Project Prioritization Process Refinement¹

THE ISSUE

Prior to this technology plan, the process that employees used to request system functionality improvements, new systems, and/or technology services was very decentralized and did not involve any preprocessing (e.g. filtering, prioritizing) of requests at the department or college level before they were submitted directly to ETS. These requests frequently asked for short project completion times regardless of whether or not the department had previously involved ETS in the process of choosing and purchasing the application. User expectations that all submitted projects could be completed by ETS within requested timeframes did not take into consideration either the current workload of ETS teams or the importance of some projects over others. Initiating new projects often caused a cycle of disruption and inefficiency as ETS developers / technicians were pulled off projects in midstream to begin work on other "higher priority" projects. The result has been excessively long project implementation times and much frustration on both sides.

THE SOLUTION

The size of the district, with two colleges and the Central Services departments, necessitates that the district adopt a formal technology project prioritization process that continuously sets and revises project priorities. This new process must be responsive to college and districts needs allowing for the inclusion of new projects as well as the elimination of existing projects (which may have fulfilled their objectives or no longer have a purpose). Accordingly, the following project prioritization process is proposed.

Process Steps

- 1. Users submit project requests to the appropriate technical organization (normally to ETS but could also be to the Technology Resources Group at De Anza College or Foothill College).
 - Technical teams are brought in early in the project definition process and work with users to define system requirements and develop potential solutions
 - Technical representatives work with users to estimate the scope, cost, and ranking² of projects
- 2. ETS will submit each project request to the appropriate college or Central Services *review authority* along with an interim ranking based on an analysis of project attributes
 - Each college and the Central Services organization will appoint a review authority to locally review and prioritize college initiated / requested projects. The review authority is either a committee or a person who has the responsibility and authority to act as a central clearinghouse as well as a decision maker for prioritizing projects requested by the organization.
 - Each review authority will create a prioritized list of projects based on the initial ranking by ETS as well as other relevant information
- 3. After prioritizing, the colleges' / Central Services *review authorities* will submit their prioritized lists to the district *review authority*.
 - The district review authority shall be made of a senior staff member from each college and central services and the Chief Technology Officer.
 - o The district *review authority* shall convene on a quarterly or other to-be-determined frequency to consolidate projects from all three lists into one district prioritized list.
 - New or existing projects may be placed in front of previously prioritized projects that have not already been started.

¹ This document is an excerpt from the 2010-2016 Technology Plan soon to be published

² Refer to Appendix K for an example of a project evaluation tool

- ETS and other appropriate technology organizations will develop schedules and refine the
 cost estimates for *mission critical* projects³, which can be initiated or completed within two
 years and which have a source of funding and point of contact (POC) identified. These
 schedules will be revised on a quarterly basis.
- 4. The Vice Chancellor of Technology shall submit the revised project prioritized list to Chancellor's Staff for review and approval and then communicate the list to ETAC, CAC and Senior Staff.
- 5. Technical teams will begin work on projects according to the schedule
 - New projects must have both a source of funding and a point of contact (POC) before
 projects will be initiated. The point of contact is a person who has the authority and
 responsibility to make decisions about the project representing the user perspective (e.g.
 articulating requirements, setting dates for when functionality is needed, approving
 designs, signing off final products, etc.)
 - Once work has begun on a project, the technical team will continue to work on the project until it is completed (e.g. projects, which have already started, will not be disrupted by other projects except in emergency situations).
 - Technical teams may elect to work on projects that require minimal resources and can be completed in a short timeframes regardless of prioritization status.
- 6. Technical teams shall report progress on project completion on a quarterly basis.
- 7. Dependencies, equipment life span and vendor maintenance / support availability will be taken into consideration in project scheduling

DEFINITIONS:

- Project: For purposes of this prioritization process, a project is defined as an activity undertaken
 to acquire, develop, enhance, or repair functional capabilities or services using IT components
 (software, hardware, or both), in which a significant level of effort is required to meet user
 objectives. A significant level of effort is defined as taking more than 40 labor hours to complete
 or costing more than \$5K. As an example, requests to install computers, repair workstations, or
 troubleshoot multi-media rooms should not be considered a project and will be addressed using
 normal ETS operational processes.
- Emergency situation: An emergency situation exists if:
 - o A legal mandate or regulation requires timely project completion
 - Lives are threatened or property is at risk of unacceptable damage or loss without timely project completion
 - o Unacceptable revenue loss to the district will result without timely project completion

Note that an individual's failure to notify ETS of project requirements in a timely fashion does not constitute an emergency situation.

• Project initiation: Project initiation occurs when the project has been scheduled and the start date for the project has passed.

³ Dependencies, equipment life span and vendor maintenance / support availability will be taken into consideration in project scheduling. Mission critical projects refers to the criticality of projects as listed on the Prioritized Technology Lists.

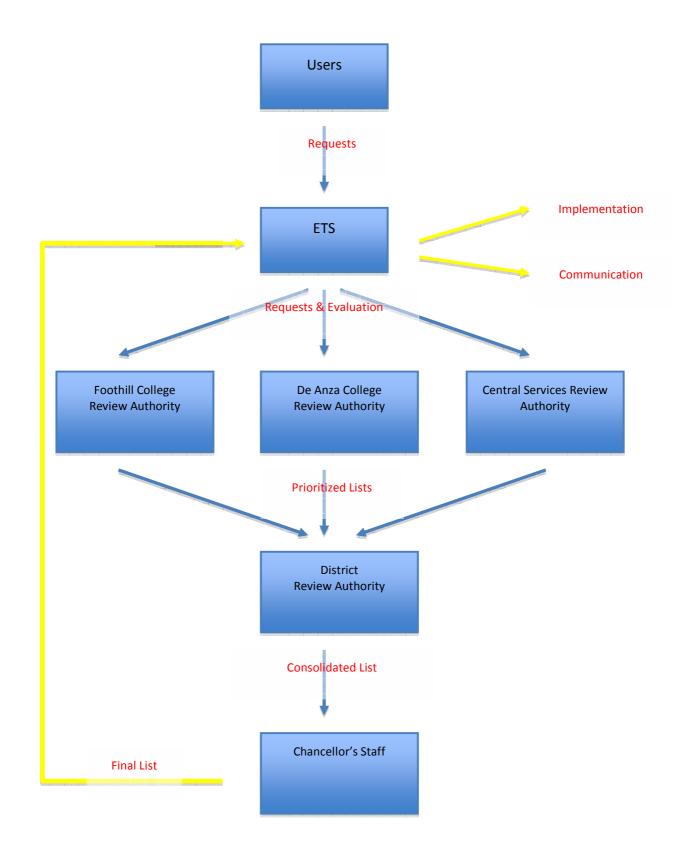


Figure 1: Project Prioritization Process

APPENDIX K PROJECT EVALUATION TOOL

ETS adapted a tool initially developed by Butte College for technology project prioritization, which displays scores for project impact versus project effort for each project so that comparisons can be made. The tool is used by completing a questionnaire on each project covering 19 factors, three of which are shown in Figure 7 as an example.⁴

Figure 2: Project Evaluation Tool Factors for Evaluating Projects (3 shown)

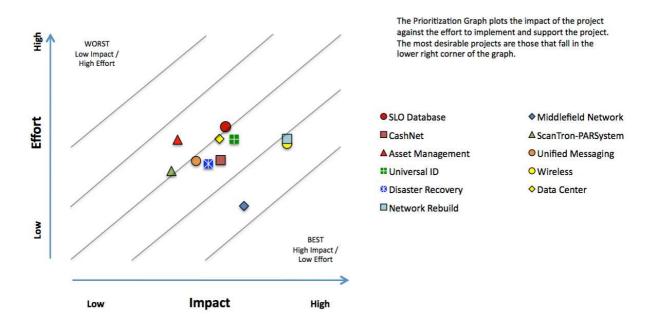
Factors	Score	Weight	Max Value	Percentage Impact
PROJECT IMPACT				
Section 2: Project Objectives and Criticality (affects Impact axis)				
Relationship to Strategic Plan Elements (Goals, Commitments, Objectives & SLOs)				
Not Aligned With Any	0			
Supports / Enhances Achievement of a few	5 7			
Supports / Enhances Achievement of several Critical to Achievement of one or more	10	1	10	9%
Critical to Achievement of one of more	10	1	10	970
Enhancement				
Will not enhance business, student, or instructional services	0			
Will moderately enhance business, student, or instructional services	3			
Will significantly enhance business, student, or instructional services	5			
Is critical for infrastructure improvement	9			
Is critical for Health, Life, or Safety	10			
Is necessary to comply with Regulatory / legal mandate	10	2	20	18%
Sponsor's Priority				
Low	0			
Medium	5			
High	10	1	10	9%

The tool automatically calculates scores for *Project Impact* and *Project Effort*. When several projects have been evaluated using the 19 factors, the summary is a graph that plots project impact versus project effort, which clearly depicts the relationship among them. See Figure 8.

⁴ Model adapted with permission of Andy Miller, Butte College, 2010 Foothill – De Anza Community College District Educational Technology Services

Figure 3: Project Evaluation Tool Graph Showing Project Distribution

Prioritization Graph



The tool can be used in the initial ranking of projects as well as to compare a new project with an existing portfolio of projects to determine if the new project should replace an existing project in priority. Please note that the factors for the Project Evaluation Tool, as depicted in the examples above have not been fully adjusted for Foothill - De Anza Community College District. As such, project distribution may be different when the factors are adjusted.

The Project Evaluation Tool is only a starting point for determining projects prioritization and should be used in conjunction with collaborative discussion in finalizing project priorities.