

How Do We Effectively Implement Technology Projects?

Module 5.1

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This resource will be useful to those tasked with leading technology implementation on behalf of their department, senior leaders, and individuals actively engaged in implementation planning



Getting Started with Module 5

The goal with all technology projects is for them to ultimately achieve and sustain their intended impact at scale. Anyone who has participated in a degree audit data clean-up, been tasked with “boosting morale” around a clunky technology gadget from the 1990s or looked too closely at the inner workings of their institution’s SIS knows that achieving this milestone requires a great deal of time, effort and luck.

It is an unfortunate and common misconception that many student success software products can be “fully implemented after 3 months!” While software firms are incentivized to share these wowing data points, the on-the-ground reality looks a bit different. After working with many institutions on many technology tool implementations, we can confidently say there has never been a student success software implementation in our field that has taken less than 6 months to achieve its intended impact at scale. In fact, many institutions that are lauded as technology project exemplars had to engage in at least one technology re-implementation to achieve the success they now experience.

This work is hard, but there are things you and your team can do to make it faster, easier, and more impactful. This module will cover the basics of technology implementation success and provide resources for those hoping to rescue a technology initiative gone adrift.

What You’ll Learn: Module 5 Learning Objectives

- How can we prepare for an effective student success technology implementation?
- What type of implementation support do we need, if any?
- How can we rescue and plan for putting a technology implementation back on track?

How You’ll Learn: Module 5 Contents and Resources

Module 5:

5.1: Read and Plan

How Do We Effectively Implement Technology Projects?

5.2: Read and Reflect

How Can We Augment Our Implementation Support Capacity?

5.3: Read and Plan

How Can We Fix Off-Track Technology Projects?



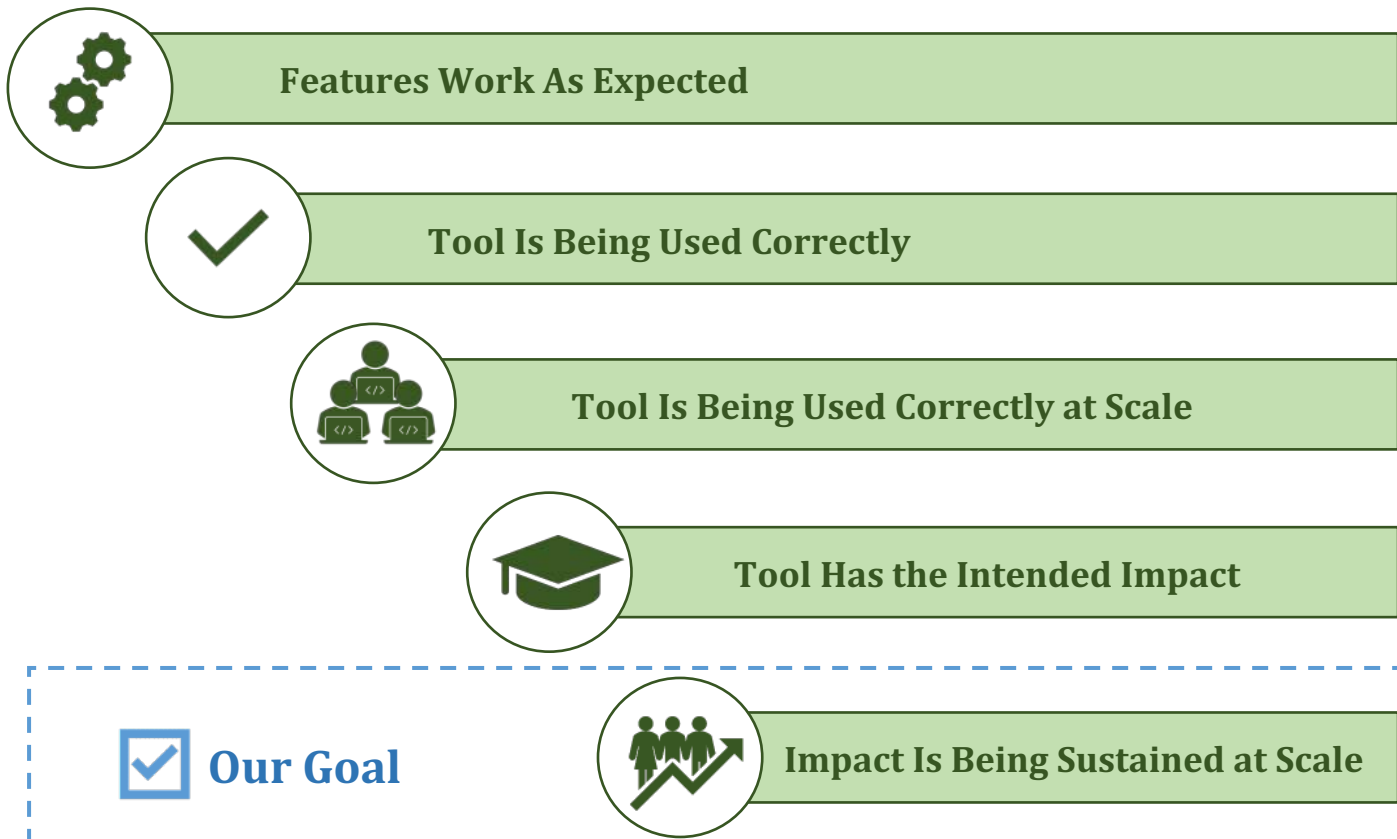
What Does Effectively Implemented Tech Look Like?

The goal with all technology projects is for them to ultimately achieve and sustain their intended impact at scale. Achieving this goal can take many months to many years, depending on the tool's complexity and loftiness of the project objective. Well before we reach this final goal, however, there are interim milestones that help us gauge a technology project's success. Do the software features work as expected? Is the tool being used correctly by its end-users? Is the tool being used correctly at scale?

Refresh: What Does It Mean to Have a “Successful” Technology Acquisition?

Early-Stage

Full Implementation at Scale





Almost
Lost Me There

Three Elements for Successful Implementation

Before procuring a new technology tool, it's in everyone's best interest to focus on three components of implementation readiness: business process, technical, and data. While some activities require actively engaging with a new software package; a great deal of readiness can be achieved before your institution starts spending that annual software license fee. In particular, engaging in business process planning and data clean-up prior to initiating a software vendor contract can save your institution hundreds of thousands of dollars and a great deal of personal headache. We cover the definitions of these categories below and across the coming pages we explore them more deeply.



Business Process Readiness

Business process readiness requires visioning the essential human activities and processes that interface with and provide inputs to the technology tool/s you plan to use. Business process readiness encompasses activities like determining protocols for how, when, and where staff will input key student conversation data points into a technology system. It also includes activities like planning for how technology end users will be involved in configuring and learning the new technology.



Technical Readiness

Technical readiness involves planning for how a new tool will be built/configured and practically integrated into an institution's existing technology infrastructure. This includes activities like creating and executing an integration plan for how source data will flow into the new system and how data assets in the new tool will impact other technology tools. It also includes planning for how the system will be maintained and iterated over time.



Data Readiness

Data readiness means that your institution has thought through a strategy for how the new technology can access the source data it needs to achieve its intended goal. This often includes data cleaning in source systems with many duplicative or non-standard data entries; transferring data from legacy systems; transcribing data that does not yet exist digitally; and creating a data strategy for the new system such that it can be successful and sustained.



Decision-Making Frameworks

Before we dive into the specifics of implementation planning, it's worth discussing the decision-making challenges that can—and very often do—hamper technology implementations. As we explored in the last module, effective procurement and planning requires assembling the right team. Implementation planning and execution will pull on many of those same individuals, and more. Software implementation requires practitioners with more detailed knowledge sets.

While it may be easy to imagine business process planning as the jurisdiction of student-facing departments, technical readiness as the jurisdiction of IT, and data readiness as the jurisdiction of IT/IR, the truth is that these categories are often blurred. Each area requires contributions from individuals across departments. Absent an effective, cross-departmental implementation team with clear decision-making protocols, there will be quandaries like the below:

Why does the student onboarding path look like this? It doesn't align with how our advising team has mapped the student experience.

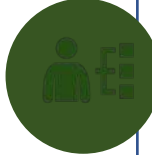
*This isn't the right degree plan for students in this program of study.
Where is the data coming from?*

It's possible that your institution has found a decision-making and implementation framework that has served you well for cross-departmental initiatives in the past. If that's not the case, we highly recommend exploring decision-making frameworks honed by the business and technology community. For example, the RACI chart or RAPID framework. Both frameworks assign clear and defined project responsibility to specific individuals.



RACI

- Responsible
- Accountable
- Consulted
- Informed



RAPID

- Recommend
- Agree
- Perform
- Input
- Decide

We recommend reading up on both frameworks and thinking about how these project management tools can support your implementation efforts. Successful execution of your technology project will require a clear designation of authority, roles, and responsibilities.



Creating Capacity and Setting Expectations

Across the coming pages and into Module 5.2, you'll find a variety of detailed tactical resources to help you and your team craft an implementation plan. These resources are project generic. That is, they are not designed for a specific type of software project (say a CRM implementation). Instead, these resources are based on feedback from MSI practitioners about the types of documentation and planning decisions they wish they had used prior to engaging in various software projects. Our hope is that you'll be able to borrow from the aspects of these resources that work best for you, your institution's culture, and the software project at hand.

Undoubtedly, one of the biggest hurdles of successful software implementation is budgeting the appropriate institution resources and capacity to engage in the business process, technical, and data readiness activities required for success. Software package prices tags can be hefty. Paying \$150,000 for an annual software license and an additional \$60,000+ for a vendor's initial set-up fee is already a major budget item. Leaders that are then asked to double that amount in extra implementation support consultants or reallocated FTE often balk at the added sum. An already expensive project is becoming twice that expense!

Unfortunately, institutions that do not invest in that added implementation support end up paying an even heftier bill. The \$200,000+ spent on a software package ends up never delivering on the intended ROI. The Ada Center has personally seen over 90+ instances of institutions paying over \$1M in software license fees for technology that was never implemented sufficiently and was never used by a single end-user.

While it can be a lofty task to make the case for a realistic software implementation budget, it is an essential component of project success. Strategies to overcome price tag concerns include:

- ✦ Engage in critical readiness activities prior to procuring a software package such that your institution is not paying for a technology tool license fee while engaging in time-consuming data and business process readiness activities that are a pre-requisite for project success
- ✦ Discuss with your software provider how best to create a tiered implementation plan whereby the "easiest" or most impactful modules are implemented first to build momentum. An "easier" module would be a module where the necessary business process, data, and technical readiness dimensions are already accounted for at your institution
- ✦ Ask your preferred software provider to speak with a peer institution that has recently completed the first year of software implementation. Alternatively, use forums like the EDUCAUSE CIO listserv to understand realistic institution implementation experiences with your chosen software tool (and share them with your leadership!). In all cases, you should make sure that these conversations include a dialogue with a member of the software provider's technical implementation team AND their business process implementation team.

Illustrative Starter Implementation Plan: Example

	 Business Process Readiness	 Technical Readiness	 Data Readiness
Key Activities:	- Mapping student advisor assignments when a student has overlapping attributes (e.g., Latina, Scholarship 1 Recipient, STEM) - Creating a uniform policy for how student interaction data will be input across all student support offices - Resolving internal FERPA disagreement about how much information on student financial supports can be shared with a student's support team	- Check with Simon to ensure we are on-track with Amazon Web Services migration - Follow-up with software provider for copy of technical implementation requirements - Meet with IT/Academic Tutoring to discuss integration plan for tutoring system	- Ensure ideal student onboarding nudges are backwards mapped to data we already have in Peoplesoft - Add new column in Peoplesoft SIS to account for Scholarship 1 Recipients - Meet with registrar's office, academic advising, IT to discuss degree map data plan
Who is Leading these Activities:	- Mapping – Shauna, Director of Advising; - Student Interaction Data and FERPA – Jacob; AVP Student Affairs	Co-owners Jacob, AVP Student Affairs and Melinda, CIO	- Co-owners Jacob, AVP Student Affairs and Melinda, CIO - Mark, App Specialist for Peoplesoft Column
Who Needs to be Involved:	See new RAPID assignments approved by President's Cabinet. In most cases, Jacob and Melinda are the "Rs" and our VP of Student Success, Pedro, is the "D."	See new RAPID assignments approved by President's Cabinet. In most cases, Jacob and Melinda are the "Rs" and our CIO Melinda is the "D."	See new RAPID assignments approved by President's Cabinet. In most cases, Jacob and Melinda are the "Rs" and our VPSA, Shaun, is the "D."
Time Estimates:	~30 hours of senior staff time to reach agreements with various parties; consult legal ~50 hours of time spread across teams to communicate decision	Still scoping time requirements, but plan to update 9/15 after initial conversations.	15 hours of project team's time for initial backwards map; more for resolution 10 hours of App team's time - Update time on 9/15 for degree map tasks
Cost Estimate (Including Staff Time):	1/2 FTE of Jacob's time spread across all activities; ~\$70,000	1/2 FTE of Jacob's time spread across all activities; ~\$70,000 - TBD for IT team time.	1/2 FTE of Jacob's time spread across all activities; ~\$70,000 ~\$9,000 in IT team time



Illustrative Starter Implementation Plan: **Worksheet**

	 Business Process Readiness	 Technical Readiness	 Data Readiness
Key Activities:			
Who is Leading these Activities:			
Who Needs to be Involved:			
Time Estimates:			
Cost Estimate (Including Staff Time):			



Illustrative Cost Estimation for Implementation: Example

*Estimates derived from HBCU implementing major software initiative and include Institution Staff Time Allocation (FTE)

	Year 1	Year 2	Ongoing
 Software Package Costs	\$250,000	\$190,000	\$190,000
 Business Process Readiness	\$200,000	\$100,000	\$50,000
 Technical Readiness	\$150,000	\$100,000	\$60,000
 Data Readiness	\$90,000	\$45,000	\$20,000
 Total Cost of Software Adoption	\$690,000	\$435,000	\$320,000



Illustrative Cost Estimation for Implementation: **Worksheet**

	Year 1	Year 2	Ongoing
 Software Package Costs			
 Business Process Readiness			
 Technical Readiness			
 Data Readiness			
 Total Cost of Software Adoption			



Next Steps

This module will cover the basics of technology implementation success and provide resources for those hoping to rescue a technology initiative gone adrift. By the end of this module, you should understand the prerequisites for successful software implementation, have new resources to aid you in your implementation efforts, and be able to conduct an actionable root cause analysis for why a software project has gone adrift. The next resource is Module 5.2: How Can We Augment Our Implementation Support Capacity?



Read and Plan Module 5.1 How Do We Effectively Implement Technology Projects?

⌚ 2 - 3 hours



Read and Reflect Module 5.2 How Can We Augment Our Implementation Support Capacity?

⌚ 1 - 2 hours



Read and Plan Module 5.3 How Can We Fix Off-Track Technology Projects?

⌚ 2 - 3 hours

Module 5 Individual Reflection:

- 1) Who should I bring into these implementation planning activities?
 - 2) In which facets of implementation planning do we have strong existing capacity and in which areas are we in need of more robust support?
 - 3) For the areas where we need additional support, what are some ideas for how we might achieve that support?
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About This Series

This five-part instructional series on Student Success Technology is designed for minority serving institutions (MSIs) and their friends. Taken together, these instructional resources aim to provide practitioners with the tools to establish and maintain a technology ecosystem that effectively supports the institution's broader student success and equity goals. The exercises and resources within these modules are also widely applicable across the higher education field.

This resource was compiled with generous funding from the Bill & Melinda Gates Foundation and was authored by The Ada Center based on six years of insight from The Ada Center's work with hundreds of MSIs and access-focused institutions. The curriculum would not be possible without the thought partnership and support from Complete College America and the Advising Success Network.

For additional curriculum modules, please visit:

www.completecollege.org/navigating-student-success-technology

For questions about this resource, or to explore additional higher education technology research and tools, please visit

www.theadacenter.org/resources.