

Advising Technology Procurement & Planning:

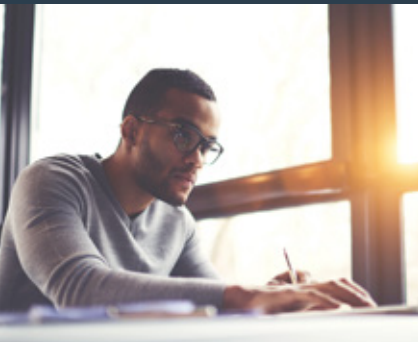
A Practical Playbook for Higher Education Leaders



The Ada Center



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About the Author

The Ada Center helps higher education leaders navigate technology and business process decisions in an increasingly complex environment. We partner with organizations, state systems, and institution leaders on projects such as:

- Developing and executing a student success technology plan
- Practical research on critical technology topics
- Getting an IT project back on track
- Landscape analysis and future planning

The Ada Center's mission is to help access-focused institutions use technology to strengthen success and equity goals. To explore additional support resources, please visit theadacenter.org.

Our Partners

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This publication was produced in partnership with the Advising Success Network (ASN), a dynamic network of organizations partnering to support educational change and improved student outcomes. Through a holistic approach to advising, the ASN addresses the operational, programmatic, technological, and research needs of colleges and universities in direct support of a more equitable student experience. Partner organizations include Achieving the Dream, the American Association of State Colleges and Universities, EDUCAUSE, NACADA: The Global Community for Academic Advising, and the National Resource Center for the First-Year Experience and Students in Transition. The network is facilitated by NASPA, Student Affairs Administrators in Higher Education.

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Advising Technology Procurement & Planning:

A Practical Playbook for Higher Education Leaders



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- Stark State College
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Introduction



A student walks into an institution, swiping her card at the entrance to the library. She checks into her math tutoring session at a kiosk; earlier in the day, she received a reminder about the appointment on her mobile phone. Later, her advisor will review notes from her tutoring session and then run a quick analysis to see how many first-year students have completed a tutoring session this week. With a click of a button, students struggling in entry-level courses will receive a note reminding them of the institution's tutoring resources. In a building nearby, a department runs data on business administration students, noting which combinations and sequences of courses lead to higher rates of student success.

This story has become increasingly common at institutions across the country. In the last decade, phrases such as “Student Risk-Scoring Algorithm” and “Next-Generation Nudging Platform” have morphed from buzzwords to common subject lines in leadership inboxes. This new vocabulary for higher education reflects the rapid rise of advising technology vendors hoping to play a part in the student success agenda—a 2019 landscape scan put the total market for student services technologies as high as \$360 million dollars.¹ And institutions across the country have made deep investments too, putting time and energy into the adoption of advising software products to help facilitate high-quality student support.

In many ways, this has been a period filled with potential. Technology that can help us to better understand and support students is available at our fingertips. Virtual flags signal when a student is at-risk of going off-path. User-friendly tools help students play out “what-if” scenarios around program selection and guide them to the right resources as they need them. Administrators explore the power of disaggregated data to unearth and address inequities ranging from program access to retention rates and post-graduation outcomes.

¹ Tyton Partners & BABSON Survey Research Group. (2019). *Driving Toward a Degree 2019—The Evolution of Planning and Advising in Higher Education—Part 2: Supplier Landscape*. Retrieved from http://drivetodegree.org/dtd-wp/wp-content/uploads/2019/01/TYT079_D2D18_Pt2_FINAL.pdf

“... It was important to come back to ‘What are our goals? What do we really need?’ instead of getting swept up by additional features that are really great but may not be the right fit for us.”

—Jelrose Wraight, IT Project Specialist, Sierra College, CA

Some institutions have realized the promise of these new technologies, adopting technology-supported advising models that have led to double-digit gains in student retention and completion. Most famously, Georgia State University and Arizona State University have served as national exemplars of technology-supported advising models.

But this hasn't been the story everywhere. Many institutions are still struggling to make the most of their advising technology investments. Despite significant expenditures on software licensing and implementation fees, some colleges have experienced few gains in student success, a great deal of staff and faculty frustration, and, at times, their technology usage has temporarily exacerbated inequities in the student experience.

This begs the question: why do some technology-mediated advising efforts succeed while others tread water or fail? Across The Ada Center and the Advising Success Network's research, we've found that the advising software itself is rarely the culprit of challenged advising initiatives. Instead, how institutions approach—or re-approach—advising technology initiatives is far more important to their ultimate success. Drawing on

interviews and lessons learned from early adopters, this Playbook focuses on critical activities that institution leaders should undertake during the software planning and procurement process to position their advising technology initiative for success.

This Playbook is intended for a leadership audience across all institution roles: student services, information technology, enrollment, academic affairs, institutional research, finance and human resources, and the president's office. The contents of this Playbook will be particularly valuable to institutions actively thinking about procuring a new advising tool to support their student success strategies. Many of the exercises also have relevance for planning and procurement across other types of technology categories.

Lastly, the contents of this Playbook can be useful if your institution has procured an advising technology and is struggling to realize its potential. The Ada Center's research reveals that almost half of institutions that experience gains in student outcomes from a technology-supported advising redesign do so only after addressing several of the challenges highlighted in this Playbook. That is, it is very much possible to recover a challenged implementation with the right attention and planning.



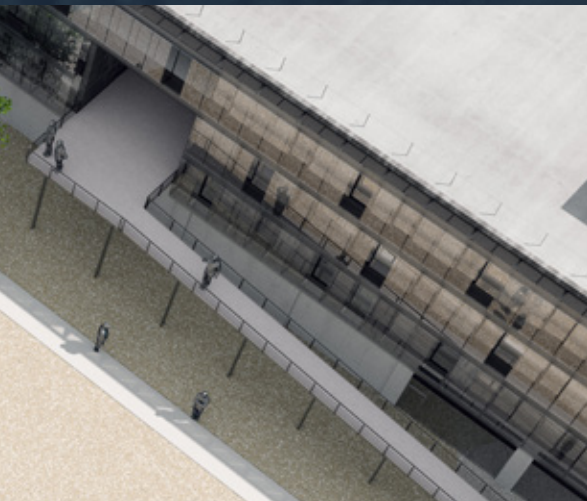


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I Planning for an Advising Technology Purchase

The last two decades of student success innovation have revealed the importance of strong leadership in improving student completion, learning, post-graduation outcomes, and equity. Reevaluating critical practices, such as how we deliver developmental education and structure student academic pathways, has improved the student experience and advanced student success in the field. Yet these practice changes require extensive collaboration across all departments at an institution and a significant investment of resources. Strengthening student advisement is also a worthy and attainable goal, though no less demanding on what it asks of institution leadership. This section will explore how institutions can collaborate on a vision for advising technology and begin mobilizing to achieve it.

In This Section

Align Technology Strategy with Institutional Vision and Goals

Navigate the Advising Technology Landscape

Understand the Promise and Limits of Technology

Build and Empower a Cross-Functional Procurement Team

Align Technology Strategy with Institutional Vision and Goals

Investment in advising technology cannot be a side project isolated from an institution's broader student success transformation strategy. Stand-out leaders and procurement teams reimagine what student-centered advising and support should look like at the institution. They seek out technology not to replicate the status quo, but to support that new vision and the updated workflows and processes that go along with it.

This collective, synchronized effort is not simply an ideal, but a necessity for success. Deploying a case management system that depicts a history of student activity and interactions, for example, requires that multiple departments adhere to the same note-taking protocols. This means new norms must be adopted not only by professional advisors, but also by enrollment offices, academic units, financial aid, and career services. Accomplishing this type of process and role change requires a high level of collaboration and commitment across an institution. Colleges that have succeeded with advising technology adoption at scale have leaders that regularly communicate how advising reform is a clear priority within the institution's student success agenda. They also articulate how technology is one critical piece of that reform.

In some cases, formalized national reform efforts can guide this visioning process. Miami Dade College, Stark State College, MiraCosta College, and Columbus State Community College have used the Guided Pathways framework^{*} to articulate institution goals and priorities. For these colleges, advising technology has played a critical role in their reform efforts. They have created an infrastructure to clarify the paths available to students and developed the data and analytics capacity to track student progression and guide intervention efforts.

Middle Tennessee State University and Northern Arizona University also offer useful examples of where advising technology procurement was linked to broader institution goals around student data access and usage. For Morehouse College, Harper College, and Central Carolina Community College, initial advising technology investments were tied to ambitions for a more seamless and supportive student experience.

In each of these cases, institutions began with a clear vision for student success first. Then, they sought out the technology architecture that could help support this vision. Dr. Rob Johnstone, Founder and President of the National Center for Inquiry & Improvement (NCII), put it simply: "Technology tools can be surprisingly impactful catalysts for improvement, but colleges must understand how they want to use the technology to support their goals before buying it."

* The Guided Pathways model is a reform framework that advocates for an institution-wide approach to clarify and streamline the student experience from onboarding through graduation. Structured program maps, proactive advising, and strategic intervention are central to the model, which consists of four core pillars: (1) Clarify paths to student end goals; (2) Help students choose and enter a pathway; (3) Help student stay on path; (4) Ensure that students are learning. Further resources on the Guided Pathways movement can be found at <https://www.aacc.nche.edu/programs/aacc-pathways-project/>

I. Planning for an Advising Technology Purchase

Whether or not institutions leveraged a national model such as Guided Pathways, effective leaders and procurement teams were able to articulate:

- ❓ **What should our critical student success priorities be for the next 2-3 years?**
- ❓ **To achieve these priorities, what should our advising model look like in the next 2-3 years?**
- ❓ **How will we know the model is supporting strong and equitable student outcomes?**
- ❓ **What changes do we need to make to our existing technology structures and processes to support this new model?**

Institutions that frontload critical planning activities and conversations prior to procuring an advising software can often save hundreds of thousands of dollars (before paying a vendor's licensing and implementation fees). The following pages provide an illustrative example of how institution leaders can align broader student success objectives with high-level technology priorities. As a first step on the path to advising technology planning and procurement, The Ada Center recommends that senior leadership develop a similar vision document. For institutions beginning this visioning exercise anew, an alignment exercise template is included in this Playbook.

Throughout this publication, we'll explore activities and case studies that help strengthen and facilitate these steps. We recommend returning to this alignment exercise throughout your institution's advising redesign journey.

Building a Grassroots Movement

If you are reading this Playbook as an advising manager, information technology (IT) staff member, or task force lead and are lacking senior leadership engagement in technology-supported advising redesign, there is still an opportunity to engage in this work, albeit on a slower trajectory. Several effective advising redesign efforts have emerged from collaborations among counseling offices and math departments or IT teams and student orientation offices. According to Achieving the Dream coaches,⁶ these efforts begin with highly motivated individuals that seek to develop a "case study" for the efficacy of technology-supported student advisement. From these small case studies, it's possible to develop a crisp vision and build leadership support. However, grassroots movements are far more likely to succeed with allies across IT, student affairs, and academic affairs.

- ✦ Achieving the Dream (ATD) is a national, nonprofit organization that champions evidence-based institutional improvement. The Achieving the Dream Network is comprised of over 277 institutions of higher education, 75 coaches and advisors, and several partners that work across 44 states and the District of Columbia. For more about ATD, see <https://www.achievingthedream.org/>

ILLUSTRATIVE ADVISING TECHNOLOGY ALIGNMENT EXERCISE

Strategic Goals Mapped to Fiction College’s Priorities and Accompanying Technology Needs

HIGH-LEVEL GOALS	Improve Student Onboarding	Streamline Student Communications	Strengthen Online Learner Engagement
DISCRETE PRIORITIES	<ul style="list-style-type: none"> ▪ Assign every student an advisor within their area of interest ▪ Finalize academic program maps ▪ Launch online orientation modules 	<ul style="list-style-type: none"> ▪ Adopt a centralized case management approach to track student interactions ▪ Evaluate communication efficacy across academic affairs and student affairs through quantitative and qualitative measures 	<ul style="list-style-type: none"> ▪ Incentivize faculty professional development on elected technologies ▪ Develop learning outcomes for faculty advising sessions ▪ Expand student access to software licenses
SUCCESS METRICS	<ul style="list-style-type: none"> ▪ All students (including undecided) assigned an advisor ▪ 90% of programs fully mapped ▪ All students attend orientation 	<ul style="list-style-type: none"> ▪ Case management software used to document at least 80% of student interactions across departments ▪ Improved student response on financial aid and registration communications 	<ul style="list-style-type: none"> ▪ 30% improvements in Learning Management System (LMS) utilization data ▪ Launch of virtual student computer lab
TECHNOLOGY NEEDS	<ul style="list-style-type: none"> ▪ Student Information System (SIS) field completed for advisor assignments ▪ Procurement of orientation software ▪ Partner with academic affairs, records, and advising to clean-up degree data and input program maps 	<ul style="list-style-type: none"> ▪ Audit existing case management tools and initiate case management software procurement and selection process 	<ul style="list-style-type: none"> ▪ Develop cost estimate for expanding licensing among critical software tools such as Adobe

ADVISING TECHNOLOGY ALIGNMENT EXERCISE TEMPLATE

Strategic Goals Mapped to Fiction College's Priorities and Accompanying Technology Needs

HIGH-LEVEL GOALS				
DISCRETE PRIORITIES				
SUCCESS METRICS				
TECHNOLOGY NEEDS				

Navigate the Advising Technology Landscape

Many advising technology initiatives can be derailed by misunderstanding critical terminology. Terms such as early alert, degree plan, and integration are often interpreted uniquely across audiences. These differences have led to tremendous miscommunications between institutions and their software vendors.

Misunderstandings are also common within institutions. One provost explained that their university's advising software implementation was halted before it could get off the ground due to different interpretations of academic planning terminology among IT, faculty, student services, and academic records staff.

Today, institutions can draw upon a wide array of public resources to form their own understanding of the advising technology vendor ecosystem. Tyton Partners regularly publishes a landscape scan of the advising and planning sectors. The Community College Research Center, Ithaka S&R, and MDRC, long-time evaluators of technology-supported advising redesigns, offer useful institution case studies. EDUCAUSE and Edsurge maintain various public-facing databases. New America has a set of publications on predictive analytics, and the Department of Education's First in the World advising technology-related grants are proving illuminating for the field.

The resources mentioned on the previous page offer nuanced differences in categorizing the advising technology ecosystem. But at present date, the field has not yet coalesced around a single shared framework for product categorization. And it's understandable why this is the case. Not only have the number of vendors and products on the market expanded exponentially over the last decade, but the nature of what each product can do shifts and evolves with each passing year as well. The advising technology landscape is dynamic, brimming with innovation and, consequently, a lot of room for confusion.

For the purpose of this publication, The Ada Center asked dozens of IT and institution leaders how they typically think about advising technology categories within the context of their procurement efforts. Given their feedback, this Playbook will reference three primary buckets of advising technology capabilities:



CASE MANAGEMENT

Case management tools enable professional advisors, faculty, and student services staff to monitor student progress and coordinate interactions with students.

The tools have the capacity to incrementally build profiles of each enrolled student and log students' interactions with staff, participation in campus activities, and performance in the classroom. Many of these technologies include built-in communications mechanisms that enable staff to send targeted communications to students who could benefit from outreach.



STUDENT PLANNING

Tools designed for student self-advising can help students plan for degree completion, connect with campus resources, make informed choices about their career, and nudge them to complete critical activities for their success. While optimized for student use, many of these technologies are used heavily by advisors to build semester-by-semester course maps for students, guide career planning conversations, and develop key activity lists for students. These technologies range from simple student mobile applications to robust tools embedded within a broader case management system.



ANALYTICS AND REPORTING

Analytics and reporting tools shed light on student patterns, guiding institution decision-making about critical resources and activities. Often, analytics and reporting tools utilized within the advising context are embedded within a broader case management system; many of these tools create automatic notifications when a student is deemed "at risk" of course failure or drop out, drawing on a number of variables to determine a student's support need. These technologies can also be used to support effective management of advising and student support departments.

These categories are important for relaying information about other institutions' experiences, but they can't replace shared institution-wide definitions. To avoid miscommunication, institutions with strong technology procurement practices leverage public resources to create their own advising technology definitions that fit their specific institutional context. This common language provides a means for procurement teams to accurately map their technology ecosystems, pinpoint specific technology needs, and communicate clearly throughout the procurement process.

Case Study: Baylor University Builds Knowledge of Technology Terminology and Consensus on Strategy

Before procuring EAB-Navigate in 2015, Baylor University's student success analytics team set out to analyze the student services technology ecosystem, define and translate that ecosystem for the Baylor context, and summarize what they found in a shared internal report.



CROSS-FUNCTIONAL ADVISORY TEAM

- ▶ Representatives from IT, academic advising, and student affairs
- ▶ Met 10X over 5 months
- ▶ Conducted external research
- ▶ Met with multiple vendors



LEADERSHIP-LEVEL REPORT

Shared with broader university community and consisted of the following components:

- ▶ **Project Methodology:** an explanation of how the report and its recommendations were formed
- ▶ **Strategic Context:** link to institution's operational plan to improve graduation rates
- ▶ **Useful Definitions:** ensuring terms of art are explained for the reader
- ▶ **Consultants on this Project:** a list of sources consulted in the report process
- ▶ **Operational Context:** explanation of why technology investments are required to achieve strategic goals
- ▶ **Current Technology Ecosystem:** an overview of undergraduate student service departments, current technology systems, and gaps in those systems
- ▶ **Best Practice Technology Ecosystem for Student Services:** definition of key functionality required to achieve Baylor's goals

Understand the Promise and Limits of Technology

While any of the aforementioned technologies can be powerful tools within a broader student success agenda, technology alone cannot generate meaningful impact. Many institutions have faltered when attempting to implement a new technology system on top of disconnected processes and poor data. Others have benefited from pausing to take a step back and consider: Have we done our homework to set up the conditions for success?

Georgia State University is the oft-cited example of advising technology success. By leveraging predictive analytics, the institution saw a 7-percentage-point increase in overall student retention from 2008 to 2018.² But it was the even more impressive increases in Black, Latinx, and low-income student populations' graduation rates that ultimately propelled Georgia State into national headlines. The number of bachelor's degrees awarded to Black students, for example, increased by 103 percent.

Other institutions sought to imitate Georgia State's approach as the institution and its student success lead were profiled nationally. While many of these colleges also achieved some success, others wound up frustrated and suspect about the merit of their technology investment, and few experienced the same levels of success as Georgia State.

Why? Georgia State succeeded because institutional leadership, faculty, and staff realized that human and process changes had to accompany technology changes. Certainly, new tools were integral to their success, but **Georgia State understood the critical nuance that technology should support the implementation and scaling of college strategies and reforms; technology is not a standalone solution in and of itself.**

At Georgia State, advising technology was layered on top of a system—and people-driven processes—that allowed for robust, accurate data collection. This meant, for example, that faculty, staff, and advisors were consistently and accurately recording key information into the right platforms. It relied on leaders to ask the right questions of the data to guide strategy, and new advising and intervention models to make use of any insights that arose from the analytics. Importantly, it was also bolstered by leadership with a focused vision and the discipline to see it through.

² Georgia State University Office of Institutional Research. GPS Advising. <https://success.gsu.edu/initiatives/gps-advising/>

In 2017, The Ada Center, in partnership with the Aspen Institute's College Excellence Program, interviewed 50 college presidents and vice presidents about their perspectives on transformative change management and technology adoption.³ Collectively, those interviewed noted that each type of major advising technology requires certain human-centered processes.

For all its promise, technology has its limits and relies on institution teams to:



CASE MANAGEMENT

- Determine how to assign students to advisors
- Articulate changes to job roles and responsibilities across advisors, support staff, and faculty
- Establish and clarify processes for follow-up on electronic alerts
- Determine how to handle complex cases when students go off-track
- Ensure faculty and staff record student interactions electronically



STUDENT PLANNING

- Create meta majors or degree maps that meet accreditation requirements, account for faculty perspectives, and map to strong transfer and labor market outcomes for students
- Vet the quality and accuracy of program information
- Update student, advisor, and faculty data systems with new decisions such as revised transfer agreements or updated program maps



ANALYTICS AND REPORTING

- Ensure that source data is comprehensive, accurate, and regularly updated
- Determine permissions around data access and sharing
- Articulate and prioritize research questions to guide data usage
- Understand that historic data cannot necessarily predict the future (past trends may not continue)
- Diagnose the “why” behind specific data patterns
- Create the urgency and plans to correct for inequitable access and student success outcomes

³ The Ada Center and the Aspen Institute College Excellence Program. (n.d.). Navigating Emerging Student Success Technology—A Decision Support Framework for College Leaders. Retrieved from <https://www.theadacenter.org/resources>

Build and Empower a Cross-Functional Procurement Team

“The work of empowering distinct stakeholders to advance a common vision of success in any decision-making process is complicated,” notes Dr. Alison Kadlec, Founding Partner of Sova Solutions. “Different stakeholders are naturally driven by different imperatives and priorities, and so the work of building an effective cross-functional team must entail as much attention to people and process as it does to the technical work of preparing for an advising technology purchase. Cultivating highly effective cross-functional teams is a primary domain of modern, adaptive leadership.”

It is this brand of leadership and collaboration that tends to be a unifying trend across successful procurement teams. Having a dedicated, cross-functional team ensures that diverse perspectives are incorporated into a unified vision. It also allows individuals from IT and institutional research to calibrate that vision given the institution’s specific context and capacity (e.g., existing technology stacks, data viability, and staff bandwidth). As procurement activities kick off, leaders should carefully consider who to include in this group.

Strong procurement teams may range in size, with most clocking in around 8-12 core people, including; (1) end users; (2) technical and data support, and; (3) strategy and resourcing leads. The following section outlines how leaders can build a highly effective procurement team that incorporates representatives from these three stakeholder groups.

✦ Further resources on adaptive leadership and effective change management practices can be found at sova.org.



STAKEHOLDER GROUP 1: END USERS

These individuals will ultimately be using the advising technology to support their work. End users can pinpoint existing challenges in their workflow and articulate the kind of information or user experience they need to succeed. By involving end users in the procurement process, institutions also create built-in champions for the technology who can appeal to the larger end user population during the implementation and scaling phase.

- ❓ Which individuals or groups will be **using the technology** on a day-to-day basis? Who manages or advocates for these groups?
- ❓ Which individuals or groups will **need to input information** into the new technology? Who manages or advocates for these groups?

Sample Titles:

Note: Most institutions do not include all of these titles; selection varies by college structure and goals.

- VP of Student Services
- Director of Advising
- Student Supports Representative (if not covered by VP of Student Services)
- Equity Leads
- Enrollment/Admissions
- Faculty
- Advising Representative



STAKEHOLDER GROUP 2: TECHNICAL AND DATA SUPPORT

Successful institutions understand that the best technology plans can go awry if they do not account for the realities of the institution's existing technology and data ecosystem. Hundreds of thousands of dollars can be wasted, for example, by implementing a technology that does not integrate well with the institution's core systems and therefore requires a heavy and unanticipated manual lift to keep data updated.

- ? What kinds of **data** (e.g., academic course data, student information) will be used or impacted by a new technology? Who manages this data?
- ? Which **technology systems** "touch" (i.e., integrate with, push to, pull from, are replaced by) the new tool? Who oversees these systems?

Sample Titles:

- Head of IT
- Registrar
- IR Lead or Data Representative



STAKEHOLDER GROUP 3: STRATEGY AND RESOURCING LEADS

Technology investments should never be a side project but rather an integrated part of existing institution strategy and reform efforts. It's also important for teams to have individuals who can help calculate the total cost of ownership for the new investment, including how it will be maintained over time.

- ? Which leaders are in touch with **broader institutional reforms** that relate to the technology?
- ? Which leaders **manage resources** that will be needed to successfully procure, implement, and sustain the technology? (*Hint: Consider human resources, funding, physical resources, etc.*)

Sample Titles:

- Senior Academic Affairs/Provost
- VP of Student Success or equivalent
- CFO/Finance
- HR Representative (if acquisition will affect staffing)

My List



Jot down the end users, IT and data leaders, and strategy and resourcing leads you might need to include on your team:

END USERS

IT AND DATA LEADERS

STRATEGY AND RESOURCING LEADS

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Does your list include important archetypes?

While including people from specific departments and with certain titles and responsibilities is important, highly effective procurement teams also assess whether the following roles are represented somewhere within the group:

LEADS *(Technical and Non-Technical)*

The project will require leadership from a member of IT (Technical Lead) and a member of student services (Non-Technical Lead). These leads help to aggregate feedback from across functional areas, move the project forward, and ultimately recommend a product to college leadership.

INFLUENCERS

These individuals are usually senior leaders, but can also include people who, due to their tenure, connections, or personality, hold political sway across the institution. Think of, for example, a well-respected faculty member who could influence how other faculty engage with a new early alert system. Influencers have the power to get things done or shut things down, and it will therefore be important to have them on board for major decisions.

CHAMPIONS

Champions are enthusiasts who are eager for change and motivated to advocate for the project across the institution. Ideally, there are several of these champions within the end user group and dispersed across different departments and/or campuses.



Sometimes, a champion might feel deeply committed to a specific product, particularly if they've had experience with it before. While "insider information" can be helpful, make sure this champion does not persuade the group to make decisions without adequate due diligence and option vetting.

CRITICAL FRIENDS

Having rational critics to represent divergent views and raise potential flags is just as important as having enthusiasts to drive the project forward. Importantly, these individuals should not be incendiary or adamantly against the core goals of the project.

Final Steps: Vetting Your Procurement Team List



Review the people/groups included in the prior sections and complete the checklist below. **Consider:**

Do we have everyone that we need?

Who are our technical and non-technical leads?

Do we have both champions and critical friends? Does this feel like the right balance? If not, who else might we need to include?

Do we have influencers? Are there other influencers who may need to be brought in intermittently?

TOTAL COUNT: _____ **Consider:** *If the total count is a large number, are there people here who can act as a steering committee involved in bigger milestones and less in the day-to-day?*



A Note On Standing Committees and Taskforces:

For colleges involved in student success reforms, tapping into an existing steering committee is an effective approach to create a procurement team. Often, these steering committees already include individuals who are critical to advising technology decision-making. Unsurprisingly, at many colleges, discussions about technology solutions arise organically within these meetings. By purposefully taking advantage of this overlap, institutions can ensure that their technology strategy and priorities align with and support the institution's anticipated reform strategy.



II Turning Vision into a Clearly Scoped Project

There are countless advising technology visions for sale. By the time teams meet to engage in visioning exercises, most members have already seen or heard technology product pitches. This can be helpful background information, allowing the team to understand the range of possibilities in the market. But it can also be confusing. Slick features might look exciting, but is the overall package the right fit for your institution? While your institution may be interested in a range of technologies, from case management systems to analytics tools, which part of the vision is vital to tackle first? The following section provides tools to help procurement teams drill down from high-level goals to an actionable, prioritized features list to guide vendor engagement and product selection.

In This Section

Craft a Focused Problem Statement

Delineate Project Goals and Product Category

Interview End Users to Develop "User Stories"

Identify Gaps and Opportunities in Current Systems

Create Prioritized Features List

Craft a Focused Problem Statement

Drafting a concise problem statement should be one of the first items on your procurement team’s agenda. It creates a unified purpose for your time together and helps translate leadership vision to operational needs.



INSTRUCTIONS: Drawing from conversations with faculty, staff, and students, summarize the advising challenges you want to solve in a concise statement. Aim for the problem statement to be broad enough to capture the main pain points discovered across your conversations.

Example from Fiction College:

Currently, students have a disjointed experience as they move between departments at our institution, often needing to repeat their story to multiple staff members and bounce repeatedly between offices to meet their needs.

***Summarizes
flaws in
student
experience***

Information about each student is stored across multiple platforms, including some “shadow” systems, that differ across advising staff, student support staff, and faculty. This makes it nearly impossible for any one faculty or staff member to have a comprehensive understanding of a given student’s profile or to proactively engage and follow up with students to ensure their needs are met.

***Explores root
cause of issues
from faculty
and staff
perspective***

As a result, students are not effectively accessing the services they need when they need them, dampening Fiction College’s retention and graduation rates, especially among racially minoritized groups.

***Connects to
institutional
goals***

PROBLEM STATEMENT FOR

(Institution Name)

Delineate Project Goals and Product Category

After your procurement team converges on a problem statement, it's time to develop a corresponding project goals statement: What would a better advising system look like? From here, it will be possible to delineate a corresponding advising software product category.



INSTRUCTIONS: Craft a statement that articulates the high-level goals for your future advising system. Then, list the product category that you believe you will need to explore to meet this goal.

Example from Fiction College:

Project Goal Statement: To improve the student experience and student success, everyone in our student support ecosystem should be able to access key student profile information and progress through a single, cohesive platform. Advisors should be proactively alerted to intervene when students in their assigned caseload are going off-path and track how those students are interacting with other offices and departments across campus.

Anticipated Product Needs: Case management system with early alert



What if my goals statement leads to multiple product categories? Sometimes, a project goals statement can unintentionally include multiple product types or categories. In this case, you may need to break apart your statement to clearly differentiate and scope each project. This will allow your procurement team to better compare vendors, assess costs, and prioritize and phase your projects later on.

DRAFT PROJECT GOALS STATEMENT

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WHAT PRODUCT WILL YOU BE LOOKING AT?

This may require a bit of market research to articulate which solutions could meet institution needs. (Hint: IT and/or individuals on the procurement team who are more familiar with the technology marketplace should weigh in here. The reading list on page 64 is also a good place to start.)

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Case Study: Sierra College Unpacks Goals for Campus “Virtualization” Amid Pandemic

When COVID-19 spread across the United States, Sierra College focused on virtualizing the campus experience, setting up systems to allow the campus to operate in a remote environment. The virtualization project involved several goals, including:

“The ability for students to schedule and attend sessions with Counselors, Faculty, Financial Aid, Enrollment Services, and Tutors via the virtualization platform during their announced availability windows.”

At first glance, this seems like a straightforward statement with clearly scoped functionality. Practically, though, this statement represents two different product types: an appointment scheduling and management tool (e.g., EAB/GradesFirst, Starfish CONNECT) and a virtual meeting tool (e.g., Zoom, Microsoft Teams).

By parsing out these two functionalities, Sierra realized they needed to prioritize the virtual meeting tool. Their appointment scheduling and management needs, however, did not require procurement of something new and could be met by better leveraging their existing advising technology, Starfish.

“...it came down to choosing between two almost evenly matched virtual meeting products in terms of features that met our requirements. One of the key factors that helped us choose one and eliminate the other was to avoid buying duplicative technology. It is not only unwise and expensive, but also introduces redundant systems of record... It was important to come back to ‘What are our goals? What do we really need?’ instead of getting swept up by additional features that are really great but may not be the right fit for us.”

– Jelrose Wraight, IT Project Specialist, Sierra College, CA

Interview End Users to Develop “User Stories”

After narrowing your goal statement and corresponding product category, it’s time to gather feedback from outside the immediate procurement team. While gathering feedback along the procurement journey can be useful, institutions that solicit input from the broader community prior to this stage in the process often find it difficult to translate disparate feedback into something actionable.

Rather than soliciting general feedback, the procurement team’s goal should be to build out “user stories,” which are descriptions of a capability told from the perspective of the person who will ultimately be using said capability. Creating user stories through interviews is not merely a buy-in activity—these stories form the underpinnings of your Request for Proposal (RFP) or vendor evaluation guide.

END USER INTERVIEWEE	INTERVIEW NOTES	USER STORIES
<p>Consider: Who will be using the technology on a regular basis that isn’t well represented on our procurement team? Who will play a role in configuring the technology?</p>	<p>Consider: For end users, aim to sketch a vision for what the new process should look like from their perspective. What does the future-state day-in-the-life of [X end user] look like?</p>	<p>Now, distill end user feedback into specific objectives. At this stage, stories do not need to be prescriptive. Focus more on what you want the tool to do, not the specifics of how you want that functionality to be delivered.</p>
<p>Sample Interview List:</p> <ul style="list-style-type: none"> Advisors Faculty Students Student Support Staff and Leadership 	<p>Sample Questions:</p> <ul style="list-style-type: none"> Walk me through what your ideal process [to do x task] would look like. What information would you need to access, at a minimum? 	<p>Sample User Story:</p> <p>“Filter students by attributes such as [x, y, z] for batch emails” rather than “send an email reminding students to register for classes.”</p>
<p>Name: Andres Apple</p> <p>Role: Advisor</p>	<p>“I’d like to be able to see a list of all the students assigned to me, and information on each student, such as their current course load, GPA, and notes from the support staff and faculty. I want to be able to communicate with students, one-on-one but also filter and reach specific groups, like all students who haven’t registered. It’d be nice if I could manage my appointments from that same system too. That way I’m not bouncing between five screens.”</p>	<p>As an advisor, I want to:</p> <ul style="list-style-type: none"> See a list of my assigned students Click into each student to see key profile information such as recent activity, communication, grades, and notes from other support staff and faculty Filter students by registration status and other attributes (to be defined) Communicate with students through platform Schedule and manage appointments <p>...so that I can more efficiently guide or intervene with my students.</p>

EXAMPLE END USER INTERVIEW

★ User stories have long been used by technology companies themselves to efficiently and transparently guide new product development ideas. Leveraging this method is not only a practical approach for technology initiatives but can also help institutions “speak vendor” when it comes time to share feature requirements and user experience must-haves. Additional resources on writing effective user stories can be found at <https://www.mountaingoatsoftware.com/agile/user-stories>.

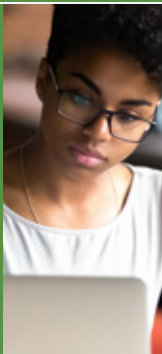
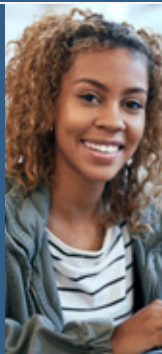
Whose Voices Are Heard While Defining Technology Needs?

Given the potential impact of these user stories—on RFP writing, evaluation rubrics, and overall technology strategy—it is vital to ask: Who are we listening to?

In general, strong procurement teams speak to individuals with different levels of technology proficiency. What’s easy for one person may be incredibly frustrating to another. They converse with end users who have different roles and responsibilities; an advisor may have a different view on a case management dashboard display than someone in the financial aid office.

This principle is even more important when exploring advising technology tools that are intended for student use. Without intentionally soliciting feedback from different types of students, student-facing technologies are often destined for underuse. As one project manager noted, “We used to do an open call for students to weigh in on tech, try out a demo, but we’d only get the honor society students or students living on campus. And that can skew the way we think about the technology we need.”

Advising technology is ideally procured to advance student success for all students and to support institutions’ equity goals. This focus on student success and equity should extend throughout the procurement process and intentionally include diverse student populations (e.g., racially minoritized students, low-income students, first generation students, etc.). Student perspectives and needs, after all, can vary greatly.

STUDENT A		STUDENT B	
<ul style="list-style-type: none">▪ 19 years old▪ On-Campus Dorm▪ Student Government Representative▪ Faculty Member’s Daughter		<ul style="list-style-type: none">▪ 22 years old▪ Off-Campus Apartment▪ Part-Time Waitress▪ First Generation Student▪ English Language Learner	

The features that Student A might identify for a new degree planning tool will likely differ from the feedback Student B might offer. Both perspectives are vital, so institutions should consider how the timing, location, and other aspects of student interview logistics might impact which students are able to provide their feedback on technology. Holding student focus groups on campus, for instance, may make it difficult for a student who lives off-campus and works part-time to contribute their perspective.

End User Interview Guide

Generating helpful end user feedback requires some planning to make sure that you reach the right people and use your time (and theirs) well.



INSTRUCTIONS: Use this worksheet to brainstorm which end users you would like to interview. Consider including an array of perspectives to ensure that the feedback you gather is representative of the general end user population.

BRAINSTORM: WHO ARE A FEW END USERS WE MIGHT WANT TO SPEAK WITH?

BRAINSTORM: WHAT QUESTIONS MIGHT WE WANT TO ASK?

BRAINSTORM: HOW CAN WE ELEVATE THE EXPERIENCES OF RACIALLY MINORITIZED AND LOW-INCOME STUDENTS IN THESE CONVERSATIONS?

II. Turning Vision into a Clearly Scoped Project

End User Interview Guide *(continued)*



INSTRUCTIONS: Once you have brainstormed a list of interview candidates, you may use this sheet (or one like it) to keep track of your interview notes. Then, you can work on extracting discrete user stories from those notes to inform your procurement process.

INTERVIEWEE NAME:

TITLE:

INTERVIEW NOTES

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USER STORIES

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Identify Gaps and Opportunities in Current Systems

End user interviews can often lead to a common question among procurement teams: “Don’t we already have that functionality?” This is an important moment to pause and consider which capabilities are missing from your institution’s technology ecosystem and which the institution already owns but has not fully utilized. Before acquiring new (and potentially duplicative) technology, effective teams audit their current systems and consider: Do we need to buy something new? Build upon or upgrade an existing system? Simply improve the way faculty, staff, and students use what we have?



INSTRUCTIONS: Create a comprehensive list of user stories. For each function, determine if the capability already exists, within which tool it exists, and then identify potential next steps.

Example from Fiction College:

USER STORY	DO WE ALREADY HAVE THIS CAPABILITY? (Y/N)	IF "YES", WHAT IS THE NAME OF THE EXISTING TOOL?	NEXT STEP
One per line, specify user title and function (e.g., "Advisor can...[action],")			Indicate: <ul style="list-style-type: none"> • Buy • Build on Existing • Improve Usage of Existing
Advisor can see a list of existing students/caseload	Y	Excel Spreadsheet	Buy—Excel not sufficient, replace with new tool
Advisor and support staff can see student profile with recent communication, grades, and notes from other support staff and faculty	N	N/A	Buy
Advisor can schedule and manage appointments	Y	Homegrown MyMeetings App	Improve Usage of Existing or Buy/Replace

Hint: The IT team and/or project managers who oversee existing technology tools can be critical for this analysis.

Create a Prioritized Requirements List

While end users can paint a clear picture of their needs and idealized outcome, conversations with department leadership, IT, and IR can help to recast these user stories into a more actionable feature requirements list. This list, which will serve as a guide for everything from RFP drafting to final decision-making, accounts for the technical, data, and user interface attributes needed to make the advising technology operate within your existing ecosystem.



STEP 1: Collect all user stories that represent capabilities you would like to buy (refer to prior exercise, *Identify Gaps and Opportunities in the Current System*).

Example from Fiction College:

USER STORY	DO WE ALREADY HAVE THIS CAPABILITY? (Y/N)	IF "YES", WHAT IS THE NAME OF THE EXISTING TOOL?	NEXT STEP
One per line, specify user title and function (e.g., "Advisor can...[action]," "Faculty can... [action]," etc.)			Indicate: • Buy • Build on Existing • Improve Usage of Existing
Advisor and support staff can see student profile with classes, recent communication, grades, and notes from other support staff and faculty	N	N/A	Buy

II. Turning Vision into a Clearly Scoped Project



STEP 2: Share relevant user stories with key technical and department leaders not represented on your procurement team. While user stories will describe the tool’s appearance and functionality, these leaders should weigh in on the technical, data, and configuration requirements needed for each of the stories. This feedback can then be translated into a feature requirement.

Example from Fiction College:

	USER STORY	IT/IR/DEPARTMENT LEADERSHIP FEEDBACK	FEATURE REQUIREMENTS
TRANSLATION OF FEATURE REQUIREMENTS	Advisor and support staff can see student profile with classes, recent communication, grades, and notes from other support staff and faculty	<p>“We’ll need something that will integrate with the LMS so we can get student grades and faculty notes.”</p> <p>“We’ll also need to pull information from the SIS for the student profile.”</p> <p>“I think we’ll want to restrict access to some of the notes from counselors—that can be potentially sensitive.”</p>	<ul style="list-style-type: none"> ▪ User-friendly, interactive student profile page ▪ Ability to pull faculty notes and student grades from our Canvas LMS ▪ Ability to pull student information from Banner ▪ Ability to configure permissions for different users (advisors, support staff, counselors)

Getting Feedback From Technical Staff on Feature Requirements

IR/DATA MANAGERS	IT STAFF	DEPARTMENT LEADERSHIP
<ul style="list-style-type: none"> ❓ What data tables do we need to access to populate this tool? Is our data robust and clean enough to support this? ❓ What data fields would we need in the tool? ❓ What other data requirements would be needed to support this feature? 	<ul style="list-style-type: none"> ❓ Which systems would the tool need to integrate with? ❓ What other technical requirements would be needed to support this feature? 	<ul style="list-style-type: none"> ❓ Who should have access to different types of information in this tool? ❓ Who should be able to access different capabilities in this tool? ❓ What policy and staffing changes will be implicated?

II. Turning Vision into a Clearly Scoped Project

While it would be ideal to immediately procure and implement a tool with all desired features, moving from vision to reality is an iterative process. Just like building a house, building a strong advising technology ecosystem requires starting with a strong foundation. Effective procurement teams examine each feature and consider:

? Which of these requirements are must-haves vs. nice-to-haves? According to which stakeholders?
(Hint: There will be differing opinions, so it will be important to remain grounded in your previously articulated needs and goals.)

? Which of these requirements do we urgently need in the near-term? (Hint: Consider which pieces might be foundational for other future functionality.)

? Does our overall prioritization align with our goals? Are all high-priority features absolutely necessary (and feasible)?



STEP 3: Procurement team ranks each feature requirement according to the following criteria:

- High: Critical requirement, must-have in near term
- Medium: Very important for longer term viability
- Low: Nice to upgrade over time

FEATURE USER STORY	REQUIREMENTS	PRIORITY (HIGH/MEDIUM/LOW)
Pull from list of “Buy” stories from Identify Gaps and Opportunities in Current System	What user functionality and technical/data attributes are needed to make this user story a reality?	What is the relative importance and urgency for this feature?

Case Study: Maricopa Colleges Avoid “Boiling the Ocean” with Focused Technology Prioritization

When Dr. Mark Koan became the chief information officer for the Maricopa Community Colleges in Arizona, the system was in the midst of Guided Pathways reforms. But each of the 10 colleges were in different stages of the process. Some had just begun planning, others had implemented meta-majors, and a few had created program pathways.

Given the relative autonomy of the colleges and their varying needs, Koan recognized that coalescing around a single technology strategy would be challenging. Some colleges wanted an academic planning module, some asked for a scheduling tool, and others pushed for analytics. And different stakeholders each had their own preferred vendor. Crucially, rather than trying to juggle multiple technology projects or engage in drawn-out debates about specific products, Koan started by developing and adopting a set of “design principles” that would be used to guide strategy and technology prioritization:

- Maricopa’s Design Principles:**
- Put students first
 - Start with what we have
 - Embrace mobile
 - Build version 1.0 first

Koan took these principles to leadership, and eventually to each of the colleges on a “roadshow,” ensuring everyone was aware of these IT prioritization guidelines.

From there, he used the design principles to help prioritize technology asks and communicated these decisions transparently across the system. The IT team also embraced an agile approach to technology development and procurement, meaning that they built simple, foundational technology capacities first, and then gradually ramped up into more advanced features.

“The design principles kept us transparent and on the same page. They helped to explain the ‘why’ behind our decisions. Our agile approach helped us to build a track record of success. People understood that their asks were sometimes a no for now, but not a no for forever.”

— Dr. Mark Koan, Chief Information Officer, Maricopa Community Colleges, CA



III Evaluating Vendors and Products

In just five years, the number of marketed student success software products has multiplied twenty-fold. Today, new vendors continue to enter the market while existing companies increase their offerings. It can be a dizzying landscape for even the most seasoned technology leaders. To navigate these constantly shifting offerings, thoughtful institutions use their prioritized features list as a starting point to structure their technology requests, sift through and engage potential vendors, and select a best-fit product.

The following section explores common steps successful institutions followed to engage productively with vendors. Typically, institutions engaged in each of these activities roughly in the order listed below, though some activities may overlap or proceed less linearly in practice.

	<i>In This Section</i>
	<i>Develop a Vendor Engagement Plan</i>
	<i>Facilitate Vendor Product Demonstrations</i>
	<i>Build a Mission-Aligned RFP and Evaluation Tool</i>

Develop a Vendor Engagement Plan

Which products are on the market? At most institutions, staff learn about tools through a mix of word-of-mouth and targeted market research.

Faced with “constant vendor emails,” Dr. Rick Sluder, Vice Provost for Student Success at Middle Tennessee State University (MTSU), assembled an informal, cross-functional group of 10–12 advisors, admissions counselors, directors of advising, IT staff, and registrar’s office representatives to evaluate new technology products that appear to meet top-priority institutional needs and goals. The group provides feedback on emerging tools and keeps MTSU’s insights on the technology market fresh for future procurement. “I call them my ‘Beta Test Group,’” notes Sluder. He adds, “getting their input and assessment is important. I might think something is interesting, but I’m not the end user. They can figure out whether it’s worth our time or not.”

Other institutions have opted for a more traditional approach, keeping track of vendors at major conferences, speaking with peers, and consulting publications. Process aside, most institutions create a list of 3–5 vendors to explore—enough to understand the spectrum of offerings on the market, but not so many that the evaluation becomes overwhelming. The final count may depend on the number of viable contenders in a specific product category or the depth of your team’s existing knowledge about the vendor landscape. Seasoned institutions shared the following considerations for building their prioritized vendor list:

❓ **Who are the market leaders for the specific type of technology tool your institution is interested in acquiring?**

Note: While many vendors may, for example, offer case management tools, only a handful specialize in this field.

❓ **Does the vendor’s product seem to include your highest priority technology features?**

❓ **Does the vendor have the ability to integrate with your core systems (e.g., SIS, LMS)?**

❓ **Do end users feel excited or, at the very least, comfortable with previews of the user interface?**

❓ **How mature is the vendor and the product? How does this gel with your team’s relative risk tolerance and/or interest in being an “Alpha” or “Beta” partner?**

(See Partnering with Vendors on Early-Stage Products, p. 55.)

Facilitate Vendor Product Demonstrations

Product demonstrations can often be the most exciting and confusing part of the procurement experience. While they offer a chance to see the latest products on the market, at times it can be difficult to separate fact from fiction while simultaneously remaining grounded in the true needs of the institution.

How can you tell if you saw a strong product or just a talented presenter with a strong sales pitch? With limited time and so many different perspectives in the room, which questions are the most important to ask?

This section provides several tools to prepare your team for product demonstrations:

- ▶ **What to Expect in a Product Demonstration**
- ▶ **Vendor Q&A Cheat Sheet**
- ▶ **Post-Demonstration Discussion Guide**

Who's in the Room?

Make Sure Procurement Team Has Key Perspectives for Demo Viewing

END USER

- ? Does the user experience feel intuitive?
- ? Are the most important capabilities there?
- ? Will the tool support my ability to accomplish my goals?

IT AND DATA

- ? Will this work within our existing ecosystem?
- ? How challenging will it be to implement, integrate, and maintain?

STRATEGY AND RESOURCING

- ? Do we have the funding for this now? For the total cost of ownership going forward?

What to Expect in a Product Demonstration

Typically 1-2 hours



COMPANY INTRODUCTION

This typically provides company background, market share, and product suite. It should give you a sense of the company culture and areas of expertise.

Hint: Consider how long the vendor has been in business, how long they've been focused on higher education, and the number of institutions they serve.



VENDOR'S THEORY OF CHANGE

Vendors explain how they view the challenges in the field and set themselves up to explain how their tool will solve for these challenges. The issues they pose create the foundation for the value proposition of their product. It will align to the features they chose to develop and highlight in the demonstration.

Hint: Consider how well their research and problem articulation maps to your understanding and prioritization of key issues on your campus.



PRODUCT DEMONSTRATION

This is your team's chance to get the look and feel of a product and to question which specific features are "live" versus still in development for the vendor.

Hint: End users and IT/backend data managers should feel free to interject with occasional questions, but try to save most for Q&A at the end of the demonstration once the group has seen the full span of functionality.



PRODUCT Q&A

This conversation is helpful for probing areas the vendor has glossed over, such as implementation approach, configuration capabilities, and data access and update strategies. Q&A can also be a useful opportunity to educate and energize team members that have been less engaged in the process, such as senior leadership.

See upcoming Vendor Q&A Cheat Sheet for more guidance.

Vendor Q&A Cheat Sheet

Depending on how your institution chooses to sequence vendor engagement activities, several of these questions may already be answered by the time you reach the vendor demonstration. However, it can still be helpful to probe into the following areas during product demonstrations and other live conversations.



COMPANY BACKGROUND AND CULTURE

Ask: Can you give me an example of how feedback from one of your customers helped guide the direction of the product?

Ask: Are there any aspects of this product that your company got through an acquisition? How do those products and features integrate with one another and with the products and features you built in-house?

Ask: How do you store data? Manage data security?

Ask: What kind of ongoing support do you provide?

Ask: How do you communicate and manage product updates across your clients?

Consider: How responsive has the vendor been to your requests? How well do they understand the higher education field?



USER INTERFACE AND WORKFLOW

Ask: Is this what the product looks like now? If not, which aspects of the user experience are different, and why?

Consider: Does the product feel intuitive for different types of end users?



PRODUCT CAPABILITIES

Ask: Which capabilities in the demo are currently “live” at multiple colleges and which are still in development?

Ask: Have institutions live with these capabilities noticed differing outcomes and experiences of students from racially minoritized or low-income populations?

Consider: Some vendors will offer a lot of flexibility to customize configurations and others will not. Sometimes, highly customized systems can be initially exciting, but difficult to maintain over time.



COST STRUCTURE

Ask: What is the initial fee for the product?

Ask: What ongoing licensing/subscription fees will come along with the product? How might this shift as we add users and scale?

Ask: Do institutions typically need to invest in additional training or consulting costs (e.g., implementation consultant, group training sessions not included in product price tag)?

Consider: What IT resources and non-technical staff bandwidth might be needed, not only to implement the product but also to sustain the tool over time?

Vendor Q&A Cheat Sheet

Depending on how your institution chooses to sequence vendor engagement activities, several of these questions may already be answered by the time you reach the vendor demonstration. However, it can still be helpful to probe into the following areas during product demonstrations and other live conversations.



IMPLEMENTATION APPROACH

Ask: What will implementation phases look like in terms of demands on and responsibilities of college staff? How might our configuration decisions impact this?

Ask: When will different features be “live” and at what scale?

Ask: What are the biggest challenges that other colleges have encountered during implementation?

Ask: Which aspects of the product can be configured for our specifications (e.g., permissions, data fields, workflow)?

Consider: Are there other ongoing IT projects at your institution that could impact the implementation of this tool?



OTHER QUESTIONS FOR VENDORS FROM MY INSTITUTION:

Handwritten notes in blue ink:

1. How will you support us during implementation?

2. How will you support us during ongoing use?

3. How will you support us during troubleshooting?

4. How will you support us during training?

5. How will you support us during integration with our existing systems?

6. How will you support us during data migration?

7. How will you support us during user adoption?

8. How will you support us during system updates?

9. How will you support us during system downtime?

10. How will you support us during system security?

11. How will you support us during system performance?

12. How will you support us during system scalability?

13. How will you support us during system flexibility?

14. How will you support us during system interoperability?

15. How will you support us during system integration?

16. How will you support us during system interoperability?

17. How will you support us during system integration?

18. How will you support us during system interoperability?

19. How will you support us during system integration?

20. How will you support us during system interoperability?

Post-Demonstration Discussion Guide

After viewing product demonstrations, successful institutions ensure there is dedicated time for the procurement team to debrief while their impressions about the product are still fresh. Below is a list of critical questions that high-functioning teams explore during their own demo debrief discussions.



INSTRUCTIONS: Jot down your thoughts on the product demonstration, ideally during and/or shortly following the demo presentation.

INDIVIDUAL REFLECTION FOR DEMONSTRATION DEBRIEF

NAME: PRODUCT NAME:

TITLE:

WHICH ASPECTS OF THE PRODUCT WERE MOST ATTRACTIVE, AND WHY?

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WHAT CONCERNS DO YOU HAVE ABOUT THE PRODUCT? ARE THERE ANY MAJOR GAPS OR SHORTCOMINGS?

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INDIVIDUAL REFLECTION FOR DEMONSTRATION DEBRIEF *(continued)*

NAME: **PRODUCT NAME:**

TITLE:

WHAT FOLLOW-UP QUESTIONS DO YOU HAVE ABOUT THE PRODUCT?

OTHER COMMENTS:

Build a Mission-Aligned RFP and Evaluation Guide

Most institutions are required to issue Requests for Proposals (RFPs) to formalize advising technology vendor selection. The most effective RFPs include a careful balance between information-sharing and questions for vendors. They provide a helpful orientation to the institution(s), its strategic goals, and relevant ongoing efforts, as well as thoughtful probes that help separate vendor marketing promises from high-quality, proven functionality. Institutions with strong RFPs follow the guiding principles articulated below:

Explain Existing Technology Ecosystem and Project

Context: Cost and implementation timelines depend heavily on existing technology stacks and the relative centralization and uniformity of those technology tools and business processes across campuses. Provide an overview of your existing core technology ecosystem, including whether these systems vary across departments or units.

Set Expectations: Provide a narrative that describes your intended outcomes. This can include a bulleted list or a few paragraphs that illustrate how you see the technology supporting your institution's broader strategic goals and ongoing reform efforts.

Provide System Requirements and Ask Questions:

Effective procurement teams typically include the following requirement buckets paired with probing questions for the vendor. Note that these generally align with key topics for Vendor Demonstration Q&A sessions and the Evaluation Rubric:

- ▶ **Company Background and Culture:** May include company perspective on reform, experience in higher education, client list, history, etc.
- ▶ **User Interface and Workflow:** Refer to your user stories. This should list key product features, but avoid listing prescriptive attributes of each feature.
- ▶ **Product Capabilities:** Refer to your technical and data requirements list. This may include information about integration capabilities, data access requirements, etc.
- ▶ **Cost Structure:** Consider up-front product cost, implementation and support fees, and ongoing licensing, subscription, or upgrade fees.
- ▶ **Implementation Approach:** Explore vendor's approach, timeline, and training and support structure.



Balance Statements with Open Questions

The most common RFP error is an absence of probing questions for the vendor. Often RFPs can be too prescriptive about exactly how they expect the vendor to accomplish a requirement, which lets vendors off the hook from truthfully describing how they would achieve a specific goal.

Grants and State Legislation as an Impetus for Procurement

In many cases, individual institutions will autonomously decide when to trigger the RFP process. However, sometimes grants or state legislation can provide a powerful impetus for procurement. For example, Central Carolina Community College and Stark State College both pursued student success technology as a part of a larger strategy around Title III funding. Similarly, state legislation encouraged California community colleges to explore tools like Starfish academic planning.

While the financial and political support offered through grants and legislation can propel procurement projects forward, it's critical to ensure the key voices highlighted in prior pages in this Playbook have a voice at the table. Because technology implementations often outlive the original grants and extend beyond the grants office, they need to involve key stakeholders from across the institution from the beginning.

EXAMPLE EVALUATION RUBRIC

While most institutions will be required to develop RFPs and corresponding product evaluation guides, some institutions leverage sole source[❖] documentation to avoid a lengthy procurement process and take advantage of promotional vendor pricing. Even without an RFP, institution leaders strongly recommend comparing multiple vendor products and developing an evaluation rubric.

State and institutional policy often governs how evaluation rubrics should be structured, but institutional culture and context plays a role as well. While there is no perfect evaluation rubric for all institutions, the weighting and categories listed here are a suggested starting point for developing an advising technology rubric of your own.

	POINTS TO ALLOCATE	VENDOR 1	VENDOR 2	VENDOR 3	NOTES
COMPANY BACKGROUND AND CULTURE	10	8	7	4	
USER INTERFACE AND WORKFLOW	15	10	12	5	
PRODUCT CAPABILITIES	35	28	30	15	
COST STRUCTURE	25	22	18	20	
IMPLEMENTATION APPROACH	15	10	14	5	
POINT TOTALS	100	78	81	49	

❖ Sole source documentation can be leveraged if an institution determines that there is only one advising technology vendor that provides all the core features and attributes required by the institution; it asserts that the vendor is unique, with no other viable competitors in the market. In this case, only a single vendor is considered in the evaluation process. This can help to create efficiency in the procurement process but should be used carefully and with extensive market research to confirm that the vendor is in fact the right fit.

EVALUATION RUBRIC TEMPLATE

Ideally, procurement team members should complete the evaluation rubric independently before coming together to compare notes. Most institutions report strong consensus around a single vendor by using the rubric method; however, if opinions are divided, revisit

the alignment exercises in the first two sections of this Playbook and work toward agreement. If majority agreement is not possible, it's a sign that your institution might not be ready for procurement.

	POINTS TO ALLOCATE	VENDOR 1	VENDOR 2	VENDOR 3	NOTES
COMPANY BACKGROUND AND CULTURE	10				
USER INTERFACE AND WORKFLOW	15				
PRODUCT CAPABILITIES	35				
COST STRUCTURE	25				
IMPLEMENTATION APPROACH	15				
POINT TOTALS	100				

IV Choosing the Right Technology

Before formalizing a multi-year agreement with a software vendor, it's important to dot the i's and cross the t's. Today, advising technology vendor fees can range from \$60,000–\$350,000 annually, regardless of how fully the tool is implemented or utilized.

In the final stages of vendor procurement, it's important to gather productive peer feedback on your chosen vendor, audit the vendor's data strategy, and begin mobilizing for implementation staffing and evaluation requirements. Engaging in these final procurement steps will help ensure your institution chooses the right advising technology to accomplish its goals.

In This Section

Gather Productive Insights from Peers

Audit Vendor's Data Strategy



Prepare for Implementation

Gather Productive Insights from Peers

It's a typical refrain: “And how has your institution’s experience been with [vendor]?” As student success technologies took off, word-of-mouth propelled certain products from anonymity to market leaders—and for good reason. Peer colleges, after all, are more forthright than vendor sales representatives. But the success or failure of a product at one institution does not guarantee a similar outcome at another. In fact, seemingly similar institutions can have different experiences and outcomes with the same exact tool. So, how can

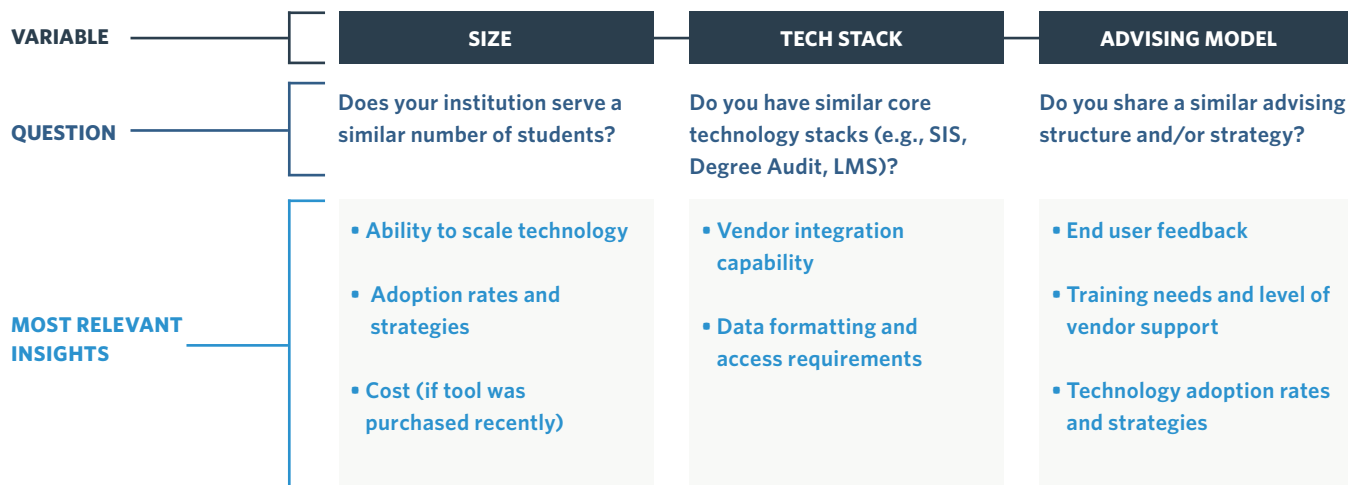
institution leaders get meaningful, productive insights from peers ahead of such a big investment?

Procurement team leaders note that it is critical to consider which insights from peer experience with a technology are most applicable to your context. The following section addresses how leaders can generate and interpret relevant, impactful advice from peers, especially before signing a multi-year contract with a chosen vendor.

STEP 1: BRAINSTORM KEY QUESTIONS	STEP 2: BRAINSTORM POTENTIAL PEER INSTITUTIONS
 <p>What big questions do we have about our peers’ experience with the vendor/tool?</p> <p>Consider: <i>End user adoption, costs, experience interacting with the vendor, implementation experience, etc.</i></p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	 <p>Which institutions might we consider reaching out to?</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
<p>Prioritize: Which of the questions above are most important for your team to understand before procuring the tool? Circle or highlight these questions above.</p>	<p>Note: This list could include suggested references from vendors as well as other institutions that your team considers a part of their peer set.</p>

STEP 3: CONSIDERING BEST-FIT PEERS FOR RELEVANT INSIGHTS

Whether you have brainstormed a set of peer references or solicited a list from a vendor, no peer institution will be exactly like your own. As a result, it can be difficult to parse out which pieces of feedback are useful and which reflect circumstances at that institution. To separate insight from noise, strategic procurement teams first assess how the peer institution compares to their own. The graphic below provides **(1) six contextual variables that impact implementation and (2) relevant insights that can be drawn from institutions that are similar within that domain:**



Leveraging the prior matrix, institutions can prepare for peer consultations by walking through each variable. This exercise can help illuminate which topics should be prioritized and ensure procurement teams appropriately contextualize feedback.

The example below illustrates how Fiction College might prepare for a call with Great State University by jotting down notes across the six major consideration variables:

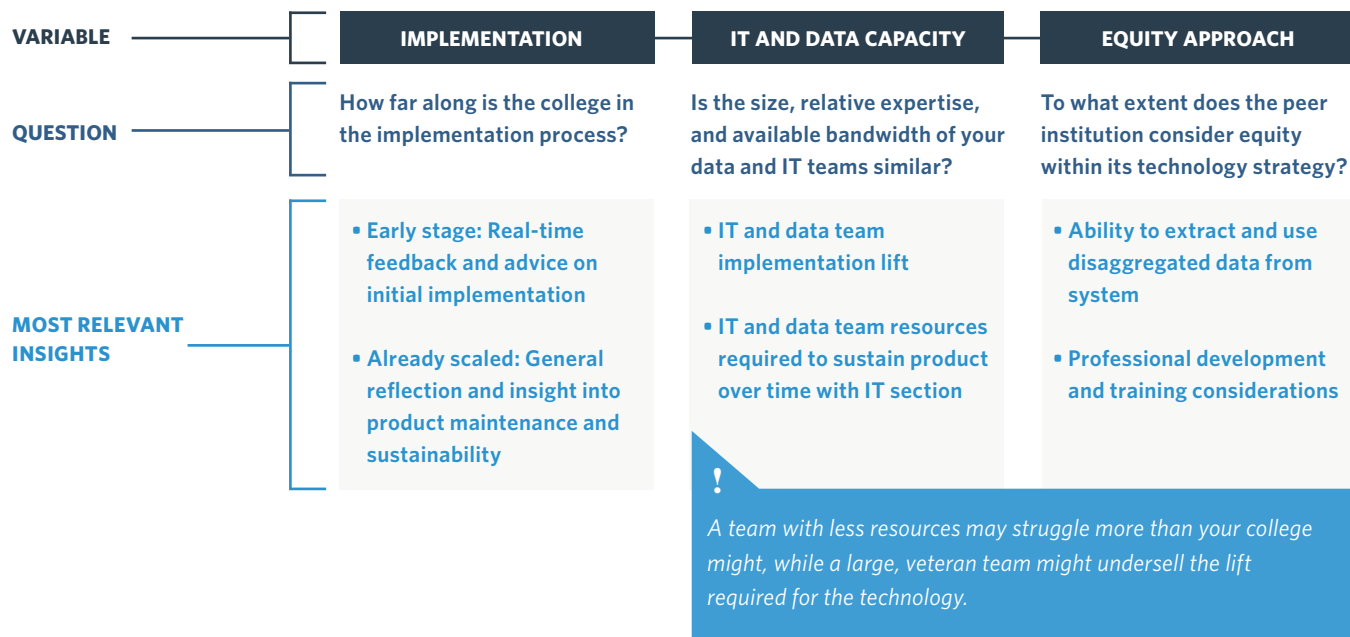
EXAMPLE	GREAT STATE UNIVERSITY	Similar size and student demographic mix	Same SIS and degree audit, but different LMS	Unique model with case management for "professional schools" (e.g., business, pre-med, pre-law); dedicated onboarding advisors, which we don't have

Summary Analysis: What Can (and Can't) We Learn from Great State University?

Note that even the most seemingly similar peer institutions will differ from your own in multiple ways. This doesn't mean they can't be helpful. Rather, it's important to isolate which areas are most comparable, and therefore most relevant, to your college.

In this case, Great State University is most similar to Fiction College in terms of its size and core technology systems. It also has successfully scaled and sustained the product for over three years. Questions about the

STEP 3: CONSIDERING BEST-FIT PEERS FOR RELEVANT INSIGHTS *(continued)*



Example from Fiction College:

EXAMPLE	GREAT STATE UNIVERSITY	IMPLEMENTATION	IT AND DATA CAPACITY	EQUITY APPROACH
		Have been fully scaled for 3+ years, some of the original procurement team has since moved on	Small IT and IR team with limited experience implementing a student success technology at scale; Our team is very experienced and runs a particularly advanced data shop that is an exemplar for other colleges	Comparable approach to equity; have specific goals and have been tracking and responding to patterns in disaggregated student success data by race/ethnicity and income for 3+ years

Summary Analysis *(continued)*

vendor’s price point, ability to integrate with existing systems, and how to scale key features can be useful. Conversations about the institution’s experience implementing the technology may need to be tempered with the insight that the college’s IT and data team were less experienced. Additionally, Fiction College would need to keep in mind that Great State University’s advising model may have required different-in-kind configuration and support from the vendor.

STEP 4: PEER OUTREACH STRATEGY



Finally, it’s important not only to know which topics to discuss with each peer reference, but also to make sure that the right people are involved in the conversation. After all, while the head of advising at a peer institution may know a lot about the user experience, they won’t be as helpful if you plan to ask more technical questions. Use the following tool to begin planning your institution’s peer outreach strategy:

INSTITUTION NAME	CONTACTS AT PEER INSTITUTION	CONTACTS AT OUR INSTITUTION	NEXT STEPS	
EXAMPLE	GREAT STATE UNIVERSITY	<p>Which types of individuals (e.g., IT, end user, project manager) will be most useful given your areas of inquiry for the institution?</p> <ul style="list-style-type: none"> ▶ IT/IR: Will know about SIS integration and data readiness requirements ▶ Procurement leads or someone who can speak to vendor pricing and support 	<p>Which individuals from our institution are most important to have on this peer call?</p> <ul style="list-style-type: none"> ▶ IT/IR: Will know how to ask about integration and data requirements ▶ Procurement project lead(s) 	<p>Which individuals from our institution are most important to have on this peer call?</p> <p>Dot down next steps for outreach (e.g., Who will reach out? By when?)</p> <p>Melinda from IT to email CIO at Great State since they worked together previously. Aim for a call within next 2 weeks.</p>

Audit Vendor’s Data Strategy

In today’s advising ecosystem, faculty and professional staff often use more than four different software tools and screens to garner a holistic picture of a student. Counselors told The Ada Center their top request for advising software is a tool that centralizes all critical student data in one, easy-to-access location. Accomplishing this goal, however, requires procuring (or developing) a product that integrates effectively with existing core data systems—a task that is easier said than done.

Before finalizing procurement, The Ada Center’s evaluation of the Ohio Association of Community Colleges “Scheduling for Completion Project”⁴ found that it is critical to audit your vendor’s data strategy. These audit activities are even more important if IT has not been closely involved in the procurement process to date, if your Student Information System (SIS) is heavily customized or unique, and if the chosen software vendor is new to the field.

⁴The Ada Center, Scheduling for Completion Project Evaluation. Retrieved August 1, 2020 from <https://www.theadacenter.org/resources>

STEP 1: ASK TO SEE VENDOR’S DATA PROTOCOL

All established vendors maintain a document that articulates how they envision gathering the necessary data to operationalize your advising technology. This document is often called a data protocol or implementation protocol. Many vendors do not share this document until after a contract is signed and an institution is moving forward with implementation. Yet viewing the vendor’s data requirements prior to procurement can prevent costly misunderstandings about data access and formatting down the road.

The Ada Center recommends that all institutions request to see a vendor’s data protocol prior to finalizing a contract. Data protocols tend to be focused on preparing an institution for implementation. This focus can provide helpful insight about critical pre-procurement decisions and activities, such as electronic transcription, to ensure the advising technology can harness the most accurate and effective data sources.

Illustrative Data Protocol Excerpt

Describe your Degree Audit Term Structure (e.g., 201910, Fall 2019, etc.) with code and description samples.	
What is the ideal time of day that imports should be run?	
Do you code key student categories (e.g., dual enrollment, scholarship, TRIO) in your SIS? Articulate these categories and describe where and how they are stored.	
Does your institution use part of term? If so, how is this identified?	

STEP 2: BRAINSTORM FOLLOW-UP INQUIRIES

Upon reviewing the data protocol, are there data access requests that are incompatible with current data architecture and policy? Requests for data sources that don't yet exist? Gather your procurement team and additional representatives from IT as needed to go through the vendor's data protocol line-by-line and mark areas for additional follow-up.



Which data requests require additional clarification with the vendor?

STEP 3: ARRANGE AN IT CALL WITH VENDOR DEVELOPMENT OR PRODUCT STAFF

While some items within the vendor's data protocol might merit internal discussion rather than vendor engagement, it's always helpful to engage the vendor's technical team with data access questions that cause concern or confusion. Prior to signing a vendor contract, Northwest Wisconsin Technical College notes the importance of a dedicated conversation among institution IT and vendor IT:

- ✓ Allows for a deeper dive into integration, implementation, configuration, and maintenance questions that surfaced from the data protocol or RFP
- ✓ Vendor's development or product staff often provide more in-depth, candid responses to technical questions as opposed to a sales representative
- ✓ Provides an opportunity to test working relationships that will be critical across the coming months



Build vs. Buy

Due to data integration concerns, many institutions are tempted to build rather than buy an advising technology. While some institutions have benefited from this approach, it's not a decision to be taken lightly. Building an advising technology requires significant user testing, development resources, and ongoing evolution and maintenance. Changes in institution staffing or underlying system architecture can often derail homegrown tools altogether. Institutions that build homegrown tools often report it is a more costly and time intensive undertaking than procuring an existing technology; as a result, many homegrown tools often turn into partnerships with vendors looking for early stage partners on a new software project.

Partnering with Vendors on Early-Stage Products

Many of the largest student success vendors are household names across institutions. However, the market continues to evolve, with new and promising players pitching innovative new features and approaches each year. But should your institution stick with an existing market leader or get in on the ground floor with an up-and-coming vendor

with potential? This decision ultimately depends on your institution’s risk tolerance, implementation urgency, and interest in innovation. To make this decision, all institutions should consider the risks and benefits of becoming an early-stage partner (i.e., “Alpha” or “Beta” partner):

BENEFITS	RISKS
<p>Lower Cost Since (a) full product capabilities are not yet implemented and (b) you will be partnering with the vendor to help test product functionality, vendors will typically offer fairly steep discounts on upfront product costs and initial annual fees.</p> <p>Influence As an early adopter, your institution can often shape the design of certain features or the evolution of the vendor’s product roadmap (i.e., which types of functionality are prioritized). Though the product will need to be designed with the broader market in mind, alpha and beta institutions often wield more influence over product adjustments than later adopters.</p> <p>Early Access to Innovation With new products or vendors come new possibilities. Newer vendors or product teams can be nimble, learning from established technologies while pushing forward new and creative solutions that other entrenched companies may not pursue for months or years (if at all).</p>	<p>Taxed Bandwidth Being an early partner may include vendor fee savings, but it will require far more IT and advising leadership capacity to work through data integration, data vetting, and end user needs. Ensure you have the appropriate staff before proceeding.</p> <p>Delays It’s always important to clarify with vendors which features are operating “live” and at scale versus still in-progress. But with early-stage products, there will always be some amount of ambiguity. Institutions should build in buffer time for delays with both initial implementation and scaling.</p> <p>Vision Shift Early product roadmaps are a mix of vision and substance. As early adopters of the product provide feedback and vendor engineering teams grapple with technical builds, the vendor’s original vision or prioritization of certain capabilities may shift; some features may change, become deprioritized, or drop off the roadmap entirely.</p>

Case Study: Davidson County Community College Sheds Light on Benefits of Early Partnership

“We figured, we’d rather be a thought-partner and try to shape what’s developing from the beginning rather than just trusting that vendors would eventually deliver what we need. We had a ‘jump in and go get it’ culture, a willingness to try things, make mistakes, and learn.”

—Dr. Margaret Annunziata, Vice President
of Academic Affairs, Davidson County
Community College, NC

Being an early partner to a technology vendor can be a good idea if the institution’s vision closely aligns with the vendor’s roadmap, if the institution has staff capacity to partner with the vendor, and if the institutional culture allows for innovation and risk-taking.

In 2012, Davidson County Community College (DCCC) became one of Starfish’s first clients after interacting with the vendor at an Achieving the Dream conference. DCCC’s student success team was focused on transformation through the loss-momentum framework[⊛] and they felt the vendor was aligned with their thinking. Starfish was still sculpting their product and DCCC decided they wanted to be part of the conversation.

DCCC’s early partnership with Starfish allowed the team to advocate for the functionality they most wanted. Over time, Starfish became “part of the culture” at DCCC, resulting in high faculty adoption, satisfied students, and measurable improvements in course retention.

DCCC’s Alpha Partner Elements of Success

- ✔ Vendor-college vision alignment
 - ✔ Dedicated cross-functional Student Success Team also served as procurement team; met weekly and aligned technology vision to reform efforts
 - ✔ Dedicated project manager to lead vendor relationship, compile feedback
 - ✔ Leadership and culture comfortable with experimentation, risk-taking
 - ✔ Responsive vendor contact
- ⊛ The loss-momentum framework, created by Completion By Design, helps colleges to identify the greatest obstacles that students typically face throughout each stage of the student journey (loss points) as well as the practices (momentum strategies) that can help to mitigate these challenges and foster student persistence and completion. For more about the loss-momentum framework, see <https://www.completionbydesign.org/s/cbd-lmf>

Prepare for Implementation

How much does a new advising technology really cost? What resource commitment is required to implement and, importantly, to sustain technology over time? Due to the nature of higher education budgeting and hiring, seasoned institution leaders strongly recommend accounting for the full cost of implementation before signing a software contract.

A typical advising vendor contract will include a one-time implementation fee and an annual licensing fee. But successfully implementing and sustaining advising technology also requires investments in internal capacity. These additional investments will depend heavily on the type of advising technology being procured, the nature of your existing data systems, and current staffing. The Ada Center recommends accounting for the following types of project expenses:

DATA CLEAN-UP AND TRANSCRIBING



Approximate Cost: \$20,000–\$60,000



As discussed earlier in this section, without proper time and allocation of resources to data cleanup, a new system can be easily dismissed by key end users who distrust its integrity. This distrust can be permanent and leave lasting damage to an otherwise successful implementation. Procurements should include budgets for internal staff or consultants to focus on data cleanup prior to launch of a new technology. This work could include standardizing data definitions across products, cleaning out false or dated data inputs, translating data from disparate sources into a central platform, and restructuring the way data is stored within your SIS to make it more accessible to third-party platforms.

ADDED IT CAPACITY



Approximate Cost: \$100,000 OVER A TWO-YEAR PERIOD



Advising technology implementation often requires a significant time investment from your institution's ERP and applications team. IT staff will need to plan for and help implement the tool, problem-solve for integration issues, and work cross-functionally to ensure the tool is working as expected. Some institutions manage this added bandwidth by temporarily deprioritizing other IT projects, giving IT staff the capacity to manage this complex work. Others that have the funds may hire additional capacity, recognizing that sustained IT support for the new system will be helpful beyond initial implementation.

A FULL-TIME, DEDICATED PROJECT MANAGER



Approximate Cost: \$200,000 OVER A TWO-YEAR PERIOD, *though ideally, this hire stays on longer to manage continuous improvement and system updates*



When asked about key factors for implementation success, teams across institution types, geographies, and sizes consistently cited one thing: a full-time, dedicated project manager. While implementation committees are helpful, only a dedicated project manager can ensure the focus, coordination, and accountability required to move a project steadily from vision through actualization. Ann Lyn Hall, Executive Director of CNM Connect at Central New Mexico Community College notes, "There are so many activities required post-initial implementation. Training, upgrades, and other system updates require help that may no longer be available from your vendor after the initial implementation of a technology. Planning ahead for these needs can help ensure the technology retains value for the long-term."

Case Study: A Director-Level Hire for EAB Implementation

The University of Delaware's (UD) procurement team acknowledged that hiring an adept, full-time project manager was critical to the success of their advising redesign. "They understood that, if the SIS has the entire Registrar's Office to help manage it, other important and large-scale student success systems shouldn't be supported by just one part-time employee," noted Naomi Nash, who ultimately assumed this full-time project manager role as the institution's Director of Student Success Initiatives. Multiple institutions, including Baylor University, leveraged The University of Delaware's project manager job description (excerpts below) to help inform their own project lead hiring process.

Defining the Project Manager Role at UD

Job Description Excerpts

Context of the Job: The Director will be responsible for managing the implementation and utilization of the Student Success Collaborative (SSC). The SSC is a retention management system that combines technology, research, and predictive analytics to help UD positively inflect degree completion outcomes for students...

Major Responsibilities:

- ▶ Manage SSC Leadership Team meetings
- ▶ Lead the implementation of the SSC and its continual optimal use
- ▶ Develop strategies for strong platform utilization and buy-in
- ▶ Serve as lead trainer for the SSC
- ▶ Obtain and analyze data from the SSC
- ▶ Coordinate, implement, and assess student success campaigns based on SSC data and collaboration with colleges, departments, and academic support resources
- ▶ Work closely with Deputy Provost, Academic Affairs to manage and track initiatives related to enhancing undergraduate advising and assessing academic policies that may adversely affect student success

Qualifications:

- ▶ Experience in a higher education environment, including academic advising, with SSC experience or other retention management system preferred
- ▶ Experience with SIS (preferably PeopleSoft)
- ▶ Comfortable performing basic data analysis and interpreting data
- ▶ High level of initiative, attention to detail, and organizational skills
- ▶ Ability to work with a diverse constituency and all levels of the organization



What Stands Out in this JD?

- Provides critical background on the specific technology and its goals.
- Positions the hire as not only a technology project manager, but as a strategic leader working across departments and units to ensure the tool supports the institution's student success goals.
- Qualifications reference two key contexts: (1) higher education advising, and (2) higher education technology (e.g., retention software, specific SIS).

Creating an Evaluation Plan

As institutions prepare to make significant resource investments in an advising technology, it's helpful to be upfront about how the success of the investment will be measured. Creating an evaluation plan is critical from a financial standpoint but also from a mission and equity perspective.

The field is full of case studies that examine technology's power to improve higher education access and success. But there have also been examples where technology has accelerated practices that disenfranchise certain student groups, including racially minoritized and low-income students. Misuse of predictive analytics engines, for example, has inadvertently enabled some institutions to push Black and Latinx students into less lucrative majors.⁵

As a result, leading institutions recommend developing clearly defined, mission-aligned equity and success metrics for the initiative and a process to track them. By keeping a sharp eye on key indicators throughout the advising technology implementation and scaling process, institution teams can identify and address issues early on, saving themselves from the complex and costly work of retroactively correcting for missteps.

Of course, selecting meaningful indicators can be a challenge for a variety of reasons. Stakeholders may ask, "But how do we attribute the change specifically to the technology when we have so many other initiatives going on?" Others worry that lackluster impact measures may dampen enthusiasm for the tool.



Experienced teams understand that while no metric is perfect, it's vital to have some means of assessing the relative success of the project, which includes the technology and the systems and structures that surround it. Further, teams typically update these indicators across different phases of implementation. It doesn't make sense, for example, to track for huge changes in institution-wide retention and graduation before the tool has been fully implemented and scaled.

In this early stage of the project, creating an evaluation plan is a signal to the institution community that the technology investment is being taken seriously and ensures evaluation won't fall by the wayside amid competing priorities.

⁵ Elowo, M., & Palmer, I. (2017). *Predictive Analytics in Higher Education—Five Guiding Practices for Ethical Use*. New America, Education Policy Program. Retrieved from https://www.newamerica.org/documents/2696/Predictive-Analytics-GuidingPractices_fbsrc53.pdf

IV. Choosing the Right Technology

The figure below, based on feedback from dozens of successful advising technology implementations, provides a framework for how college teams might think about project evaluation during different stages of implementation:

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

Multiple Success Indicators Should Emerge Across Implementation Period



IV. Choosing the Right Technology

Inevitably, some indicators within this framework will be easier to track and analyze than others. Depending on capacity and information accessibility, procurement teams will need to sort through the logistics of how they plan to evaluate the efficacy of the project while it is in progress. Institution leaders recommend partnering with institutional research on the how-to of evaluation plan design.

Evaluation Plan Excerpt

GUIDING QUESTION	INDICATORS	METHODOLOGY	BENCHMARK	TRACKING AND REVIEW PLAN
Are our advisors switching to the new system?	# unique logins /# total end users • Average end user logins per week, tracked over time	Track advisor logins within admin dashboard during roll-out	80% of advisors logging in daily within 6 months of product launch	Project manager reviews metrics regularly, progress shared with student success team every other week

Notably, in the example above, the institution is thoughtful about not only what they want to track but also who will be accountable for keeping tabs on these metrics, how often and with whom the data will be discussed, and what benchmarks could indicate whether the project is progressing. Keep in mind that peer institutions and even vendors can be helpful in this process, too. After vendors have implemented their product at several institutions they often, for example, have a sense of how many logins per user per day should be expected or what the general timeframe for scaled user adoption can look like.



Concluding Thoughts

At the time of writing this Playbook, institutions across the country are relying on technology to deliver student support, advisement, and learning amid an unprecedented health and economic crisis. While advising technology is more important than ever before, institutions' bandwidth and resources are constrained; being judicious about where to invest in technology resources and innovation is now mission critical. The Ada Center encourages institutions to focus on technology projects that feel manageable and highly connected to mission, all themes explored in the early pages of this Playbook.

The Ada Center also encourages institutions to draw upon the activities and recommendations in the Playbook that feel most appropriate for their circumstances. Though it may appear daunting to work through the entirety of planning and procurement activities included within this guide, many institutions already have the building blocks of the exercises within reach.

The Advising Success Network wishes you the best of luck as you embark on technology-supported redesign and hopes this resource supports you along the way.

Additional Resources

In addition to leveraging the insights and activities included in this Playbook, we encourage leaders to continue to build their knowledge about the advising technology field through other literature. The following resources were consulted for this research project and can be helpful to others seeking to gain a deeper understanding of the higher education technology marketplace and its impact, as well as effective practices for technology deployment on campus.

Achieving the Dream and The Ada Center. (n.d.). *Appendix C, Case Management and Early Alert Technology Evaluation Resource*. Retrieved from <https://www.theadacenter.org/resources>

Alamuddin, R., Rossman, D., & Kurzweil, M. (2019, June 27). *Interim Findings Report: MAAPS Advising Experiment*. Ithaca S+R. <https://doi.org/10.18665/sr.311567>

Community College Research Center & Tyton Partners. (2017, September). *Technology-Mediated Advising and Student Support: An Institutional Self-Assessment*. Columbia University, Teachers College, Community College Research Center. Retrieved from <https://ccrc.tc.columbia.edu/media/k2/attachments/technology-mediated-advising-student-support-self-assessment.pdf>

Elowo, M., & Palmer, I. (2017, March). *Predictive Analytics in Higher Education—Five Guiding Practices for Ethical Use*. New America, Education Policy Program. Retrieved July 29, 2020 from https://www.newamerica.org/documents/2696/Predictive-Analytics-GuidingPractices_fbsrc53.pdf

Kalamkarian, H. S., Boynton, M., & Lopez, A. (2018, July). *Redesigning Advising with the Help of Technology: Early Experiences of Three Institutions*. Retrieved January 21, 2020 from <https://ccrc.tc.columbia.edu/publications/redesigning-advising-technology-three-institutions.html>

Klempin, S., Grant, M., & Ramos, M. (2018, May). *Practitioner Perspectives on the Use of Predictive Analytics in Targeted Advising for College Students*. Retrieved January 21, 2020 from <https://ccrc.tc.columbia.edu/publications/practitioner-perspectives-predictive-analytics-targeted-advising.html>

The Ada Center, *Scheduling for Completion Project Evaluation*. Retrieved August 1, 2020 from <https://www.theadacenter.org/resources>

The Ada Center and the Aspen Institute College Excellence Program. (n.d.). *Navigating Emerging Student Success Technology—A Decision Support Framework for College Leaders*. Retrieved from <https://www.theadacenter.org/resources>

The EdSurge Product Index. (n.d.). EdSurge. Retrieved December 1, 2020, from <https://www.edsurge.com/product-reviews>

Tyton Partners & BABSON Survey Research Group. (2019). *Driving Toward a Degree 2019—The Evolution of Planning and Advising in Higher Education—Part 1: Institutional Perspective*. Retrieved from http://drivetodegree.org/dtd-wp/wp-content/uploads/2019/01/TYT078_D2D18_Pt1_FINAL.pdf

Tyton Partners & BABSON Survey Research Group. (2019). *Driving Toward a Degree 2019—The Evolution of Planning and Advising in Higher Education—Part 2: Supplier Landscape*. Retrieved from http://drivetodegree.org/dtd-wp/wp-content/uploads/2019/01/TYT079_D2D18_Pt2_FINAL.pdf





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