



STATE CENTER
COMMUNITY COLLEGE DISTRICT
FRESNO • REEDLEY • OAKHURST • MADERA • CLOVIS

TECHNOLOGY ACQUISITION PROCESS

Presented by:
Cambridge West Partnership, LLC

Table of Contents

Purpose of the Document.....	3
District Environment	3
Mission, Vision, Value and Goals	3
Current Technology Environment.....	5
Current Technology Acquisition Approval Process	5
District-wide Technology Organization	6
District Information Systems	6
Campus Information Technology Departments	7
Summary of Student, Staff and Administration Perspectives regarding Technology	7
Correlation Between District and Campus Goals.....	9
Proposed Technology Acquisition Approval Process	10
Proposed Acquisition Process Flow	11
Proposed Acquisition Process Documents.....	12
Program/Administrative Reviews	12
Project Proposal/Total Cost of Ownership	12
Prioritization Rubric.....	12
Appendix A – Example Project Request Form & TCO Analysis	13
Appendix B – Project Prioritization Matrix	16

Purpose of the Document

The purpose of the *Technology Acquisition Process* is to clearly document for all constituents the process for technology acquisition, approval, prioritization and implementation at State Center Community College District. In addition, this document recommends changes for improvement in the process that will streamline the approval process, identify the total cost of ownership including one-time and ongoing costs, improve communications and provide consistent information for prioritization of projects.

During the process of developing the *District-wide Technology Plan 2019-2022*, constituents across the District overwhelmingly agreed that a clear and well-documented process for the acquisition of technology would be very beneficial. As a result, the following initiative was proposed:

9.a.2 Review, optimize, document and widely distribute the process for technology (hardware and software) acquisition including involvement of appropriate IT and purchasing department resources (III.C.2)

This document is designed to address this initiative.

District Environment

Mission, Vision, Value and Goals

The *SCCCD District Strategic Plan 2017-2020* identified the Mission, Vision, Core Values and Goals. The Mission, Vision, Core Values and Goals also provide the focus for this analysis and the resulting recommendations. Highlighted are those items that indicate a well-documented technology acquisition process is needed:

Mission Statement

State Center Community College District (SCCCD) is committed to empowering our colleges in their efforts to promote exemplary educational opportunities and to provide safe, inclusive, and supportive learning environments leading to student success and global competitiveness which will transform our region.

Vision Statement

Empowering through Educational Excellence

Core Values

STEWARDSHIP

We are committed to the enhancement, preservation, conservation, and effective utilization of our resources.

COLLABORATION

We are committed to fostering a spirit of teamwork internally with our students, faculty, classified professionals and administrators while expanding our external partnerships with education, industry, and our community.

INTEGRITY

We are accountable, transparent and adhere to the highest professional standards.

INNOVATION

We are committed to an educational environment promoting actions and processes that create new methods, ideas, or products.

INCLUSIVITY

We are committed to and intentional in creating an environment that cultivates, embraces, and celebrates diversity.

Goals**EXCELLENCE IN EDUCATION**

SCCCD is committed to empowering our colleges to cultivate excellence in educational programs and student support services.

INSTITUTIONAL EFFECTIVENESS

SCCCD is committed to data-informed but people-driven continuous quality improvement of processes and resources.

LEADER IN HIGHER EDUCATION AND COMMUNITY COLLABORATION

SCCCD is committed to being a force for positive change by expanding partnerships in education and workforce development.

Most significant to consider in the *Technology Acquisition Process* is the goal of Institutional Effectiveness and the values of stewardship, collaboration and innovation.

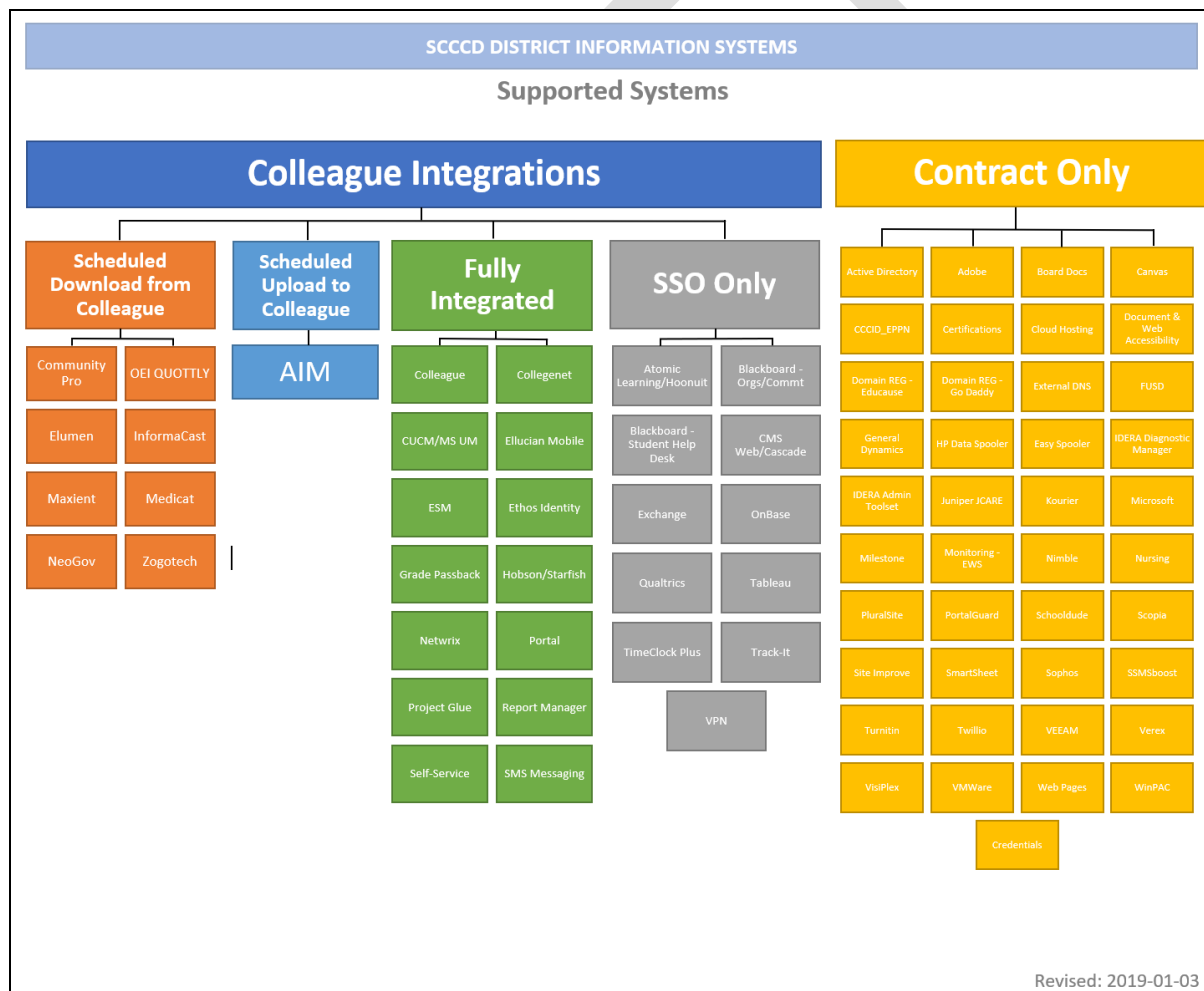
District-wide Technology Organization

District Information Systems

The District Information Systems Department (IS) works very closely with the Campus IT Departments to support the full range of IT-related capabilities in the District. The IS Department provides the following services for the entire District:

- Enterprise Resource Planning System (Colleague) and related systems
- Telephony
- Internet Services
- Wide-Area Network
- Teleconferencing
- Helpdesk

The diagram below depicts the systems supported:



Campus Information Technology Departments

The Campus IT Departments are responsible for PC support, LAN support, classroom IT support, student/employee help desk support, specialized computer driven equipment, local web and client/server applications, databases, virtualization, data center operations, VDI and campus resources such as shared folders. Each campus has its own decision-making processes for technology acquisition that are completed before requests are forwarded for discussion and funding at the District level.

Summary of Student, Staff and Administration Perspectives regarding Technology

During the development of the *SCCCD District-wide Technology Plan 2019-2022* interviews and surveys resulted in thirty-six (36) key items to be included in the plan numbered below in priority order. These items were grouped into ten (10) strategic themes. Below are the results of the consolidation. Highlighted are those key items that should also be considered when determining the technology acquisition process:

State Center Community College District Technology Plan Summit Strategic Themes	
Strategic Theme	Key Items
Effective Planning	1. IT Project List assessed, prioritized, managed and communicated; software evaluation process documented; clear goals; who screams the loudest gets projects done; IT says "Yes" to everything
	13. Assess equipment (network, servers, storage, A/V etc.); replacement planning; performance improvement; Wi-Fi is not working well in all locations; equipment disposal
	15. Plan for support of mission critical applications; administrative reviews; IT departments in reactive mode; focus on the agreed upon system
	16. Leadership and vision for meeting technology demands; Strategic Planning on an ongoing basis
	24. Align with District/campus plans; i.e. Facilities Master Plan, Distance Education, Technology Plan, etc.
	25. Link plan to student success initiatives like Guided Pathways etc. which are clearly defined and used for prioritization; define how technology can help us meet the goals in these areas
	27. Identify new systems that make the institution better; i.e. staff more effective and efficient
	29. Leverage Statewide projects
Adequate Staff and Resources	32. Annual Review of the plan is part of the plan
	2. Organizational review and staffing analysis; roles and responsibilities between campus and district defined; review of job descriptions and required skills; why not centralized management; need at CIO; succession planning

	<p>8. IT departments unable to meet demand; result in end arounds or duplicate systems; IT departments not working together; no incentive to coordinate; IT (campus and District) not involved from beginning</p> <p>17. Help for end users-staff and students; shared help desk; after hours support plan; self-help services i.e. question answering</p> <p>33. District as a support organization to campuses</p> <p>36. Inadequate work space for technical staff</p>
Effective Policies/Procedures/Standards/Guidelines	<p>3. Policies/procedures/guidelines/standards need to be reviewed, documented, standardized across District, agreed too and followed; currently based on personal integrity; construction standards; drone policy</p> <p>9. Data Governance; too many people have too much access; shadow systems; some need more access to do their jobs</p> <p>21. Interface to outside systems; integration of systems</p> <p>28. Accessibility standard</p>
Secure Data and Systems	<p>4. Security planning and assessment, standards and proper staffing; mitigate risks i.e. Active Directory; consider a Security Officer</p>
Effective Governance and Decision Making	<p>5. IT Governance needs to be reviewed, strengthened, clarified, documented; constituents not getting information about issues and decisions; clarify role of DTAC; each campus does their own thing; need a CTO to represent the department</p> <p>6. Review, clarify, document and enhance technology decision-making process</p>
Effective Communications/Training	<p>10. Training on systems and security for users; technical staff in need of more training; cross training of technical staff; training for new employees</p> <p>11. Better communications across the District; improved emergency communications; outage notifications</p> <p>17. Help for end users-staff and students; shared help desk; after hours support plan; self-help services i.e. question answering</p> <p>28. Accessibility support</p>
Optimization of Technology	<p>12. Systems portfolio analysis; how will we sustain all systems; eliminate duplication; ensure continued operation; licensing needs reviewed; minimize customizations</p> <p>14. Standardization of systems and equipment across the District for effectiveness and efficiency; i.e. Help Desk, Network, etc.</p> <p>20. Evaluate ERP (Colleague); assess effectiveness and use; leverage capabilities</p> <p>22. Email is limiting ability to do work; postmaster accounts not used properly</p> <p>23. Use economies of scale when acquiring and/or managing technology across the District; inefficiencies</p> <p>29. Leverage Statewide projects</p> <p>30. Cloud evaluation for systems</p>
Process Improvement	<p>18. Review technology acquisition processes; document and communicate</p> <p>19. Business process analysis and alignment with systems; streamline processes</p>
Emergency Preparedness	<p>7. Disaster recovery/business continuity planning; safety of data centers; fire suppression</p>

Support Instruction

26. Support for instruction and curriculum development including LMS; Canvas support from one campus; pedagogy to drive technology

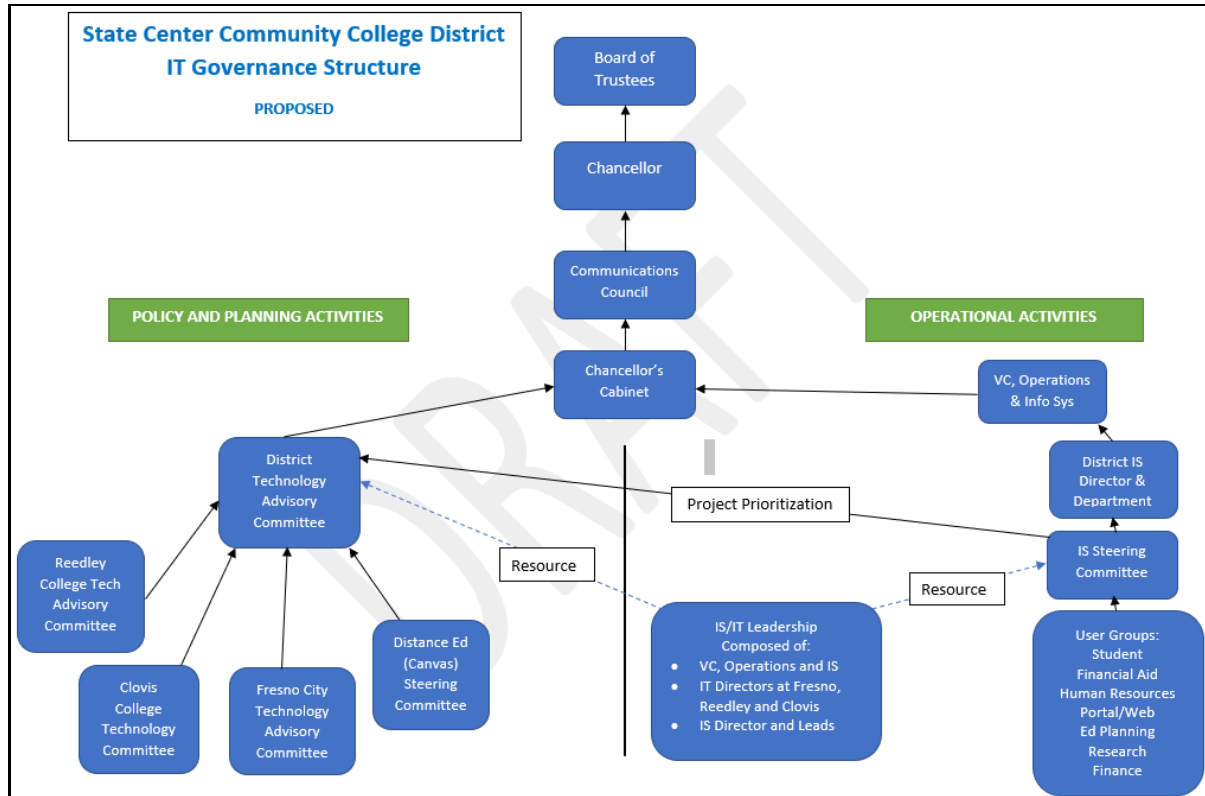
Correlation Between District and Campus Goals

Technology goals across the District also correlate with the District Strategic Goals and District Strategic Themes. The chart below shows the correlation and the highlighted areas also indicate the need for streamlined effective processes in technology acquisition:

District Strategic Goal	District Strategic Themes	Fresno City College Goals	Reedley College Goals	Clovis Community College Goals
Excellence in Education	Support Instruction	1,4,5	1,2,4	2,3,4
Institutional Effectiveness	Effective Planning	3	1,5	2,4
Institutional Effectiveness	Adequate Staff and Resources	1,2,3,4,5	1,2	1,2
Institutional Effectiveness	Effective Policies / Procedures / Standards / Guidelines		4	3,4
Institutional Effectiveness	Secure Data and Systems			
Institutional Effectiveness	Effective Governance and Decision-making	3,6		
Institutional Effectiveness	Effective Communications and Training	5	3	
Institutional Effectiveness	Optimization of Technology	1,2	1,2,4	1,2,4
Institutional Effectiveness	Process Improvement	4		
Community Collaboration	Emergency Preparedness			

Proposed Technology Acquisition Approval Process

The first step in a more effective process is an improvement to the decision-making structure under which SCCCD operates. Below is a suggested revision to the structure to streamline the decision-making process as it relates to technology:

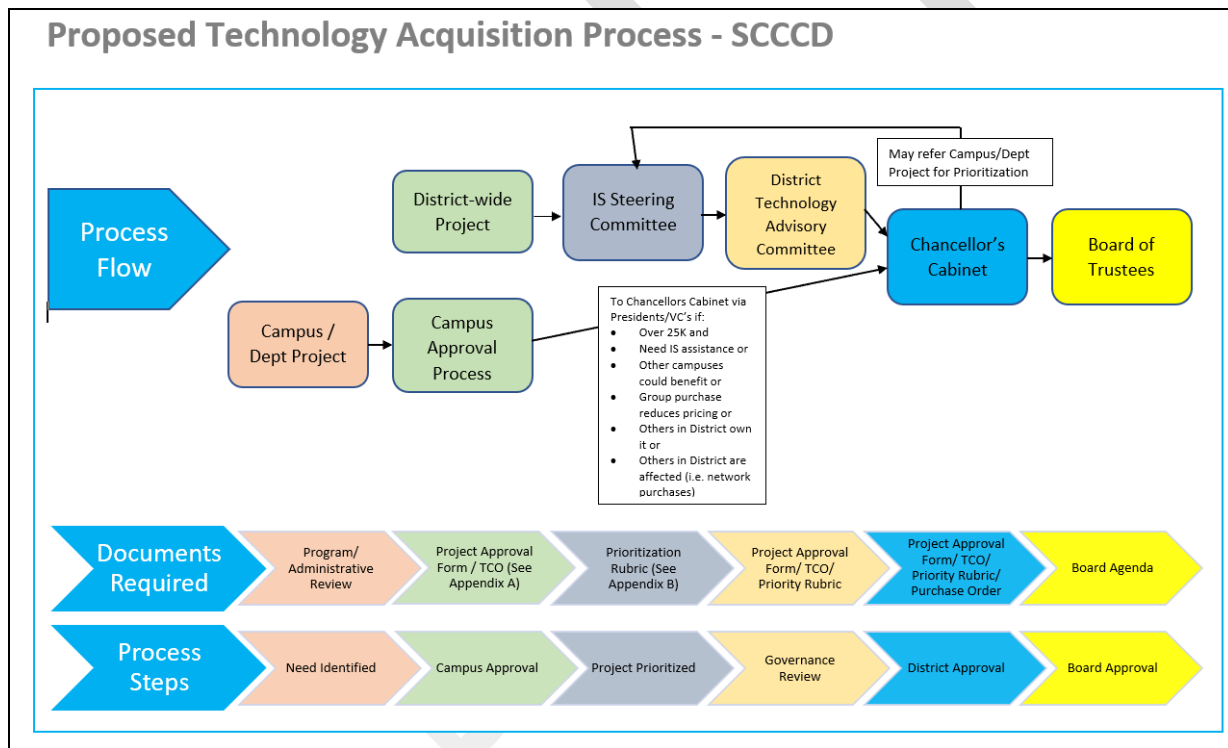


The most notable change is the formation of an operational decision-making committee composed of practitioners and first level managers from all aspects of the District including Student Services, Instruction, IT (campus and District), Finance, Facilities, Human Resources, Research and Educational Services. This group will review all acquisition requests for District-wide projects or projects referred to them by Chancellor's Cabinet and recommend to the District Technology Advisory Committee the prioritization of these projects. These campus and District staff are best suited to understand the needs of students and staff because they work with the systems each day and know the pain points. The District Technology Advisory Committee will review and approve of the priorities and move the results forward to the Chancellor's Cabinet and Chancellor for approval. This proposed change would provide for separation of operational decisions and policy/planning decisions. This also makes the workload more manageable for all committees and staff involved in the process. There is simply too much to be done for one committee to make operational, policy and planning decisions.

Other changes recommended include the formal inclusion of College technology committees and Distance Education with representatives on the DTAC committee and the formalization of the IS/IT Leadership group as a resource to both DTAC and IS Steering to ensure that decisions made can be carried out by the respective IS/IT departments. Another recommended change to IT Governance is the addition of user groups to provide input to the IS Steering Committee decision-making and prioritization of projects.

Proposed Acquisition Process Flow

Given this new decision-making structure, the following process for acquisition of District-wide technology resources and would provide for campus autonomy in local projects while establishing coordination for technology acquisitions that could be shared, could benefit all campuses and the District or affects District-wide systems. The new proposed process is depicted below:



Projects/systems could be proposed from either the campus or at the District level. If a project originates at the campus and is over \$25K and requires IS resources to complete, could be beneficial to other campuses, could get better pricing from a group purchase, has been acquired elsewhere in the District or the purchase affects other systems in the District (i.e. Network equipment) the proposal is taken by the appropriate President or Vice Chancellor to Chancellor's Cabinet. Chancellor's Cabinet could approve or refer the project to the IS Steering Committee for prioritization prior to approval.

If the Project is District-wide the proposal proceeds directly to IS Steering. Appendix A contains a recommended Project Request Form for the project proposal as well as an analysis of the Total Cost of Ownership (TCO). TCO analysis is beneficial to understand the on-going as well as one-time costs associated with technology acquisition and is identified in Accreditation standards.

The IS Steering Committee makes a recommendation on the prioritization of all District-wide projects or campus-based projects referred to them by Chancellor's Cabinet. A recommended rubric for prioritization is contained in Appendix B. Quarterly or as projects are identified, the prioritization of projects is reviewed and approved at the District Technology Advisory Committee (DTAC) to ensure input from all constituent groups. The DTAC forwards their recommendation of project priority to Chancellor's Cabinet for approval.

Items which meet specific criteria, based Board Policy and Administrative Regulation are presented to the Board for approval.

Proposed Acquisition Process Documents

Program/Administrative Reviews

Each campus and the District have various processes for their respective reviews, but these reviews should drive the requests for technology acquisition through the campus and District planning process.

Project Proposal/Total Cost of Ownership

Appendix A contains an example form that can be used to request a project. It can be used for both campus and District projects. It captures key information such as general project information and description, objectives, level of effort, impact to the institution and costs over 5 years. Proposers identify appropriate District and Campus goals met by the project.

Prioritization Rubric

Appendix B contains an example form that can be used by DTAC to evaluate the priority of projects along with the Project Proposal/Total Cost of Ownership. This can be done collectively by DTAC or individually and then DTAC reviews the results and prioritizes.

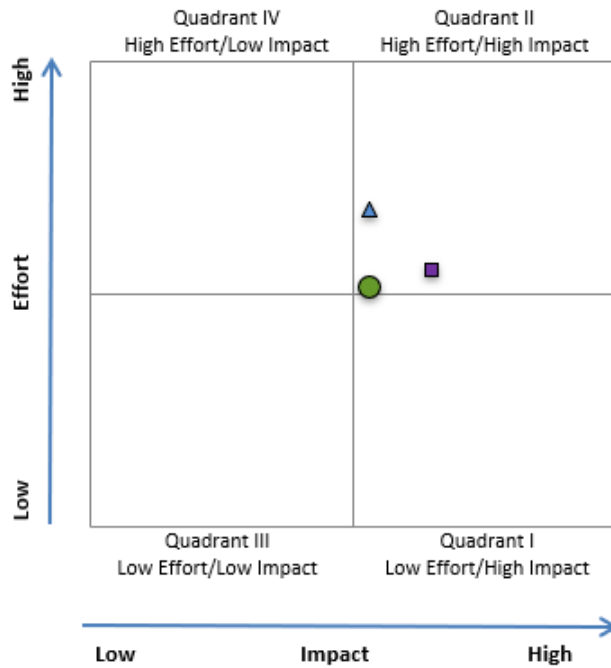
Appendix A – Example Project Request Form & TCO Analysis

Please fill out all sections of this document electronically in Excel (i.e. don't fill out by hand). Please note that many of the cells in this spreadsheet contain dropdown values (which will appear when you put your cursor in a cell).

After this document is filled out please submit it to chair of the I.S. Steering Committee.

Section 1: General Project Information			
Project Title:	Oracle Database Enterprise License		
Project Description:	Upgrade our Oracle Database Licensing from processor-based to enterprise-wide.		
Submitted To:	Chancellor's Cabinet	Click here for contact info	
Project Sponsor:		Sponsor's Department:	Information Services
Sponsor's Phone:		Sponsor's Email:	
Date Submitted:	17-May-17	Requested Completion Date:	31-Aug-17
Has project been discussed w/IT?	Yes	If so, with Whom?	
Have non-IT human resources already been identified/assigned?	No	Has funding already been secured?	Not Funded
Section 2: Project Classification (affects Impact axis)			
Project Primary Category:	Add or increase functionality/efficiency		
Project Secondary Category:	IT infrastructure enhancements		
Section 3: Project Objectives and Criticality (affects Impact axis)			
Strategic Alignment:	Indirectly Aligned w/1 or More	Identify Specific Objectives: (click here to see list)	Goal 2
Criticality:	Current Operations	Sponsor's Priority:	Medium
Section 4: Project Impact/Significance to User Base (affects Impact axis)			
Students Who Benefit:	Moderate Amt. of Students	Employees Who Benefit:	Moderate Amt. of Employees
Financial Impact (annual savings or new income as a result):	Impact < \$1k	Client Impact (client time savings as a result):	Saves <= 10 hrs per wk
Satisfaction Improvement value to Users:	Moderate	Probability of Realized Benefits	Guaranteed Probability
Future Resource Impact: (likelihood that more functionality will be requested as a result)	High	Leverage Potential (can be used by users on other campuses and/or external partners)	Medium
Section 5: Project Effort (affects Effort axis) (please contact IT if you need assistance with this section. Click here to see a list of depts.)			
Implementation Participants: (number of departments)	1 Department	Name the Participating Departments:	Information Services
Ongoing IT FTE Support Required:	FTE < .25	Please Describe IT FTE:	Maintenance, administration, migration
Ongoing Non IT FTE Support Required:	FTE < .25	Please Describe Non IT FTE:	None required
Implementation Hard Costs:	Cost >= \$100k	Please submit detailed cost breakdown (click here)	
Ongoing Hard Costs:	Cost >= \$50k	Please submit detailed cost breakdown (click here)	
Time to Implement:	40 hrs <= Time < 80 hrs	(includes combination of IT and non-IT implementation hours)	
Business Process Changes Required:	No business process will change as a result		
Complexity of Implementation:	Minimal (minimal system impacts or few dependencies)		
Section 6: Final Effort/Impact Score (for: Oracle Database Enterprise License)			
Calculated Impact:	5.33	These values will automatically be calculated by this application after sections 2-5 above are completed.	
Calculated Effort:	5.09		
IS Steering Adjusted Impact	6.50	I.S. Steering manually enters these. If IS Steering agrees w/Calculated values above, enter those values here. If not involved enter 0's.	
IS Steering Adjusted Effort	5.50		
Chancellor's Cabinet Adjusted Impact	5.30	Chancellor's Cabinet manually enters these. If Chancellor's Cabinet agrees w/Calculated values above, enter those values here. If not involved enter 0's.	
Chancellor's Cabinet Adjusted Effort	6.80		

Effort/Impact Quadrant



The Effort/Impact Quadrant is a tool that will assist in prioritization of projects. Most desirable projects are those that fall in quadrant I (low effort/high impact), whereas least desirable projects are those that fall in quadrant IV (high effort/low impact). Please note that this tool is only intended to assist with identifying desirability as derived from effort/impact, but the actual prioritization of the collection of project proposals in relation to each other must be done via analysis and governance in I.S. Steering and Chancellor's Cabinet

Sections 2 – 5 in this document contain data elements that are used to calculate an initial placement for this project in the Effort/Impact Quadrant. I.S. Steering and Chancellor's Cabinet should then review all data elements, and should make manual adjustments to the project's placement in the Prioritization Quadrant (by manually supplying values in cells above in Section 6.

- Proposer's Calculated Effort/Impact (LEGAL MANDATE)
- Proposer's Calculated Effort/Impact (no legal mandate)
- IS Steering Adjusted Effort/Impact
- ▲ Chancellor's Staff Adjusted Effort/Impact

Section 7: Effort/Impact Criteria overview (click here to view Effort/Impact Matrix)

Required Service/Product	N/A		
Strategic Alignment	Indirectly Aligned w/1 or More	Objectives: Goal 2	
Value to Users	Low value	Low time savings	
Importance to Risk Mitigation	N/A		
Leverage Potential	Medium		
Total Cost of Ownership	\$880,658	Not Funded	
Significance to User Base	Moderate impact	Moderate Amt. of Students	Moderate Amt. of Employees

Total Cost of Ownership (TCO)

Do not include labor/time for work performed by SCCC employees on this sheet. Those are considered "soft costs" and are already automatically considered based on the answers in sections 2-5 in the Project Proposal

Implementation Hard Costs							
	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Detailed Description
Hardware <i>(Includes Clients, Network)</i>	\$0.00					\$0.00	
Software <i>(Includes Application, Client, Database, Licensing, Server)</i>	\$103,685.37	\$103,685.37	\$103,685.37			\$311,056.11	Oracle Database Enterprise License
Other Equipment	\$0.00					\$0.00	
Training	\$0.00					\$0.00	
Materials/Supplies	\$0.00					\$0.00	
External Labor	\$0.00					\$0.00	
External Services	\$0.00					\$0.00	
Security Costs	\$0.00					\$0.00	
Total Implementation Hard Co	\$103,685.37	\$103,685.37	\$103,685.37	\$0.00	\$0.00	\$311,056.11	
Ongoing Hard Costs							
	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Detailed Description
Hardware	\$0.00					\$0.00	
Software/Licensing	\$145,875.04	\$150,251.29	\$154,758.83	\$159,401.59	\$164,183.64	\$774,470.40	Oracle DB Enterprise License support
Other Equipment	\$0.00					\$0.00	
Training	\$0.00					\$0.00	
Materials/Supplies <i>(Includes Office Supplies, Operational Supplies)</i>	\$0.00					\$0.00	
Contracted Services/External Labor <i>(Includes Administration, External Services)</i>	\$0.00					\$0.00	
Other	\$0.00					\$0.00	
Cost Savings	-\$75,446.00	-\$77,709.38	-\$80,040.66	-\$82,441.88	-\$84,915.14	-\$400,553.06	Oracle DB licences traded in
Cost Savings	-\$4,097.00	-\$4,219.91	-\$4,346.51	-\$4,476.90	-\$4,611.21	-\$21,751.53	Degreeworks database licenses retired
Cost Savings	-\$4,329.00	-\$15,609.00	-\$15,609.00	-\$15,609.00	-\$15,609.00	-\$67,365.00	SQL Server licences retired
Total Ongoing Hard Costs by Year	\$61,403.04	\$52,713.00	\$54,762.66	\$56,873.81	\$59,048.30	\$284,800.81	
Five Year Ongoing Hard Costs	\$122,806.08	\$105,426.00	\$109,525.32	\$113,747.62	\$118,096.59	\$569,601.62	
Total Cost of Ownership	\$880,657.73						

* TCO is defined as the sum of implementation costs plus 5 years of the total recurring costs.

Appendix B – Project Prioritization Matrix

Project Prioritization Matrix		
CRITERIA	WEIGHT	SCORING VALUES
Required Service/Product (are any of these true?) <ul style="list-style-type: none"> Mandate from Feds, State, CCC System Office, Board, Chancellor or Campus Legal/ Regulatory Compliance Impacts Core/Foundational Service Other Services/Products Depend On It 	5	Range: 0-9 0: None are true 3: one is true 6: two are true 9: all are true Weighted Score:
Strategic Alignment <ul style="list-style-type: none"> State Initiatives BoT Strategic Directions Chancellor Goals Campus Directions, Goals and Action Areas Department Priorities 	4	Range: 0-9 0: aligns with none 3: aligns with one 6: aligns with two 9: aligns with all Weighted Score:
Value to Users <ul style="list-style-type: none"> Students Staff/Administrators Faculty/Counselors CCCO System External partners 	4	Range: 0-9 0: little value to users 3: some value to users 6: A lot of value to users 9: Essential/critical to users Weighted Score:
Importance to Risk Mitigation Would the district, campus or user base be exposed to a risk or impact if the service or product were not implemented or offered?	3	Range: 0-9 0: little risk to district, campus or users if not offered 3: some risk to district, campus or users if not offered 6: much risk to district, campus or users if not offered 9: high risk to district, campus or users if not offered Weighted Score:
Leverage Potential Multiplier effect: Service or product can be leveraged for other users on other campuses and/or adds value for external partners	3	Range: 0-9 0: little leverage potential, isolated service 3: some leverage 6: much leverage 9: service could be leveraged by many Weighted Score:
Total Cost of Ownership Includes Implementation and Maintenance Costs, including purchase, licensing, training, support	2	Range: 0-9 0: not funded 4: partially funded 9: fully funded Weighted Score:
Significance to User Base	2	Range: 0-9 0: low impact, low number of users 3: low impact, high number of users 6: high impact, low number of users 9: high impact, high number of users Weighted Score:
TOTAL PROJECT SCORE:		