Profiles in Appian Excellence: Translating Strategic Goals into Application Capabilities

Summary.
University of South Florida’s (USF) IT team set out to help university deans and department leaders achieve state-mandated goals for student success and retention. By breaking down this goal into component pieces and underlying capability requirements, USF IT built an application which helps assess and track retention risk based on leading indicators for student attrition. The application also provides a single, unified source of student information, which enables faculty and staff to more effectively collaborate on student success plans, engage students in a timely manner, and have more tailored advisory conversations.

USF’s Appian journey.
USF’s Appian journey began in 2015. Since then, they have created dozens of applications and now maintain three Appian development teams, in addition to occasionally supplementing their development efforts with a mix of staff from Appian Customer Success and trusted development partners.

At the outset of the COVID-19 pandemic, USF created “Return to Campus,” an app that allowed the university to safely open its campus in the fall of 2020. The application monitors building occupancy, and supports testing operations and other communications strategies. An average of 8,000 individuals submitted health status information via the application each day. USF won Gartner’s 2021 Eye on Innovation Award for their innovative excellence in response to COVID-19.

Cascading goals into application capabilities.
USF grounds each application they build in their larger mission: “to deliver competitive undergraduate, graduate, and professional programs, to generate knowledge, foster intellectual development, and ensure student success in a global environment.” In support of this mission, USF focused on a state-mandated goal of achieving a 90% first-year retention rate and a 70% or greater four-year graduation rate.

Focusing on enabling student success, USF’s IT team broke this high-level strategic goal down into smaller pieces. To do so, they needed to understand requirements from across the university. They spoke with Deans of each college to understand how they were supporting student success and the associated pain points in those processes. During these conversations, the IT team was also able to curate a list of red flag student behaviors that were highly predictive of future student attrition. These red-flags include: changing majors, failing grades, and missing critical milestones within their major.
To reach their “north star” goal and address pain points in supporting student success, the university created an application that assesses and tracks student dropout risk based on factors correlated with dropouts. For example, a student changing their major is flagged as higher risk. The application then alerts staff members to set up an advisory conversation with the student to ensure the new major fits their interests and to help them with the transition. The application also provides a single, global source of information for all faculty and staff. This enables faculty and staff to more effectively collaborate about student success plans and have more tailored advising conversations.

Impact mapping.
Impact mapping is a lightweight, collaborative technique that ensures you build a solution that directly supports stakeholder priorities and goals. For USF’s IT team, this process helped connect user needs to key organizational goals for student success.

It’s about making sure that the goals we set at a high level cascade into technology priorities and, ultimately, the solutions we build in support of our community. First-year retention is a critical metric for us and is predictive of graduation rates. We want to do everything we can to equip our staff members to effectively guide our students through their learning journeys.

Sidney Fernandes, CIO

Student success impact mapping.

Student behaviors (red flags):
- Not attending class
- Not completing assignments
- Little community participation
- Unbalanced course load
- Not meeting course requirements
- Change of majors

Success inhibitors:
- Advisors unaware of red flag behaviors
- Advisors unaware of all support options
- Faculty and staff finding it difficult to collaborate across silos
- Disparate student information

Faculty support capabilities:
- Student advisory conversations
- Career services
- Graduation tracking
- Provide performance feedback

New faculty and staff support app:
- Global view and streamlined location for student support services
- Unified central communications platform
- Single repository for data capture
- Red flag tracking and alerting

Benefits achieved:
- More tailored advising conversations
- More timely conversations
- More faculty and staff collaboration on student success
USF and the Appian Customer Success team assessed faculty, staff, and student behaviors and the impact those behaviors had on student success. Coupling this information with pain points, priorities, and goals identified from across the university, the team constructed a map and were able to identify success inhibitors. From there, the team brainstormed and built an application that prioritized mitigating those inhibitors.

For example, faculty and staff often found it difficult to collaborate across silos (departments or colleges). The new application created a single repository and unified communications platform, enabling faculty and staff to more effectively collaborate on student success plans.

After two years of using the application, USF surpassed their initial goal (90%) and achieved a 93% first year retention rate.

Lessons learned.

Track application value against core metrics. “First-year retention is a critical metric for us. It’s not only predictive of graduation rates but also tied to state-level accreditation metrics. We want to equip our staff members to effectively guide our students through their learning journeys. Being able to quantitatively track the impact of the applications we create ensures we’re doing everything we can to support student success.”

Listen for pain points that could potentially lead to projects. “It’s important to listen to people on the ground. We talk to our deans, for instance. There’s a never-ending list of problems and pain points which can be addressed. Hearing from individuals across the university helps us understand varying priorities and how different groups support student success.”

Connect strategic goals to application capabilities. “Impact mapping helps us ensure we build applications and capabilities that actually support stakeholder needs across the university. We know this application made a demonstrable impact because we focus on measurable goals to ensure the value of everything delivered.”

Think you have a best practice to share with the Appian community? Email us at bestpractices@appian.com to schedule a research call with our team.