



Technology Roadmap

A strategy for supporting Clemson Advancement through technology

Clemson Advancement currently maintains over fifty applications that support the philanthropic and alumni engagement activities on behalf of the university. Many of these systems are core to the business processes needed to support the institutional goals, but there are opportunities to integrate systems and create more efficient use of these resources. Most applications are stand-alone systems and do not support a master data management approach. The following steps serve as a guide to ensure that Clemson Advancement makes the most of the systems we already own, eliminate disparate systems by streamline data sharing, and sunset applications that serve redundant functionality.



Guiding Principles established by the CTO.



IT recommendations provided by the BWF Technology Ecosystem Assessment.



Core functionality provided by Blackbaud and partners.



Guiding principles toward a more cohesive synergy across Clemson Advancement:

Executive support and stakeholder ownership

Leadership will identify and support a manageable number of projects that align with our strategic goals and are achievable with the resources available. Having a defined set of projects sets clear expectations and supports the success of our teams. For each project, regardless of its size, it's important that a change management form is submitted, drafted by the project sponsor. This ensures the project owner has a thoughtful understanding of the current state and the desired outcomes. It is also necessary to collaborate with Advancement leadership and the CTO before entering into any third-party agreements. Every product should have a designated product owner or manager who can provide training and serve as a subject matter expert for the business process the product supports. Stakeholder ownership can be established through the Data Collaborative and partnering with the appropriate data steward.

Digital transformation and online philanthropy

Clemson Advancement is dedicated to providing the top donor experience, and a digital transformation can enhance online philanthropy by streamlining processes and increasing engagement. Through innovative technology, Clemson Advancement can more efficiently manage donations, track donor interactions, and personalize communication, ensuring a smoother and more transparent giving experience. Our goal is to connect with a wider audience, transcend geographical boundaries, and enable donors to give with ease at any time. The online experience can be enhanced through a donor portal for endowment reporting which can promote digital engagement and philanthropy. We can provide tax receipts, endowment statements, and automate pledge reminders which can encourage further online activity. Online behavior and personal preferences are incentivized when the online experience is done well.

Enhance security through modernization

Our constituents have entrusted Clemson with confidential and valuable information through our CRM and other systems, many of which operate as stand-alone applications. Clemson Advancement is committed to continuously strengthening the security measures that protect the data. Using APIs for integration between applications enhances automation and streamlines processes. Greater use of multifactor authentication can help protect data by validating access. Attention to master data management provides audit controls for data access. Fostering a culture of security awareness, implementing strong authentication protocols, and regularly updating systems and software are critical strategies to mitigate risks. By combining these innovations, Clemson Advancement can build a resilient security framework that evolves to address emerging threats and protect data from ever-growing cybersecurity risks.

Focus and Finish style of project management.

Advancement IT team provides support to many other units within Clemson Advancement: Alumni Relations, Annual Giving, Business Intelligence, Central Development, Donor Relations, Finance, Gifts & Records Management, Prospect Management, Talent and Development Operations, and University

Development. Currently, teams submit multiple project requests, but these can lose momentum due to competing priorities or lack of leadership support within the early stages. The capacity for the IT team to effectively support the division is limited to approximately ten projects at a time, which includes a mix of large and medium-to-small projects. By encouraging each unit to focus on one project at a time, the IT team can ensure successful completion and move on to the next project with clear objectives that support our strategic goals.

Invest in IT developers and technical support.

For every 4 to 5 people hired in Development, IT will seek approval to hire one new developer or business analyst. Medium-sized organizations (50-200 full time employees) typically need a development team of 5–15 developers, respectively. As the organization grows, there will be more demand for product development, technical support, and maintaining internal systems. It is recommended that one developer provides support for 10-20 employees. Clemson Advancement is currently at a ratio of 1:30.

All IT expenditures are approved by the Chief Technology Officer.

The IT team cannot support what we do not know about. The decision to purchase a product is often made without the right team members being included. The Chief Technology Officer can facilitate awareness and collaboration among leaders and across the organization. With IT purchases spread across the organization, the IT budget is not as accurately measured. Developing a more centralized IT budget will ensure leadership is aligned, strategies are supported, and the return on investment is met. As products come up for renewal, the Chief Technology Officer will work with divisional leaders to evaluate functionality and centralize the funding for technology.

Product selection process with the CTO.

Clemson Advancement should not enter into vendor agreements without a documented strategy or use cases. The current approach is to identify a product that offers a solution to a problem. This positions vendors and outside consultants to dictate our strategy. Clemson Advancement needs to develop a culture where we identify and define the *problem first* and then propose a solution, which may or may not include the need for a new product. If a new product is deemed necessary, then the product selection process must follow these steps:

- a. Utilize existing Blackbaud CRM functionality and the ancillary products we already own.
- b. If the current systems do not meet our business needs, then consider the Blackbaud Marketplace.
- c. If the Blackbaud Marketplace does not meet our business needs, then consider a third-party vendor.

Develop synergy through an enterprise Event Management solution.

There are multiple teams who are charged with planning and facilitating events. However, the experience of each event is often uniquely different because teams utilize different systems and business processes. To deliver the number one donor experience, Clemson Advancement should expect all event planning teams to follow similar processes that support invitations, registration, and communication. Valuable data should be captured and stored within the CRM, which will ensure each event feels intentional and detailed with the experience we offer.

Centralize reporting and data analytics.

Having a central team responsible for reporting ensures consistent, accurate, and actionable data. The Business Intelligence team has invested in expertise and has the resources to serve as the central source for reporting and data analysis. Having a user-friendly reporting tool and proper training, Advancement colleagues can be empowered to access common data sets and gather information for decision-making. The IT team supports the Advancement Business Intelligence team and works in partnership with the university Business Intelligence team to develop more innovative data warehouse solutions. CADENCE is the source of record; The IT team implements and supports the systems that store and secure data, while the Business Intelligence team analyzes this data to generate insights that drive business decisions.

Streamline communication across the organization.

Various teams are using different applications for communication. Constituent engagement is lost when we are unable to measure the effectiveness of our communication. Some teams send communication from the CRM while other teams are using a third-party solution. Teams can work together to streamline the communication process, offer a preference center for audiences to select content, and capture the data to improve the way we engage and solicit. The IT team can help facilitate collaboration for events and communication platforms. The goal is to collect engagement data by making the CRM the record system and integrating ancillary systems to help collect the data.

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IT recommendations provided by the BWF Assessment:

The following recommendations come directly from the BWF Assessment that was provided in January 2023. The headings and bullet points are directly from the report and a status is provided to mark the progress of each recommendation. ***These topics set a direction for enhancement, but they are organic and may change as better technology or improved processes are implemented.***

Recommendation 1 - Establish and recruit for a chief technology officer reporting to the president and CEO of the Foundation.

Complete

This position focuses on solving two key problems for the organization:

- Streamlining strategy and decision making over technology priorities
- Establishing a chief security position to minimize liability
- Key oversight responsibilities should include:
 - Senior leader for the advancement services team
 - Technology strategic planning
 - Technology budget and financial planning
 - Cyber security planning and program implementation
 - Security policies and procedures
 - Liaison with the university senior technical staff (CIO, CISO)
 - Technology vendor relationship management

Recommendation 2 - Restructure data governance committees to focus less on establishing project priorities and focus more on data strategy.

Complete

Data governance (council and stewards) has comingled governance, prioritization, and approval for technology initiatives. In smaller organizations, this model may be effective but does not work for a complex organization such as Clemson.

BWF recommends disjoining data governance and strategic technology intake and prioritization processes to better serve the needs for data integrity and strategic portfolio management, including empowering a CTO to independently prioritize large technology initiatives.

The role of the data stewards should be revised accordingly to reflect the separation of governance, technology prioritization, and implementation duties.

Recommendation 3 - Invest in additional operations staff to fully realize BBCRM's potential and move beyond simple platform maintenance.

In Progress

Additional strategic investment in business analyst resources is required to identify, prioritize, and develop solutions for existing team needs that may be met by BBCRM functionality. Business Analyst roles include:

- Identification and prioritization of end-user needs based on real-world interactions with staff.

- Providing expertise in the full functionality of BBCRM to identify functionality that is disabled or add-ons that may be utilized.
- Identify opportunities for system customization.
- Translate user requirements into technical requirements for projects utilizing internal or external programming resources.

Recommendation 4 - Audit operational areas of concern relative to the new CUF structure that could be remediated by additional training and change management.

In Progress

Auditing and creating standard operating procedures and policies that enhance the recruitment and hiring process for the Foundation.

Allocate budget for one professional advancement conference annually for each development, alumni, and foundation team member.

Recommendation 5 - Assuming a long-term commitment to CADENCE, the platform must be reintroduced to users via a comprehensive training program that encompasses onboarding and continual learning needs.

Needs Work

Many team members’ technological requests can often be addressed through additional training. Consider bringing in an outside specialist with a “train the trainer” approach. Identify subject matter experts for each unit and build out a training program so that all team members follow standard operating procedures.

Utilize help desk tickets to inform recurring data issues that can be addressed as part of the training program.

Recommendation 6 - Create clear decision-making authority regarding a marketing platform to create a cohesive vision and fully utilize platform functionality.

Needs Attention

Decision-making authority should be established to determine which Clemson platforms (BBIS, CADENCE, Emma, Constant Contact, Crescendo, etc.) will be adopted and which should not. Clear ownership is required in this area to prevent departments from making independent decisions that do not integrate with CADENCE.

Consideration of email marketing platforms needs to be approached from a donor centric approach as opposed to which platform is easiest to use for select internal audiences. Data flowing into CADENCE from various communication platforms is fragmented and cumbersome. Clemson should clearly define the functionality and KPIs desired from communication efforts to drive platform evaluation.

Recommendation 7 - Prioritize baseline BBCRM functionality over high maintenance customizations.

In Progress

Each customization should be individually evaluated further to determine return-on-investment to ensure resources are not diverted away from more impactful efforts.

- Premium Donation Form - This customization is reaching the limits of support by both Clemson and Zuri.
- Consecutive Giving - There is likely little return-on-investment to this complex customization.
- Honor Roll - Cease the publication of online honor rolls, especially considering the overhead involved for Clemson.
- Phonathon – Continue to assess the ROI and consider a more digital, online giving focus.
- Zuri Expert Access - Additional investment in business analyst resources would assist in realizing these potential benefits.

Recommendation 8 - Assess and prioritize integration and automation opportunities for CADENCE.

Needs Work

- Leverage the ecosystem map to explore integration opportunities.
- Investigate Ticketmaster integration leveraging Sky API and the data warehouse.
- Further automate and streamline gift processing (i.e., AQ2 to PaperSave)
- Explore the usage of Omatic Cloud to assist with streamlining imports and updates into CRM.
- Evaluate functionality of CADENCE and Emma. Is there integration between the two platforms to help with list pulls, record tagging, and centralize opt-outs and communication preferences?

Recommendation 9 - Capitalize existing prospect research tools to realize additional capabilities that already exist, particularly with iWave.

Not Started

- Consider optimizing iWave to incorporate a more comprehensive strategy and cadence for wealth screening larger segments of the alumni population.
- Re-establish Clemson's partnership with iWave to explore additional capabilities, i.e., modeling. iWave will provide a walk-thru of base and new feature sets at the request of the customer.
- Create ongoing training opportunities for fundraisers that focus on data availability and available tools that can create efficiencies in the fundraising process.

Recommendation 10 - Explore efforts to streamline production, distribution, and long-term access of endowment reporting.

Needs Work

- Evertrue's Fundriver platform does not currently have a Blackbaud CRM integration.
- Explore Evertrue's sister platform, Odder, which provides digital endowment report delivery to your constituents and is integrated with Fundriver. Evaluate current offerings with iFOLIO.

Recommendation 11 - Establish policies for adding attendees for all university events to enhance data tracking and integrity efforts.

Needs Attention

- Developing an event policy should be a collaborative activity. Event policies should be driven and developed by the events team with cross-functional input from data governance and information technology teams to ensure technology and security concerns are being considered.
- Distinguish tracking of event registrants and event attendees in CADENCE for accurate reporting and analysis correlated with major gift prospect development, stewardship, and alumni event efforts.
- Coordinate with all units and departments that use other event tracking software to capture event attendance and either use batch, custom batch, or import to update invitations and attendance.

Recommendation 12 - Establish Clemson's long-term commitment to Tableau and define its role in the organization's long-term reporting strategy.

In Progress

- Implement a central reporting structure and develop various reporting tools that meet the needs of the organization. It is not common for all reporting to be met by an enterprise BI tool such as Tableau. Rather, Clemson should define what types of information will be met through varying channels such as query build, Power BI, SQL, or Tableau. Tableau is typically best suited for high-level dashboards that require interactivity and visualization.
- Clemson may wish to explore partners that can develop core reporting suites to allow staff to focus on unique data requests.
- Develop a communication and training plan to reintroduce internal teams to CADENCE and Tableau reporting. Plan for continual communication as new reports are developed.

Recommendation 13 - Identify and prioritize opportunities for continual cleanup and improvement focused on data integrity.

In Progress

- Create an annual data integrity plan that identifies consistent audits and data appends with a timetable and responsibilities. Assess vendor partners that specialize in data hygiene and enrichment services.
 - National Change of Address (NCOA) - configure in CADENCE to be run automatically.
 - Deceased Finder—At the least annually.
 - Phone Finder—At the least annually.
 - Email Finder—At least annually.
 - Employment updates—consider LiveAlumni or similar platform.
- Audit and remediate areas of greatest need. Suggestions include:
 - Duplicate records, proposals, opportunities, constituency codes, pledges, and recognition credit

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Core functionality provided by Blackbaud and partners.

In alignment with one of the CTO Guiding Principles and the BWF recommendations, making full use of the Blackbaud Feature Packs extends the capability of the Blackbaud CRM. These packets are readily available on the Blackbaud Marketplace and can help streamline workflows and business processes. The Chief Technology Officer and the Advancement IT team meet regularly with Blackbaud to ensure full support and full awareness of innovative technologies.

<p>b> Blackbaud CRM Recurring Gift Feature Pack <i>Blackbaud, Inc.</i></p> <p>Take control and amplify your recurring gift programs!</p> <p>Paid</p>	<p>b> Blackbaud CRM File Transfer Feature Pack <i>Blackbaud, Inc.</i></p> <p>Save time by seamlessly transferring data between Blackbaud CRM and your General Ledger, and enable bi-directional data transmission to and from FTP/SFTP sites.</p> <p>Paid</p>	<p>b> Blackbaud CRM eReceipting Feature Pack <i>Blackbaud, Inc.</i></p> <p>Streamline gift management with automated email receipts sent.</p> <p>Paid</p>	<p>b> Blackbaud CRM Volunteer Enhancements Feature Pack <i>Blackbaud, Inc.</i></p> <p>Scale up your volunteer management capabilities.</p> <p>Paid</p>	<p>b> Blackbaud CRM Supporter Journey and Timeline Feature Pack <i>Blackbaud, Inc.</i></p> <p>Simplify Multi-Channel Outreach with the Blackbaud CRM Supporter Journey Feature Pack</p> <p>Paid</p>
<p>b> Blackbaud CRM SharePoint Connector Feature Pack <i>Blackbaud, Inc.</i></p> <p>Quickly create and access a SharePoint folder with additional documentation related to a constituent.</p> <p>Paid</p>	<p>b> Blackbaud CRM Simplified RSVP Feature Pack <i>Blackbaud, Inc.</i></p> <p>Simplify your supporter registration experience and get instant RSVP updates!</p> <p>Paid</p>	<p>b> Blackbaud CRM Report Accelerator for Blackbaud Data Warehouse Feature Pack <i>Blackbaud, Inc.</i></p> <p>Get a more complete vision of your data by streamlining the creation of custom reports from the Blackbaud Data</p> <p>Paid</p>	<p>b> Blackbaud CRM Region Codes Feature Pack <i>Blackbaud, Inc.</i></p> <p>Provides a tab on the constituent record which auto-populates a "Region Code" based on a set of criteria in the Administration functional area. The Region Code is tied directly to all the constituent's</p> <p>Paid</p>	<p>b> Blackbaud CRM Drag-and-drop Email Editor (Kalimna) Feature Pack <i>Blackbaud, Inc.</i></p> <p>Kalimna is a fully integrated email editor, and its drag-and-drop user interface makes designing effective emails quick and easy.</p> <p>Paid</p>
<p>b> Blackbaud CRM Just Giving Connector Feature Pack <i>Blackbaud, Inc.</i></p> <p>Blackbaud CRM customers can now easily capture fundraising details from JustGiving, the world's leading crowdfunding and social fundraising solution, without managing a manual</p> <p>Paid</p>	<p>b> Blackbaud CRM Events Barcode Scanner Feature Pack <i>Blackbaud, Inc.</i></p> <p>Event Registration Management Made Easy!</p> <p>Paid</p>	<p>b> Blackbaud CRM Custom Branding Feature Pack <i>Blackbaud, Inc.</i></p> <p>Whether you prefer your organization's own branding, or you have given your Blackbaud CRM application its own unique 'persona', we can enable a customized skin that aligns to your preferred look.</p> <p>Paid</p>	<p>b> Blackbaud CRM Bank Account Validation Feature Pack <i>Blackbaud, Inc.</i></p> <p>This feature pack saves time by automatically populating a new 'Validate' action on the constituent financial account add and edit forms. When this action is selected, BBCRM will</p> <p>Paid</p>	<p>b> Blackbaud CRM Annual Tax Statement Summary Feature Pack <i>Blackbaud, Inc.</i></p> <p>Remove annual constituent tax statement headaches and simplify donation receipt distribution.</p> <p>Paid</p>