services

Many higher education institutions are faced with the growing challenge of reducing institutional risk (by improving its IT security posture) while also providing a diverse user community with faster and more flexible access to a greater number and range of IT resources and services. Most IAM technology vendors are not prepared to provide turnkey implementation services. MTC has developed optimized IAM implementation methodology for higher education that can be applied to a large variety of IAM technical solutions.

The Optima Higher Education IAM Implementation Method

Methodology

MTC will implement the clients selected IAM solution using our highly optimized methodology for deploying IAM solutions for higher education clients - Optima. Based upon our experience working with over one hundred (100) colleges, universities, and university systems, MTC has developed the Optima IAM implementation service methodology and project approach.

Our IAM Experience

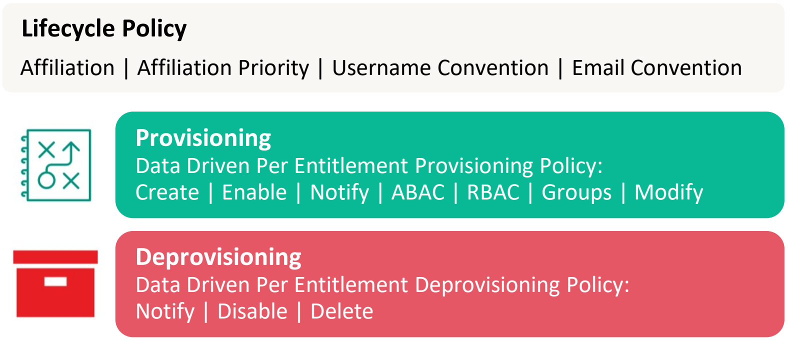
The Optima implementation method:

- **Recognizes the complexity of higher education identity lifecycle management** and our clients' need to manage multiple, diverse, and simultaneous affiliations/roles associated with single identities;
- Leverages MTC experience with higher education IAM to **simplify options and standardize** requirements gathering, design, and configuration;
- Provides a **policy driven process** for identifying lifecycle requirements and governing the creation, enablement, disablement, and deletion of identities, credentials, and access.
- **Reduces the time, costs, and risks** of the initial configuration and deployment of your IGA solution;
- **Empowers clients** to easily own, maintain, and modify identity lifecycle policies and management.

How the Optima IAM implementation services work

1. Optima implementations have a clearly defined and fixed scope of work for the initial deployment and configuration of your IGA solution.

2. The Optima IGA implementation utilizes IAM lifecycle policy templates and files to identify requirements as well as to configure (and manage) your IGA solution.



Lifecycle Management Policy

Optima IAM implementations leverage standardized and granular lifecycle policy files to simplify deployment and operations as well as audit and compliance requirements

3. The Optima implementation is guided by MTC project management and project controls best practices. In addition to IAM consultants highly experienced with implementing IAM solutions for higher education, Optima implementation projects are managed by experienced project managers utilizing the following MTC project controls:
    - Approved Statement of Work
    - Project Schedule
    - Project RAID Log (Risks, Actions, Issues, and Decisions)
    - Project Hours/Budget Report
    - Risk Matrix
    - Project Status Meetings
    - Formal Project Approval Gates:
        - Design (required to initiate Configure The client selected IAM solution)
        - Test (required to initiate Production Deployment)
        - Close-out (required to initiate Support)
    - Communications Plan Template
    - UAT Test Plan Template
    - Deployment/Go-Live Plan Template

4. All effort required that is outside of the approved Optima IAM implementation is managed utilizing the MTC project change request (PCR) process. The PCR process allows our clients to identify adjustments to initial agreed upon project scope and MTC to develop the best approach as well as estimated effort, and an hourly rate for completing additional work.

Project Critical Success Factors

Having conducted many of these projects for colleges, universities, and university systems, we clearly understand the implications of this project. Based on our experience on previous projects, we've identified several key critical success factors that the client should consider as it plans for this initiative:

- **Executive Sponsorship / Ownership and Support** – The active support and participation of an executive sponsor / owner is critical to success.
- **Client Project Manager –** The client project manager will serve as a project champion and be accountable for internal scheduling and communications as well as obtaining necessary documentation and access for MTC to conduct and complete our analysis, design and planning. This role is estimated to be part-time. Project status reporting and status meetings will be conducted with the Project Manager. The client project manager will be responsible for the assignment of client resources to project plan tasks, managing task status in the project plan, and updating the project plan due to delays in the client's schedule.

To ensure success of this engagement, it's important that an effective project management environment is established. The following describes our proposed structure, based on our experiences with similar projects.

MTC will assign an MTC Project Manager responsible for oversight and coordination of the MTC support team. In the MTC Project Manager role, the project manager will interact regularly with the client Project Sponsor / Owner.

The MTC Project Manager will establish communications and escalation plans as well as status reporting and status meetings that will be used to manage this project. As the project proceeds, the MTC Project Manager will track the project and facilitate communications among team members and The client staff. Issues that arise will be formally addressed and resolved by the MTC Project Manager and the client Project Sponsor / Owner.

Implementation Plan

The following project steps will be utilized to implement the client selected IAM solution:

- Step 1 – Project Kick-off & Planning
- Step 2 – Requirements Gathering & Design
- Step 3 – Configure IAM Solution
- Step 4 – Test
- Step 5 – Production Deployment
- Step 6 – Knowledge Transfer
- Step 7 – Collaborative Training Sprints

Step 1: Project Kickoff and Project Planning

Objectives:

- To establish a clear understanding between the MTC and the client project sponsors regarding the objectives, scope, and scheduling of the project and the approach that will be taken.
- To establish an effective working relationship among all team members, including both the MTC and the client staff.

Approach:

- MTC will conduct one-to-two (1-2) one (1) hour meetings (conference calls) with the client project sponsors:
  - Validate and refine the basics of scope, objectives, and approach that were proposed and review/refine the detailed project work plan
  - Establish project management procedures, roles and responsibilities, status reporting, and status meeting schedule
  - Validate and refine the detailed project schedule.

Deliverables:

- Conduct kick-off meeting
- Define project participants and establish project schedule
- Establish project management processes
- Conduct project status meetings, status reporting, and RAID log reviews (Risk, Action, Issues, and Decisions)
- Project Schedule.

Step 2: Requirements Gathering & Design

During the design phase, MTC will gather lifecycle policy requirements for each of the identified affiliations/roles and map identity and access data from source(s) of authority to the client selected IAM solution to the appropriate targets. Requirements will be documented in a design document, which will undergo a customer review and validation and will serve as the execution requirements for all configuration tasks.

Objectives:

- Gather business requirements/lifecycle policies for the client student, employee, and sponsored guest lifecycle
- Present The client with standard data integration template for ERP integration and finalize detailed technical requirements and data mappings for sources of authority and target directory/application provisioning and deprovisioning
- Gather business and technical requirements for the client claim and password management;
- Document requirements in design document.

Tasks:

- Conduct an Introduction to the client selected IAM solution workshop with key technical resources to familiarize them with the solution as part of preparation for requirements gathering and design
- MTC to provide the client with requirements survey and templates to identify draft requirements for:
  - Source data
  - Affiliation/roles
  - Unique identifiers
  - Affiliations/Roles and lifecycle policies
  - Targets and Attribute Mapping.
- Once MTC has received draft requirements templates from the client <u>some of the following meetings will be conducted</u> to finalize requirements and design (*as needed*):
  - Conduct workshop(s) to review the of current state IAM services and processes – e.g., identity management, access management, and authentication services
  - Conduct requirements workshops on SoA integration requirements. Topics include:
    - Employee/HR data
    - Student/SIS data.
  - Conduct design review and requirements validation workshops on **student lifecycle** management to finalize student lifecycle policies
  - Conduct design review and requirements workshops on **employee lifecycle** management to finalize employee lifecycle policies
  - Conduct design review and requirements workshops on **guest/affiliate or sponsored account lifecycle** management to finalize employee lifecycle policies
  - Conduct requirements workshops on Active Directory domain (1) requirements and attribute mapping
  - Conduct requirements workshops on directory and collaboration platform requirements (e.g., LDAP, AD, Azure, Microsoft 365, and Google Workspace) user objects, licensing, and attribute mapping. Assumption: This will involve one (1) one (1) hour meeting workshop
  - Conduct requirements workshops on LMS user provisioning requirements and attribute mapping
  - Conduct requirements workshops on the client selected IAM portal requirements, including:
    - Account Claim and Password Management [if desired]
    - Roles/Group Management
    - Sponsorship/Guest Module for sponsored guests [including multiple guest/sponsorship affiliations]

        - Service Desk and Accounting Administrative Delegation.
- Draft detailed technical design documentation
- Distribute draft design document to the client for review and feedback
- Conduct design review workshops to finalize design documents

Deliverables:
- IAM Solution Design

Step 3: Configure IAM Solution

During the Configuration phase, the MTC consultant will configure the client selected IAM solution to the customer approved design specifications. Each integration will undergo unit testing by MTC throughout the configuration cycle. Configuration activities will be performed directly in the customer's development/test environment.

Objectives:
- Work with Identity Automation and the client technical resources to deploy selected IAM solution development/test environment and configure selected IAM solution and Identity Bridge;
- Configure the client's Optima lifecycle management policies in selected IAM solution;
- Configure solution portal solutions for self-service account claim & password management, workflow& approval, sponsorship module, roles module, and administrative access in development according to approved designs.

Tasks:
- Execute on customer approved design documents;
- Configure retrieval of authoritative source data;
- Configure data management processes;
- Configure lifecycle management policies and process flows;
    - Configure solution portal according to Design for:
        - Self-service and Service Desk Delegation
        - Roles / Group Management
        - Sponsorship / Guest Module
    - Complete unit testing:
    - Configuration of services for account claim and SSPR.

Deliverables:
- Development environment functioning to requirements identified in approved Design document.

Step 4: Test

During the Test Phase, MTC will work with the client team to conduct user acceptance testing (UAT). The goal of the test phase is to conduct user acceptance testing with the customer assigned resources and gain customer acceptance on each test scenario. Should any workflow fail UAT, the MTC consultant will remediate and return to the customer for another test validation. This will repeat until all solution components are customer validated.

Objectives:
- Support UAT testing, resolve issues, and finalize build for production.

Tasks:
- MTC to provide test plan template to the client resources and assist the client resources with the development of detailed test plan and test cases
- MTC will support the client's execution of the UAT plan, including training the client resources with how to operate selected IAM solution
- MTC Consultant will respond to and resolve identified issues.

- ***Deliverables:***
- Test Plan template
- Validated The client selected IAM solution configuration in development.

Step 5: Production Deployment

During the Production Deployment phase, the MTC Consultant will migrate validated the client selected IAM solution from the customer's development/test environment to production and go-live.

Objectives:
- Deploy the client selected IAM solution in production and go-live.

Tasks:
- Work with IAM vendor and client technical resources to configure the client selected IAM solution and identity bridge in production
- MTC will conduct workshops to gather requirements and dependencies for:
    - Deployment and Go-live Plan
    - Communications Plan.
- MTC will provide the client with a communications plan template and assist the client resources with the development of a deployment plan and rollback planning
- MTC will initiate data import and synchronization
- MTC will work with the client resources to validate/test in production
- MTC will work the client to initiate go-live plan
- Go-live.

Deliverables:
- Go-live planning
- Communications planning
- RapidIdentity functioning in production according to Design.

Step 6: Knowledge Transfer & Support

During the final phase of the project, the MTC team will work with the client technical resources to transfer knowledge of the development and production environments.

Objectives:
- Transfer as-built, run, and operational knowledge of the client selected IAM solution environment to client technical resources
- Provide support for implemented solution for 2 weeks (10 business days) following go-live.

Tasks:
- The client technical resources responsible for the operation and maintenance of the IAM solution will participate in training offered by IAM solution vendor
- The client technical resources will participate in the design, configuration, test, and deployment of RapidIdentity as specified in the Implementation Plan
- MTC will deliver updated design documentation to reflect as built and review design documents with client technical resources
- MTC to conduct knowledge transfer workshops with the client technical resources.
- IAM vendor to provide product support

Deliverables:
- Updated design documents to reflect as built
- Knowledge transfer workshops.

Data & Analytics Tools

In this section we have listed several Data & Analytics support tools that we have found to be especially helpful for institutions considering and/or pursuing an ERP transformation. These support tools can be combined as desired to create a project or MTC can create a custom proposal based on scope needs.

Support Tool: Business Intelligence (BI) & Analytics Assessment
Institutions are focusing more and more on the power utilizing the massive amount of data being collected for decision making, but many institutions do not know where to start. We work with clients to assess their current state business intelligence (BI) and data landscape including people, process, and technologies to deliver targeted recommendations on how to move their analytics capabilities forward.

Methodology:

Our BI & Analytics Assessment methodology is designed to understand and evaluate the data and analytics landscape within higher education institutions. We take a holistic approach by reviewing background documents, engaging with key stakeholders, and collecting insights from users. Leveraging our extensive experience and best practices from successful implementations at other institutions, we provide tailored recommendations to enhance data-driven capabilities, further enabling institutions to make informed decisions and drive institutional success.

Below is a high-level illustration of our methodology:

Through this methodology, we provide higher education clients with a comprehensive assessment that highlights areas of strength and areas for improvement. By leveraging our experience and what we have seen in successful data-driven/informed institutions, we offer specific recommendations that enable institutions to enhance their data and analytics practices, drive effective decision-making, and achieve institutional success.

Objectives:

- Develop a high-level understanding of the current state environment
- Establish an understanding of what is working well and where things could be improved from an end-user perspective
- Provide a tangible set of recommendations along with sequencing so that the institution has a clear view on how to sequence environment uplift activities

Approach:

- Conduct workshops across the various stakeholder groups to understand the perceived strengths and weaknesses of the current BI environment
- Conduct workshops with the groups providing the current reporting and analytics services, as well as the technology team(s) that are supporting the existing platform(s)
- Hold clarification sessions as required with groups based on items that arose in the two sets of workshops
- Provide a draft of the current state assessment and recommendations for review and discussion then address any feedback/clarifications to issue a final report.

Deliverables:

- BI Assessment with current state findings, along with targeted recommendations including proposed sequencing of the recommendations

Support Tool: Data Conversion Readiness and Data Quality Planning

Part A: Data Conversion Readiness

Data Conversion is always on the critical path of an enterprise system project due to the nature of the activity and the need to sign-off on reconciliation prior to confirming go-live. Due to the criticality of the activity, it is imperative to plan and establish principles, a staffing approach and a functioning conversion environment prior to the System Integrator coming onboard.

Objectives:

- Develop a detailed RACI based on the anticipated scope of data conversion and activities assigned to the System Integrator versus the activities that the institution will be responsible for during the project
- Establish a conceptual architecture for a data conversion environment which focuses on leveraging existing technologies to achieve the conversion objectives
- Document the common risks in a data conversion along with the institutional specific risks and establish documented treatment plans for all risks
- Establish a high-level principles and anticipated scope document which includes how to handle historical data and documents key systems and off-system datasets required for conversion

Approach:

- Conduct up to five (5) sessions across technical, data and functional areas to understand the current landscape and toolsets used by the organization
    - These sessions will be focused on understanding the legacy platforms, flow of data and the platforms available that might assist in the conversion activities, and risks that the departments see in converting their specific datasets
- Conduct up to three (3) sessions with the Technical Lead, Functional Lead and enterprise system Project Lead to develop a staffing model
    - These will be iterative sessions where we start with a common staffing approach then lay the institutional context on top for things such as current staffing skillsets, source systems and tools used in the legacy environment
- Facilitate up to three (3) Risk workshops with key institutional leaders that would be involved in the project
    - These sessions will be used to start discussions around handling of historical data, project data security, reconciliation and other project level risks related to data conversion to agree on a mitigation treatment for each one

Deliverables:

- Data Conversion RACI – Breakdown of project key activities and role the various groups will play
- Data Conversion Risk Treatment Plan – Documented risks identified during the discovery sessions and what we see at other institutions along with the discussed treatment plans
- Data Conversion Strategy – Document that would contain the conversion principles, conceptual architecture of the conversion environment as well as other key findings from the discovery sessions

Part B: Data Quality Planning

Institutions undertaking an enterprise system replacement project will have to address data quality throughout the project, otherwise they will jeopardize the go-live and/or risk the quality of future reporting. We work with clients to put together an approach to kick-off a data quality project at any point doing an enterprise system project. Contrary to an enterprise-wide data quality initiative, an enterprise system focused approach is a tactical solution to safeguard the implementation of the new platform thus we work with clients to utilize existing technology and internal skillsets to achieve their objectives.

Objectives:

- Establish the foundations for how data issues will be identified, logged, and managed throughout the project lifecycle
- Utilize an inventory of common data issues that arise on enterprise system implementations to kickstart the identification of issues to start addressing ahead of project commencement
- Design a solution that would complement the architecture required during the project for data conversion activities thus having a functioning conversion environment prior to onboarding the System Integrator

Approach:

- MTC will first review the existing environment, covering potential source systems, ETL technologies, and Business Intelligence Solutions
- As part of the discovery work, MTC will conduct the following meetings:
    - Functional Data Owner/Trustee sessions to understand the legacy platforms, resource capabilities and existing data quality concerns
    - Sessions with IT to understand existing technology stack, data structure knowledge and IT Governance processes required to stand-up a potential solution
    - Session with Risk, Compliance and/or IT Security to understand institutional policies around data storage and access
- MTC will prepare a Data Quality Strategy deliverable which includes the following components:
    - Conceptual Architecture (Process, Technology Stack and Data Security)
    - RACI of Activities
    - Process Diagram outlining the cleansing process
    - Implementation Steps and Durations

Note*: MTC can also support standing up a pilot in collaboration with the client, but it will be priced separately based on the discovery work. This would typically involve setting up a process to extract, log/track, and then visualize one or more data cleansing issues so the users can cleanse records.*

Deliverables:

- Data Quality Strategy - Based on our findings, targeted recommendations on how to stand up a repeatable process to manage data cleansing

Support Tool: Reporting and Integration Readiness

Institutions embarking on an enterprise system project should leverage the opportunity to establish automation across platforms via integrations and look at rationalizing reporting across departments. To be in a position to best achieve these objectives, institutions should understand their current environment in detail or else they will risk replicating the current environment on a new platform. This readiness project would look to have all key information documented and ready for the project start so that the institution can truly use the opportunity to transform their data integration and reporting architecture.

Objectives:

- Establish a view on the current reporting practices across departments with a focus on Regulatory and Compliance needs
- Establish an inventory all potential integrations whether via current automated integrations or manual integrations, including all information needed so that a System Integrator would be able to hit the ground running understanding the current environment

Approach:

- Conduct up to five (5) sessions across IT Department(s) and relevant Functional Areas (e.g., HR, Finance/Procurement, Student) with a focus on getting a complete view of the legacy integration landscape including the mode of integration, business context, and technical details
- Conduct two (2) as-is Reporting workshops to document the current method of reporting across the various functional areas
- Develop a template and process for documenting current business critical reports which must be replaced as part of the project
- Work with client team to facilitate the gathering process and perform reviews to ensure that the information is being correctly input so that it can be leveraged in the future

Deliverables:

- Integration Inventory- Standardized list of all integrations identified during the workshops with both business and technical details
- As-Is Reporting Environment Overview – Document outlining the various ways in which users are generating reports today (Excel, On-System, Data Warehouse, Access...etc.)
- Template which will be used for document reporting needs ahead of the project start. This will be focused on reports that typically cannot be rationalized such as compliance and regulatory reporting

Support Tool: Data Conversion Advisory Services

Often institutions do not have internal resources that have experience in running an enterprise system conversion and bringing in a full-time resource may be cost prohibitive. Our Data Practice has completed 20+ data conversions for institutions globally, with the most recent project being a multi-year enterprise system implementation. We provide Time & Materials services to cover general Data Conversion Advisory Services when bringing in an independent expert may be needed:

- **Conversion Contracting Support**: Review draft contracts/SOW and provide feedback and guidance based on our years of experience to ensure that the institution is setting themselves up for success.
- **Education**: Providing project team members or a subset an overview of typical conversion processes and what typical obstacles enterprise system projects encounter with conversion and reconciliation.
- **Data Project Governance:** Establish or review the processes, responsibilities and templates for any of the following activities:
    - Data Cleansing/Quality
    - Data Mapping & ETL Development
    - Post Conversion Cycle Success/Issue Reporting
    - Conversion and Reconciliation Defect Management Processes
    - Data Reconciliation Approach
- **Data Engineering:** Support the client institutions with development activities such as ETL development, visualization development, or development of a historical data solution for accessing data that has not been converted.
- **Other Advisory Topics**: Historical Data Approach, Data Masking Approach, Technical Data Conversion Environment Commissioning, Automated Reconciliation, Parallel Payroll Conversion, Data Conversion General Health Check

Implementation Project Management and Quality Assurance Tools

The following section explains our tools for helping institutions:

- Manage ERP implementation projects (Client-Side Project Management)
- Ensure project health and quality for ERP implementation projects:
    - Risk Management / Project Health Check
    - Risk Management / IV&V / Project Quality Assurance Support

Support Tool: Client-Side Project Management

Objectives:

- MTC will provide your institution with full-time or part-time client-side project management support during your ERP implementation

Approach:

- MTC will function as your institution's internal project manager for the duration of the ERP implementation
- We will work with your institution to determine the number of hours per week the PM would work on this project

Support Tool: Risk Management / Project Health Check

Objectives:

- Develop high level understanding of any issues that could impact the success of your institution's go-live activities
- Provide recommendations for further addressing any 'go-live' readiness risks/issues

Approach:

- Review any relevant go-live documentation, including the following:
    - Cutover Plan – This should include pre and post cutover activities
    - Build (Conversion) Plan – plan including conversion tasks that are being executed to create the environment (if not included in the above)
    - Application Ecosystem Cutover Plan(s) – cutover plans for other applications that will be transitioned to the new solution (if not included in the above)
    - Cutover Communications Plan
    - Cutover Disaster Recovery/Business Continuity Plan
    - Go/No-Go Readiness Assessment Template
    - Catch-up Transactions Plan – plans for catching up transactions processed after the conversion files were extracted from legacy (if necessary)
- If necessary, conduct interviews with selected project leadership to understand any issues that remain to be fixed before 'Go-Live'
- MTC will develop a draft Go-Live Readiness report that will document the major issues that are identified as being inhibitors to go-live
- The MTC team will develop a draft set of improvement recommendations
- Conduct up to two (2) workshops to review and refine the assessment and recommendations with the Project Manager, Project Sponsors / Owners and other appropriate project leadership

Deliverables:

- Documented Go-Live Readiness challenges
- Documented recommendations for improving the ability for your institution to successfully go-live with your ERP implementation

Support Tool: Risk Management / IV&V / Project Quality Assurance Support

Objectives:

- Determine the desired scope of IV&V/QA support (areas to review and frequency/types of reviews)
- Provide the Project Sponsor / Owner and other executives with independent validation that the project team has an accurate view of the project status and progress and has appropriate plans in place to manage risks associated with the project
- Complete assessment visits and produce applicable reports

  NOTE: this step is more detailed and in-depth than our higher-level Risk Management / Project Health Check tool above, which is reflected in our pricing.

Approach:

- MTC will work with your institution to determine the desired scope of the IV&V/QA effort, including both the areas to review and the frequency/types of reviews desired:
  - Typical areas for review include:
    - Task/milestone completion
    - Project expenditures vs. project budget
    - Project plan review
    - Security assessment (when appropriate)
    - Risk assessment
    - Overall project scorecard that examines point-in-time progress and provides a probability measure of the project's overall success
    - Overall state of the project from both a top down (executive level) and a bottom up (staff level) viewpoint to ensure that project participants are in sync and moving forward
  - Potential review frequency varies significantly based on the needs of your institution. Our approach is based on working with your institution to collaboratively determine how much review work is desired to help you achieve your goals. Our assessments can – but do not necessarily need to – include:
    - An initial, more detailed project "snapshot" baseline assessment to determine progress to date and to gain a strong understanding of the project's structure, governance, financial management, project methodology, project staffing, and stakeholder engagement/agreement
    - Project quality reviews up through go-live to provide an on-going assessment and to monitor the project and review deliverables and change orders
    - Some institutions may be interested in a post-project review (not priced)

- MTC will complete assessment visits based on mutually agreed upon scope (e.g., baseline, quarterly, monthly) and assessment timings. An example visit might involve:
  - Review the current state of the project, utilizing project documentation such as: project plan, key milestone dates, deliverables, resource plans, financial & business requirements.
  - Conduct a one-hour interview with the Executive Owner
  - Conduct one hour interviews with selected project leaders, such as:
    - Project Executive, Project Manager, functional leads and technical leads, and any augmented consulting staff (if applicable)
    - Other staff as appropriate
  - Conduct a 1-2 hour discussion about potential issues with the joint project management team and potential remediation strategies
  - Conduct brief survey of project participants (executives, staff participants, non-participants, students, faculty, interested parties) to ensure that project communication is functioning and that participation from all impacted parties remains high
  - Meet with the Project Sponsor / Owner to discuss findings

  - Develop the final Project Assessment report
  - Deliver the final report to the Project Executive Steering Committee or other oversight committee

Deliverables:

- Deliverables will vary based on the scope of IV&V/QA support selected, but might include:
  - Project Baseline Assessment Report documenting key issues and remediation plans and an ongoing Quality Assurance Plan
  - Project Audit Report documenting key issues and remediation plans utilizing the report format described below:
    - Overall project summary and scorecard
    - Project tasks/milestones
      - Planned tasks vs. completed tasks
      - Significant milestones
      - Recent activities/accomplishments
      - Upcoming key activities
    - Project budget
      - Budget vs. actual expenditures
    - Current issues/concerns
      - Remediation strategies for key issues
    - Risk assessment
      - Risk avoidance and mitigation recommendations
  - In addition to typical audit report sections described above, the post-project assessment can include the following sections:
    - Accomplishment of project goals including strengths and weaknesses
    - Budget execution versus budget estimates
    - Analysis of scope creep and other significant project obstacles
    - Risk management assessment
    - Lessons learned