Introduction: This document is intended to serve as a recommended framework for Cal Poly based on current business practice. It is structured as a checklist for use in considering the acquisition of software-based applications. The concept (has been/will be) endorsed by the campus computing committees\(^1\) who will serve as a key review gate for subsequent purchases whose total value is estimated to be in excess of $20,000 on a Total Cost of Ownership basis. This level is a current “threshold” and was recommended from current consultation, subject to upgrades guided by implementation experience and specific committee actions.

One key goal of this framework as implemented will be to assist the university toward a process of better understanding total cost of ownership (TCO) as a key overall approach to determining such decisions based on “value beyond price” in an IT context.

This framework is not intended to further burden the existing administrative procurement process, but to serve as a current best practices business tool to further communication and understanding of the implications of purchasing software tools in advance of the actual purchases and to make better life-cycle IT based decisions.

Specific framework implementation for specific decisions will be negotiated between the unit sponsor(s) (if applicable), ITS, and the appropriate computing committee(s) based on the nature of the proposed acquisition (e.g., academic, administrative, enterprise-wide application, etc.), the anticipated cost of the project, and the perceived impact of the solution under consideration on present and future methods of operation. It is expected that all committees will address IT decisions of both purchased and donated assets within this framework.

It is also expected that the respective computing committees will develop their own processes, and statements of roles and responsibilities with regard to implementing this framework within the culture and charter of each committee.

It is expected that the depth and detail of the review expended will be appropriately comparable with the value of the proposed expenditure and its impact on operations or new services.

\(^1\) While designed for IACC, AACC and/or IRMPPC per se, SC3 should at times be in either an assistive, consultative or possibly active user role for this framework.
Framework for Decision Making
With Regard to the Acquisition of Software-Based Applications

Prologue
Assumption: There is an increase in the value and the quality of IT decisions such as these (software applications) to have functional organizations take a key or lead role in evaluating acquisitions tied to functional areas.

An introductory statement should be developed that addresses basic issues, including, but not limited to:
1. Why is this needed?
   a. Identify: significant priority or early applications which drive higher level priorities or urgency.
   b. Cost: with (severely) constrained resources, there is a benefit for an explicit process that must emerge
      i. to better assess demand and requirements,
      ii. to add visibility and discipline to understand current resources and costs
      iii. to address TCO factors and understanding
      iv. to streamline procurement processes (e.g., duplicate titles with similar features)
2. Discuss effect of vertical applications / bolt-ons in CMS Environment and to other core campus services or applications (e.g., messaging, calendaring, teaching & learning environments)
3. Discuss candidate application’s role in an integrated, cost effective, functional, enterprise-wide service model, including:
   a. service and support (start-up and ongoing, including staffing needs; roles of centralized and decentralized units, e.g., LAN Coordinators and non-technical staff)
   b. infrastructure considerations (e.g., extensibility, open standards)
   c. need to make sure it doesn’t violate any back-end or core business services (e.g., administrative, teaching and learning)
   d. flexibility while sustaining consistent operating efficiency and integration

Key / Critical Steps
1. Requirements definition
   a. Unique / specific / more general
2. Problem definition
   a. Fix / solve / improve / strategic
3. Service and support definitions (e.g., Help Desk, Training, workstation support)
4. Alternative solutions or approaches? Why can’t we do this some other way? What is unique or specific in the proposed solution being sought / or that has been found?
5. Options to...Replace / Substitute / Eliminate / Combine with other applications?

6. Integration Requirements with other University Systems and Services
   a. Is the proposed solution solving a functional problem (as opposed to a university service problem)
   c. Are there usability tests and/or reference accounts
   d. Can it be easily integrated into support systems, e.g. help desk/Remedy trouble ticketing work flow, Directory/authentication, uPortal, ADA support, “push/pull” technologies for updates, keyservers uses, etc.

7. Vendor Evaluation / Negotiation: both facts/references, and processes

8. What is the time frame for implementing the proposed solution?

9. What are the key milestones and “measures of success”?

10. What is the exit strategy & time line for the proposed solution?

11. What are the training requirements?

Cost Information

1. What are the easy-to-identify costs – out of the box? First order resources, documentation, Help Desk, etc.

2. Collateral funding issues: are funds currently available? How could this be funded (e.g., IRMPPPC-speed bumps, cost avoidance, business case, elimination of xxx???)?
   a. Address Funding for Acquisition
   b. Address Funding for On-going Support (E.g., Refresh, ongoing support, license growth requirements, maintenance, extended support window? etc.)
   c. Costs to convert data, integrate to Portal, etc.

3. What are the “hidden” / hard-to-find costs – e.g., inadvertent consumption of unidentified resources (e.g., Degree Works eating up the mainframe)

4. What are the functional costs / requirements?

5. What are the costs associated with training?

6. What are the system administration costs / requirements?

7. What are the memory & storage costs / requirements?

8. What are the bandwidth costs / requirements?

9. What are the transaction costs / requirements?

10. What are the on-going maintenance costs / requirements (including staffing needs)? What is the expected cost increase curve for future support?

11. What are the on-going cost savings?

12. Does the vendor have an easy and explicit escalation process and list serve approach to share “bugs”, “fixes”, user group release control, etc.
Decision Making – What is the best /available (procurement) process to guide this decision? Who needs to be involved/informed?
1. Have the committees been engaged and informed? Do they approve?
2. Have the key functional areas been involved? Do they approve? (E.g., LAN Coordinators, non-technical staff)
3. Have legal and policy issues been identified? Addressed? Approved? E.g., ADA compliance, SEVIS, etc.
4. Does the proposed solution meet university data security requirements such as confidentiality of the data, integrity of the data, accessibility / reliability of the systems, legal requirements, etc. Has the information owner and/or steward, been identified assigned, etc.
5. Have key constituents (e.g., Academic Senate) been involved? Do they approve?
6. Final Review of acquisition strategy: Sponsor Unit (if applicable) + ITS to present to (AACC / IACC) for review in context of this framework. Documentation to be supplied prior to review consistent with the overall framework checklist.

General Environment
1. Is this a good fit? For the Campus? At the System Level (CSU-wide)? Technically? Operationally? Strategically?
2. Have the processes/rules been followed in a clear, precise, explicit fashion (e.g., procurement)
3. How does this fit into the ITS strategic plan? Teaching and learning efforts of the University?
4. Is this solution compatible with the existing campus /Resnet IT infrastructure?
5. Is this solution an “industry standard” or is it proprietary?
6. Are there considerations with external entities and/or vendor management issues that should be considered when implementing? (e.g., security, network, service level agreement)
7. Is this a candidate for the development of a system-wide Master Enabling Agreement?