Final Report of the
Client Relationship Management Team

IT Transformation Program
UC Santa Cruz

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1 Creating A Client-Centric Organizational Culture

The new IT organization must have a client-centered culture with clear client communications to ensure success. Shifting this focus from technology silos to client needs will take calculated, repeated efforts, where client-centered work is rewarded. Extensive, frequent training and communications for IT staff will help to change the culture. IT leaders will set examples for client-focused services, governance, workflow processes, and quality assurance.

Measurements of performance must shift from their current system-centric form to client-centric metrics. For you to be doing a good job the client needs to think you are doing a good job. If you produce a robust, highly available, highly featured system that doesn’t meet client needs, your project is not successful.

This client focus needs to be embedded in our project management practices and procedures. Client input needs to be heard early and often during a project. Usability issues and other client concerns must trump technical concerns if there is a conflict. Service level agreements should be crafted to ensure that clients and IT staff have the same expectations of the services to be delivered.

CRM overall is comprised of four parts:
1. Understanding what the client is asking for, and needs.
2. Executing or delivering what the client is requesting.
3. Predicting what the client will need in the future.
4. Delivering targeting communications to respond to client needs.

1.1 Two type of clients: Individuals and Organizational Units

As part of a client-centric focus, the CRM organization needs to assess both individual needs, aggregated into client segments, and organizational or unit needs.

Organizational and individual needs are different, as the following diagram illustrates. Individuals need workstation support, help in using applications, and other individual services. Units need IT support for their strategic programs, such as developing IT infrastructure for a new building, developing the IT portion of a research proposal, etc.

We propose a structure where Local IT Specialists (LITS), Help Desk staff and Field Techs will meet the individual client relationship needs, while Divisional Liaisons will support the organizational/unit IT client relationship needs.
2 The Principles: Our Promises to our Clients

One of the first and perhaps most important realizations of the CRM team was that in the new IT organization, CRM activities – and indeed ideally the entire organization – should be clearly focused on the needs of our faculty, staff, student and community clients. To this end, we developed seven principles designed to guide all our activities. We worded them as promises we make to our clients. We felt it was critical that these be neither in technology-babble nor in bureaucrat-speak, but rather in plain English. They are as follows:

1. You receive the campus-standard IT equipment, software, networking and systems access that you need to do your work.

2. ITS works diligently to ensure that your IT environment is secure, stable, reliable, recoverable and free from intrusion and nuisance.

3. IT support, troubleshooting and repair are available to you promptly, courteously and in language you can understand, throughout the normal working day, and are available during extended hours as well. You also have access to a self-service IT web portal at all times.

4. You do not need to know whom to contact in the IT organization to receive a specific service, nor do you need to know the technical details of that service. You need only contact your support specialist or the help desk. There is also a liaison between ITS and your division for more complex or strategic questions.
5. You receive the IT-related training you need to do your work.

6. One login and password provide you access to most or all ITS systems and functions.

7. The baseline set of services is centrally funded and is available at no additional cost to you or your unit. Many services beyond the baseline are also available for additional cost.

Many of the words and phrases in these principles imply significant activity in setting standards, service levels, policies and so on. For example, principle #1 implies a process for setting standards for equipment, software and networking; policies and processes for system access; purchasing, distribution and maintenance mechanisms for equipment and software; and the like. Further, some wording implies service levels that may change based on budgetary realities. For example, principle #3 promises “prompt” support, but the definition of “prompt” may vary with the organization’s ability to maintain staffing at certain levels.

In addition, we recognize that there can be a whole world of discussion in phrases like “…that you need to do your work.” For staff, who have few options about providing the equipment and software they desire, the phrase embodies a standard that needs little discussion. For faculty, however, whose conceptualization of their work may be very broad, more precision may be required. The committee in fact developed alternate wording for faculty for the first principle, to wit: “You receive campus-standard IT equipment, software, networking and systems access to help you teach and do research. You and your students have access to IT-enhanced classrooms and labs suitable for instruction in your field.”

3 Elements of the CRM organization

The CRM organization we propose has seven distinct elements: self-service for clients; a help desk; a workstation support field staff; local IT specialists; divisional liaisons; a training and documentation group; and a services assessment and overall client relationship management function.

3.1 CRM proposed organizational structures

The CRM team has developed alternate detailed organizational models. The models are hosted on a private site at http://arts.ucsc.edu/computing/crm/org/ because of their sensitivity. The models are detailed to an extent that even if they were publicly available, they wouldn't be quickly comprehended. The simplified org chart below shows a summary of the elements contained in the alternate models. This simplified org chart was presented at the ITTP Coordinators meeting on June 14, 2004. One large question remains-- some CRM team members prefer that Divisional Liaisons report to the Divisions, while others prefer the Liaisons report to ITS. If Liaisons report to Divisions, what will the structure be for those smaller orgs who share an FTE as their Liaison?
The CRM team has developed a few options for organizational structures. See http://arts.ucsc.edu/computing/crm/org/ for links to these charts. A brief description of each follows.

### 3.2 Self-service

An intuitive and useful self-service Web portal is one of the foundations of the new consolidated model of IT services. Self-service Web pages can resolve a wide range of customer needs including answering basic questions through a searchable list of frequently asked questions, providing tutorials and eventually supporting the downloading of authorized software. The Web portal will also provide the customer with current and relevant information regarding the transition as it progresses throughout the campus. Through these basic services, the Web portal can deflect and absorb some of the common calls to the help desk while providing a mechanism for contacting the help desk if the customer needs additional assistance.

Due to its consistent availability at all hours, the Web portal will be a stabilizing force during the transition. The CRM Committee recommends that the development of these Web pages begin early in the transition process so that our customers can come to rely upon the information provided.
As the Web has become more pervasive in our society, people are using it for a wide range of services from arranging travel plans to buying shoes. It is therefore likely that the Web portal will be the first experience our customers will have with the new IT model of services. Building customer trust in the new model will begin with the presentation and usefulness of this Web portal, therefore, along with early development, user testing should be employed to determine if the CRM principles regarding ease of use have been accomplished. (“IT support, troubleshooting and repair are available to you promptly, courteously and in language you can understand…”)

3.3 **Help desk**

The help desk will be staffed by a group of people who are customer focused, knowledgeable about IT services, have a clear understanding of the IT organization, and are able to utilize the organization to meet customer needs. They will be able to answer basic questions (any frequently asked questions posted on the Web portal, for instance) and will have access to remote control software to perform some maintenance and training over the network remotely. Help desk staff will provide effective escalation and dispatch to workstation support, a local IT specialist (LITS), and/or a divisional liaison.

Help desk staff should be trained to send consistent messages to users, and, together with the IT organization overall, should follow a client contact through to resolution. Often, help desk staff may be able to educate users during their interaction with them. Further, help desk processes should be thoroughly documented. For training and review purposes, a scaled down version of policy, procedures and processes should be created and be readily accessible.

The help desk will require the use of a full-featured Customer Relationship Management (CRM) system with features that include request tracking, client preferences, and asset management. The use of a CRM system is imperative for effective communication within the IT organization and as a method of communication between IT and its customers.

The help desk will be fully staffed between during standard—and likely, extended—working hours, Monday through Friday. Limited staffing of the help desk will be available after these hours and on the weekends. Our goal is to have at least minimal staffing 24 hours a day, seven days a week. Additionally, some IT staff will have rotating responsibilities to be on-call after 5:00 p.m. and during the weekends.

3.4 **Local IT Specialists**

The Local IT Specialists (LITS) are geographically distributed, in all areas of the campus and in off-campus locations as well. These specialists have comprehensive general IT skills, but more importantly, they have a high level of skill that is specific to the academic discipline or administrative function that is prevalent in the geographic region where they are located.
LITS’s provide support that is more strategic and development-oriented, for example, pedagogical, media, or special administrative support. Although the LITS’s are capable of performing routine support, we expect that this will happen most often during the transition to the new organization, and decrease over time.

The LITS’s, along with the divisional liaisons, are in many ways the “face” of the IT organization. Their geographical distribution ensures that clients are personally acquainted with a member or members of the ITS staff, ideally have an ongoing support relationship with these specialists, and as a practical matter, don’t have far to go to reach an ITS staff member in person. To the extent possible, the IT organization should preserve and enhance existing local expertise.

We expect that LITS will devote most of their time—perhaps 80%—to direct support of the clients in their region. The remaining 20% of their time would be devoted to support of clients campus-wide, to strategic projects, and to the mentoring of other IT staff.

A key issue early on in the transition phase will be to have an appropriate group, one which collectively has detailed knowledge of all campus areas, consider the distribution of LITS that we propose. In other words, we seek to have our guidelines for LITS staffing levels and deployment vetted and if necessary refined.

3.5 Divisional Liaisons

The Divisional Liaisons are a key strategic element of the IT organization. In general, there is one liaison per division, whether academic or administrative, although smaller divisions (e.g. Chancellor’s Office, Academic HR, Planning and Budget) could be served by one liaison. We believe that the ITS division should have its own liaison as well.

Divisional liaisons work closely with the principal officer of the division they serve, as well as being highly placed in the IT organization. They are strategically aligned with the division, and assist with programmatic, capital and other strategic planning. They are likely to supervise LITS in their area, and possibly divisional IT specialists who are not part of the central IT organization (“blue diamond specialists”) as well.

Divisional liaisons have some discretionary budget authority. This enables them easily to resolve issues that involve some financial outlay within general policy and standards guidelines without undue delay.

In addition, liaisons are the governance process for issues that would unnecessarily burden a larger, more representative, but slower governance process. For example, they may have the authority to interpret what is and what is not a “standard service” (previously, “bronze”), up to some kind of threshold.

The CRM Team believes that it is necessary to have checks and balances on the power of the central IT organization; the more resources that are taken from units and moved to the center, the more important this becomes. There are several ways
to accomplish this. Certainly, the assessment and quality assurance function within the CRM unit, discussed below, is a key factor. Service level agreements and input into performance reviews are other methods. Another possibility is to use the mechanisms of the funding and reporting relationships of divisional liaisons. The Team is not in unanimous agreement on this approach, but a majority of team members felt that it would be beneficial to implement either or both of: (1) a funding structure where liaisons are funded 51% by their division and 49% by ITS; or (2) a reporting structure where liaisons report directly to divisional deans, with a “dotted-line” reporting relationship to ITS.

3.6 Training
The CRM team focused on self-service training and online documentation for the campus, including ITS staff. We did not address instructor-led training. The question of whether or not instructor-led IT training should be located organizationally within the CRM unit is an issue that needs early resolution in the transition / implementation process.

In general, service-specific training and materials should be available through the self-service function. Multiple training modes should be available to accommodate users’ different learning styles and preferences. Materials should be field-tested with pilot groups before the roll out of any new service. And in any case, all materials should be written in plain English.

3.7 Quality assurance and assessment
To help ensure a client focus, we propose an additional unit within the Client Relationship Management function, which will continually assess the quality of the IT organization’s services. This unit, the Quality Assurance and Assessment group, consists of two parts: (1) the CRM and request-tracking system; and (2) the client needs and satisfaction assessment group.

The head of this unit, the Director of Client Relationship Management and Services Assessment is an “empowered advocate”. The Director acts on behalf of both organizational units and client segments to ensure IT services are delivered as needed for unit and segment strategic programs. The Director participates in the strategic planning, and monitors projects to ensure delivery of benefits.

3.7.1 CRM and Request Tracking System
This unit is the organizational home of the client relationship management / request-tracking system. Data collected through this system, including things like time-to-resolution, platform and software analysis, escalation paths, FAQ analysis, and direct online feedback from clients, among other means—will provide metrics to help the organization assess its resource deployment, staffing levels and general effectiveness overall.
3.7.2 Client Needs and Satisfaction Assessment

The client needs and satisfaction assessment group will use broad measures and survey methods to assess the IT organization’s effectiveness. This group will serve as client advocates on IT project teams, with the authority to veto or modify a project to improve client focus. The director and her/his staff should:

- Work with Divisional/Unit Liaisons and appropriate governance structures, to lead the process of negotiating, compromising, and subsequently analyzing and aggregating organizational needs across divisions and units.

- Collaborate with the Services Management Director and others involved in Portfolio Management to determine appropriate services for Division and Unit IT needs.

- Work with client segments such as faculty, staff, and students, to aggregate client needs and articulate those needs from the individual perspective.

- Assess how well services meet client segment needs.

- Advocate for clients to ensure that the client voices are heard in a technology-focused organization.
Perform assessment activities including planning, implementing and analyzing surveys; participating in a governance and advisory client council; and other activities to hear the client and unit voices and manage expectations.

4 Scenario examples
The CRM team developed an exhaustive compendium of real-world scenarios to test our organizational models and principles. Here are two:

4.1 Scenario 1: Externally-mandated upgrade in the Library
A new mandatory statewide library program has been developed through the California Digital Library, which requires the installation of software on ten computers in the Science & Engineering Library. All of the computers meet the campus standard OS for Macintosh computers, but the software requires a slightly later version of the OS. Additionally, these computers will need 512 MB of memory and they are currently running 128 MB.

The library coordinator for the project contacts the library’s Divisional Liaison to discuss the request. The Divisional Liaison can make independent decisions to make exceptions to the campus standard up to $6,000. Seeing that the program is a statewide mandate and that the cost for upgrading these 10 computers with software and hardware is less than $6,000, the Divisional Liaison authorizes the expense to ITS. The Divisional Liaison creates a trouble ticket in the CRM system, delegates the task to the library LITS, and communicates with her fellow divisional liaison colleagues and her supervisor to alert them to her decision. At the next monthly meeting of the divisional liaisons, this decision and others throughout campus that exceed the campus standard are discussed, and if necessary the campus standard is adjusted. The library is informed of the decision and any future requests for upgrades to software and hardware are handled accordingly.

The LITS contact the ten clients to arrange for a convenient time for the upgrading of their computers. The LITS also enlist the assistance of the hardware and software depot to obtain the correct materials for the job. When the project is finished, the LITS close out the trouble ticket in the CRM system.

This scenario could also use the assistance of workstation support instead of the LITS since the job is relatively straightforward. That should be up to the divisional liaison or the LITS who would know and understand the complexity of the computers being upgraded.

4.2 Scenario 2: Request for new workstation and training
Reorganization within a department results in Asst. Manager being promoted to Manager, who hires replacement to oversee large graduate program. Newly hired grad rep must receive an appropriate workstation and the training to use all required enterprise programs, especially the new graduate admissions program. The new manager was promoted before using the new admissions program herself,
so she can't offer the usual 'in-house' training. Who does she contact to have setup and training provided very quickly – recruitment season is already underway by the time new grad rep is on board.

The department manager had discussed the upcoming needs with the divisional liaison at the time that the department was originally discussing the administrative reorganization. The Divisional Liaison therefore has had adequate time to assess availability of appropriate hardware, software required, and associated costs, if any, to this unit. The Divisional Liaison advises department manager about what service packages to request which will reflect this planning. At the time that the recruitment for the graduate adviser is being completed (the new person is being hired), the department manager contacts the administrative Help Desk (phone, email, or in person) to request that a new workstation be provided, and emphasizes the need for the training specific to the graduate admissions system. Department manager will identify service package (hardware, software, support) from the catalog of services provided by the Help Desk.

The Help Desk generates a trouble ticket and enables access to accounts ordered by the department manager: email, AIS, Embark, FIS. Various accounts will be available to the new hire at start of employment, or as training is completed as required by each account. The Help Desk also contacts:

- Workstation support, who will contact the department manager to confirm where and when the new work station will be located; determines that the appropriate voice and data ports exist, or makes arrangements to have installed.

- Phone services to have phone and associated services, as requested by dept. manager, installed and activated.

- Training services to arrange training contact for newly hired employee. Employee may be directed to online tutorials, scheduled for ongoing group class(es), or scheduled for one-on-one training as applies to each account.

Tracking system will notify department manager by email that requests are being processed, and manager or new employee may check status of requests online. Divisional Liaison will monitor the progress of requests and will ask Administrative LITS to check that workstation and support have been provided and that the new employee and dept. manager are satisfied with all systems.

5 Client Relationship Management System

A robust CRM system is critical to the success of the new IT organization. The CRM team took preliminary steps toward developing requirements and identifying vendors for such a system.
5.1 System requirements

Following is a list of requirements for a client relationship management system at UCSC. We have a detailed a number of attributes for (a) ways to enter information into the system; (b) information that is tracked by the system; and (c) general system attributes. Attributes that are essential and required are coded as “1”; attributes that are desirable are coded “2”.

Table 1: CRM System Requirements

<table>
<thead>
<tr>
<th>Priority</th>
<th>Input into system by:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 email</td>
</tr>
<tr>
<td></td>
<td>1 web</td>
</tr>
<tr>
<td></td>
<td>1 staff input</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>System tracks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Problem History</td>
</tr>
<tr>
<td>1</td>
<td>Information about machine</td>
</tr>
<tr>
<td></td>
<td>Ability to fetch machine configuration (directly or from a database [directly is probably better])?</td>
</tr>
<tr>
<td>2</td>
<td>Information on the person</td>
</tr>
<tr>
<td>2</td>
<td>Useful aggregation of information</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>System attributes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Multi-platform for both client and staff</td>
</tr>
<tr>
<td>1</td>
<td>Robust, intuitive web interface for clients and staff</td>
</tr>
<tr>
<td>1</td>
<td>Escalation tree</td>
</tr>
<tr>
<td>1</td>
<td>Known-problems database</td>
</tr>
<tr>
<td>1</td>
<td>Standards-based interfaces</td>
</tr>
<tr>
<td>1</td>
<td>Robust reporting</td>
</tr>
<tr>
<td></td>
<td>canned</td>
</tr>
<tr>
<td></td>
<td>customizable by staff</td>
</tr>
<tr>
<td>1</td>
<td>Ticket aging multi-layered</td>
</tr>
<tr>
<td></td>
<td>Service level agreements, promises</td>
</tr>
<tr>
<td></td>
<td>old, lower-priority items go up at some point (rather than never being dealt with)</td>
</tr>
<tr>
<td>1</td>
<td>Prioritized calls (priority management, rules)</td>
</tr>
<tr>
<td></td>
<td>Billing tracking? Or, integration with financial systems? Or at least ability to push data to financial system to generate a bill</td>
</tr>
<tr>
<td>2</td>
<td>Focus on people, not problems and/or tickets</td>
</tr>
<tr>
<td>2</td>
<td>Intelligent routing (pre-analysis before human involvement, learning for automation of this)</td>
</tr>
</tbody>
</table>
2 Backend usable by people not expert on system
2 Has tools to keep machine/person data current
2 Knowledge of important events (i.e., software upgrades) in history
2 push & pull
2 proactive recognition of trends
2 Integration into IDM
2 authorization
2 people info
2 Semantic analysis of tickets/trends
2 Queues/bins for request types
2 Talks to system managing available human resources for expectation setting/information for client portal

<table>
<thead>
<tr>
<th>System affords client/staff:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 No need for client to retell story on routing of ticket</td>
</tr>
<tr>
<td>1 Client can check status at all times and includes expected time to solve</td>
</tr>
<tr>
<td>1 Information easily accessible</td>
</tr>
<tr>
<td>1 Least data entry possible</td>
</tr>
<tr>
<td>1 Adds value for staff and clients</td>
</tr>
<tr>
<td>2 Natural language queries</td>
</tr>
<tr>
<td>2 Clients’ self-service for FAQs</td>
</tr>
<tr>
<td>2 Access without ticket number</td>
</tr>
</tbody>
</table>

6 Client Segmentation

There are numerous ways to group, or segment, IT users at UCSC, depending the questions being asked. Earlier, in Section 1.1, we discussed typical groupings of university clients, where the campus community is divided into faculty, staff and students (for some uses, community clients should be included as well). For many considerations—including some kinds of applications used, types of support, and support staffing ratios—these are useful groupings.

Grouping by academic or administrative division is another obvious segmentation, and one we have used when considering the positions of divisional liaisons and local IT specialists. There are numerous other potential groupings of UCSC IT clients. All these data points should be tracked in the CRM system.

Overall, these segmentations can be used to inform budgetary decisions, to provide prompt and appropriate service, and—as noted in the next section on IT Services—to drive service level agreements.

6.1 Segmentation by application

The following diagram attempts to answer the question, "how do we provide application support to clients, from standard applications to the most specialized and complex applications?" The answer we devised is that the help desk needs to be able to provide support for the base-level applications and know about or be able readily to refer to support for campus administrative and academic systems.
At the level of complexity of software held under shared licenses, which are presumed to be more complex, the help desk should be able to answer basic questions. But these applications begin to be the domain of local IT specialists, as are more complex applications held under shared licenses.

The most complex discipline / divisional application issues may be supportable by LITS, or may be the domain of highly-specialized IT services, the so-called “blue diamond” services.
6.2 Other considerations in client segmentation

As the following diagram illustrates, while discipline and function are primary ways of grouping clients, and while we have also used location as a consideration in the deployment of local IT specialists, there are numerous other things we need to know about faculty, staff and students in order to provide them with effective IT support.

**Figure 5: There are numerous ways to group, or segment, clients.**

For example: for planning, budgeting and operational purposes, it is important to know which clients have genuine need of the most advanced workstations, and therefore have an accelerated equipment renewal cycle. As another example, it is important to know at a glance what users are using what operating systems because viruses and other malware tend to be operating-system-specific, and it may be necessary to react quickly to a security incident. Segmentation by operating system could also provide real-world data to inform discussions of OS total cost of
ownership. As a final example, it is useful to be aware of telecommuting users, as they have additional specific needs that on-campus-only users do not.

7  ITS Services

7.1  ITS service principles and governance

A well thought out, client-centered service portfolio is critical to the success of the new consolidated ITS organization. ITS should provide only 10-12 comprehensive client-focused, business-driven services. These services should be designed around what people need to get their work done.

These broad service suites will help us move from an “IT as product” paradigm to an “IT as service” paradigm. Fundamentally, people don’t need a printer, they need printing. They also don’t specifically need a computer workstation or a live network jack. This component-level complexity should be abstracted from the client. What they need is a technology-enabled workspace. This includes a workstation that will be refreshed on a standard replacement cycle, a functional network connection, a telephone, voicemail, software, software renewal and licensing management, printing, etc.

One rule of client-centered design is if there is only one option, don’t ask the end-user to make a choice. Since a client should never be able to get a computer without the network connection to attach it to the rest of campus or without the software that they need to do their work, we shouldn’t put the burden of being sure they have all these components on the client.

This type of model supports and empowers the university’s business. People only need to make one contact to, for example, provision all the technology they need for a new employee. Additionally, it prevents problems we have now where, for example, some units choose not to get some employees voicemail because it is “too expensive,” that is, it’s not a high enough priority for the unit. This type of strategy saves the local unit a little bit of money but costs the overall academic mission in opportunities, time, and money as other members of the University have difficulty contacting this individual. The way to avoid this type of problem is to stop externalizing these core business costs onto local units and instead wrap them in centrally-funded, comprehensive service suites.

7.2  Campus IT service types and definitions

IT services at UCSC can be divided into three categories: ITS Standard Services, ITS Recharge Services, and Highly Specialized IT Services. ITS Standard Services are services provided by ITS to the campus community at no cost to them. Standard Services are available to all campus community members according to the service level agreements for their client segment. Standard Services will be designed to provide the technology enablement that most people need to do most or all of their work.
ITS Recharge Services are services that are provided by ITS but which are only available to those in the campus community who pay for them. This category enables ITS to provide a set of services that is somewhat specialized, and therefore not part of Standard Services, while still capturing economies of scale associated with doing these types of tasks centrally.

Highly Specialized Services are IT services not performed by ITS. These services are so highly specialized that there is little or no advantage associated with centralizing them and so both the costs for, and the performance of, these tasks should remain with the local group who needs them.

It is important to note that these service categories must evolve over time to meet changing client needs. Over time a recharge service may become a standard service as it becomes a more commonly used technology. Over time services will also be retired from the various service categories as their usage goes down.

The definition of what is and is not contained in ITS Standard Services is a dial that can be adjusted up or down according to the prevailing funding situation. Of course, this requires that a governance process be established to determine and continually update what types of things are considered standard services to balance funding while also meeting client needs. This governance process should be fast, simple, and as low in the organizational structure as possible. Divisional Liaisons, as the keepers of divisional knowledge, should be a key part of this governance process.

Some properties of these services are described in the following table:

<table>
<thead>
<tr>
<th>Service</th>
<th>Old Name</th>
<th>Provided By</th>
<th>Paid For By</th>
<th>Percent Of Campus IT Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITS Standard Services</td>
<td>Standard</td>
<td>ITS</td>
<td>ITS</td>
<td>65%</td>
</tr>
<tr>
<td>ITS Recharge Services</td>
<td>various, including “Platinum”</td>
<td>ITS</td>
<td>Local Unit</td>
<td>30%</td>
</tr>
<tr>
<td>Highly Specialized IT Services</td>
<td>“Blue Diamond”</td>
<td>Local Unit</td>
<td>Local Unit</td>
<td>5%</td>
</tr>
</tbody>
</table>

As you can see from the table, ITS Standard Services and Highly Specialized IT Services are proposed new names for what were previously called “Bronze” and “Blue Diamond” services, respectively. We propose to change the old names, because they are not customer-centered—they don’t say, in clear language, what they really are. The more descriptive, functional names will help clients understand what these categories really imply.
7.3 **Client groupings and service level agreements**

As noted in the previous section on client segmentation, levels of ITS services may be differentiated according to the needs of specific client groups. Standard service for one group may be different than Standard service for another group. Service levels might differ in response time and/or ratio of support staff to clients. Faculty have time-specific needs for classroom support, so their support staff to client ratio for these services might be 1:30, whereas the support staff to client ratio for students could be much lower.

ITS will define and document Service Level Agreements for the services it provides for each client grouping. Service Level Agreements may change over time depending on changing budgetary constraints and client needs. It is important that service levels be clearly communicated to clients, and that clients are also informed of any changes. Governance bodies, client councils, and ombuds functions are required for determining the service catalog. These governance and client groups will ensure that clients’ expectations of ITS services are realistic and that our services map well to the campus community’s IT needs.

8 **Implementation: High-level action items for various CRM Services & Elements**

The team roughed out high-level implementation plans for four aspects of the CRM function: self-service, the CRM system itself, the help desk and the deployment of LITS.

8.1 **Self-Service function**

1. Obtain dedicated staff – tech writers, editors, technologists, project manager.
2. Define what self-service system will do.
3. Create list of processes and client segments available for self-service.
4. Take census of existing docs available campus-wide. Local may be better than central; consider other sources as well.
5. Spec and obtain self-service system.
6. Perform pre-production user testing.
7. Write additional content (based on gap analysis from testing).

8.2 **CRM System**

1. Identify project manager.
2. Identify governance group.
3. Get staff – project manager, techies, client advocate.
4. Define system specs.
5. Vet specs with client and ITS community.
6. Prepare Request for Proposals.
7. Evaluate proposals, select vendor.
8. Buy it.
9. Write use procedures and standards.
10. Training for staff.
11. Preproduction testing.
12. Roll-out.

8.3 Help Desk
1. Do self-service project first.
2. Do CRM system project process first / concurrently.
3. Do asset management process first / concurrently.
4. Create staffing capacity somehow, while maintaining existing operations.
5. Figure out the location / space question.
6. Figure out the help desk virtual space: phone, email, etc. There may be a possible expense to spec and obtain a more robust phone system.
7. Define help desk question scope and escalation issues.
8. Write help desk staff job descriptions.
9. Define goals, specs, outside resources for help desk staff training.
10. Perform training for help desk staff—customer service, organizational and technical. Technical and possibly customer service may be outsourced. Organizational should be internal.
11. Create map of org structure and UCSC resources for HD staff.
12. Define communications links / tools between help desk and rest of ITS (e.g. (1) expected / unexpected service outage; (2) HD needs a document written).
14. Define coverage hours, coverage levels, SLA’s, standard response times.
15. Roll out help desk function.
16. Assessment group / person monitors balance between old support services and new help desk functions, service levels and quality. Ensures that too much staffing is not taken, but helps determine when it is appropriate to shift staffing.

8.4 Deployment of LITS
1. Ensure that staff have the ability to identify their skills and interests and can advocate for themselves (e.g. meet with Michelle Erickson).
2. Perform skills and desires assessment of current staff (not just for LITS). Determine which current staff could become LITS.
3. Have Divisional Liaisons and LITS Manager in place.
4. Determine more precise segmentation by vetting client segmentation groups and numbers of LITS (i.e. CRM org chart) with real workloads and disciplinary specialties.
5. Write LITS job descriptions.
6. Determine early target groups for implementation.
7. Fill LITS positions, probably in stages.
8. General training for the new position of being a LITS. Also, identify necessary individual training to compensate for skills lost in local areas.
9. Establish backup, coverage and cross-training procedures and documents.
9 ITS Transition Principles, Questions, and Risks

The CRM team identified a number of considerations for the transition to the new IT organization. We have grouped these as principles relating to clients, principles relating to the IT organization, open questions that remain, and risks and concerns of transition.

9.1 Principles of transition

9.1.1 Client

a) We need to focus on being client centered first; this ideology must permeate all of ITS. By discouraging responses like “that’s not my job”, “this is not the correct place to go”, or “I don’t know” and instead encouraging “I can find out for you,” we can help to achieve a client-centered organization.

b) We must introduce and test (and re-test if we have to) the CRM system, utilizing a sample population, before the official roll out campus-wide. To the extent possible, we must make the client experience seamless during the transition. We can achieve this by ensuring that we only ask our clients to change behaviors or actions once during the transformation process. Any problem that exists “behind the scenes”, must not interfere with the clients’ experience at ITS; the client-ITS interface must remain stable through time.

c) ITS should continually and honestly tell clients the status of the transition process, progress, issues, and failures. We must develop an easy, standard way for clients to submit complaints, problems and receive feedback. We need to respond to feedback in a timely manner.

We are committed to the transition process, in it we will make mistakes. We will strive to rapidly identify and correct errors. We will continue with this transformation until we get it right.

9.1.2 Organizational

d) We are committed to creating an environment where people do not fear losing jobs or being reassigned to undesirable places. To the extent possible we will preserve and leverage existing local expertise. We must recognize that there will be frustration, stress, and resistance during this transition. Managers must support the process rather than circumvent it and adhere to the new standards when they receive a complaint. We will create an environment which fosters communication within ITS, this is especially critical during a transition. Staff at all levels must be empowered to identify issues that are and are not working and provide input into making changes.

e) We will invest in our people by providing an opportunity to gain skills, knowledge and abilities through formal training or cross sectional training.

f) We will identify existing best practices already in place at UCSC, modify them as necessary to make them scaleable, and try to utilize these best practices as the foundation of the CRM system in ITS.
9.2 Transition open questions
   a) What is the methodology used to identify early and important targets for the transformation?

   b) Who ends up doing the general, centralizable tasks?

   c) What is the right scale to start at?

   d) Phased transition or all at once? Or a hybrid (different for different components)?

   e) How do we identify who goes to center?

   f) How do we maintain operations while also putting resources into the new state/system?

   g) What resources do we need for the new state?

   h) Who are the resources that provide the capacity to handle recharge services (above bronze but critical to campus and still in ITS). LITS? Others? How does this affect our resources needed and costing model? We've spoken very little about this fairly large chunk of ITS services.

9.3 Transition risks and concerns:
   a) There is a timing issue between fulfilling the clients need while in the present state and at the same time trying to establish the central resources needed for fulfilling the clients need while in the transition.

   b) Lead time is needed to establish the CRM system and asset management system, etc., without it, there is a risk of push-back from the client to move forward. If we go ahead without these systems in place, we risk failure as these are critical components to the new process; if we wait for these systems to come online we risk significantly slowing the process. We need to project manage the process to allow for a balance and full establishment of the system.

   c) Many people don't tend to bring their best self to change. We need to provide resources to facilitate acceptance of change.

   d) Budget constraints may force unreasonable time constraints. A project manager must try to foresee arising problems, and take into consideration, current workloads, resources, and pressures when managing this project.

   e) It may be difficult to determine where local capacity might be with our current state of being so distributed. We will need a detailed analysis of the skill sets of all people who will be integrated into the new system.
f) Too much commitment to maintaining current state/current level of local services during the transition may be a barrier to creating central services.
10 Appendices

10.1 Appendix A: CRM Proposed Organizational Structures
The CRM team has developed a few options for organizational structures. See http://arts.ucsc.edu/computing/crm/org/ for links to these charts.

10.2 Appendix B: CRM Team Members
The Client Relationship Management team consisted of ten regular members, including two team co-leads, and one advisor. In alphabetical order, they are:

- Ramon Berger, Senior Systems Manager, Physical and Biological Sciences Academic Computing
- Scotty Brookie, IT Director, Arts Division, Team Co-Lead
- Jackie Davis, Facilities Coordinator, Information Technology Services
- Beth Guislin, Director, Instructional Computing, Team Co-Lead
- Naomi Gunther, Customer Service Supervisor, ITS Voice Services
- Warren Mikawa, IT Director, Colleges and University Housing Services
- Lynda Potzus, Department Manager, Film & Digital Media Department
- Terry Schalk, Associate Dean, Physical and Biological Sciences
- Catherine Soehner, Head, Science & Engineering Library
- Phillip Stark, Lab Operations Manager, Instructional Computing

Team Resource and Advisor
- Magge McCue, Business Officer, Information Technology Services

10.3 Appendix C: Thoughts on network, standard and application clients
(Ramon Berger)
In order to move towards a cost-saving consolidated ITS, I believe we need to concentrate now on two main functions. First, we need to simplify what we’ve come up with so far. And second, we need to integrate what we’ve come up with, with the work of the other vision teams.

Albert Einstein supposedly said, “Make it as simple as possible, but no simpler.” And while this may not be true for art, music, etc, it certainly is for technology. I think our CRM team has come up with some very good ideas, but in order to avoid the risk of starting out with a system that is too vast in its implementation, I suggest we strip out the substantial ideas and try and see how they fit in with the other groups’ work.
I suggest we reduce our client segmentation to three tiers. Here I’m speaking only of computer client segmentation. I understand that ITS covers more than just computers and computer users, but the majority of costs savings will be realized here.

10.3.1 Tier 1: Network client
A network client is simply a user using a machine that connects to the network for all of its applications. I believe most of the costs savings of the ITS consolidation will be realized by moving toward this client. The machine has no moving parts, not even a fan. If this is simply a savings of just $100 per client and we are able to move toward, say 5000 of these in the future, this would be a savings of half a million dollars.

This of course, is dependent on central server applications being available, and illustrates the integration necessary.

For example, in our Client Segmentation by Applications diagram found at https://supremo.ucsc.edu/twiki/bin/view/ITTP/ITTPClientRelationshipManagement there are a number of applications such as FIS, NES, PPS and SAS among others that may be able to run on central servers. A network client via a web browser will simply be able to access the latest version on the server.

10.3.2 Tier 2: Standard client
A network client is brilliant you say. Why don’t we all just work this way? I believe many, if not most clients in the future will be network clients. Only a few years ago this was the way things were heading. Users had graphical terminals displaying applications from main frame or mini frame computer systems. But it turned out the costs of these network devices soon costs more than PCs as the costs of PCs came down. (This costs didn’t take into consideration all the costs, like licensing and desktop support.)

Also, most users now have desktop computers now, and while a desktop computer is a network device, there may be some application that are better suited to run on a machine that runs its own applications and stores its data locally.

For this client, the standard client, I suggest we support the same applications for all users. This may seem too simplified, however, the standard client will run on a number of platforms, Windows, Mac and Linux. These system as well as all of the applications on them will need to be licensed patched and upgraded as well as protected against viruses. “Keep it as simple as possible.”

10.3.3 Tier 3: Application client
If the Desktop Support Team can maintain Tier 1 and Tier 2 support I believe this will cover over 90% of the computer clients at UCSC. But some clients may still need application support beyond this. The new ITS should still be able to deliver this via application client support delivered by LITS. The Local Information Technology Specialist will be able to take a standard client machine and layer any special applications needed.
10.3.4 Integration
In order for the above client segmentation model to work we will need to first put a lot of energy into the central server model. We will need to require many applications to run as server applications accessible via most web browsers and maintain the security necessary for this type of access.

We will need to concentrate resources on the server model first. I believe we should start a pilot server project. We should see how many common applications can be made to run centrally and start using these services via the web with our existing desktop machines. If this show signs of success we can start scaling up the project and as the need arises for new machines, many of these machines can be network devices, reducing the overhead for the desktop support term and their techs.

10.4 Appendix D: CRM Project Team Charge
The team charge delivered in January 2004 included goals, deliverables, and identified project interdependencies.

10.4.1 Goals and Objectives
1. Define a customer/client relationship management process that specifies the roles, responsibilities, processes, principles and procedures to support the implementation of client relationship management as outlined by the new IT Service Delivery model.
   a. Identify the principles that guide the client relationship management
   b. Create a problem resolution and problem escalation process
   c. Describe the roles, relationships and responsibilities of each of the key participants in the process (Users, Divisional Liaisons, Client Service Representatives, Client Service teams, and others who are "touching" the client.)
   d. Identify the desired attributes and skills of the incumbents for each of the identified positions.
   e. Identify a process through which thematic client concerns can be identified and communicated to the ITS leadership and governance bodies.
   f. Define the role and function of the divisional specialists (See Blue Diamond in the IT Service Model) within the account management process.

2. Determine an IT service architecture for how clients will perceive services, and how service providers connect the sets of services they provide to the client. How does the client interact, select the service, receive the service? The CRM team is charged with defining what a bronze level service is generally, but not the specific service is. Then the CRM team will go to the other ITTP teams and ask them to test the client service model developed by the CRM team with the specific bronze level service developed by the other teams. For example, if the Web Publishing team defines a bronze-level Web Publishing service, they would test that service against the bronze level concept developed by CRM to
see if the Web Publishing bronze service has a scalable metric. Magge McCue, a CRM team member and Funding team member, will work across teams to test scalable metrics.

a. Identify the means by which these services will be managed and evolved by the consolidated IT function.
b. Test the service delivery model with service related questions (Scenarios)
c. Determine the nomenclature and terms that the project team (and hence the organization) will use to refer to the services and the project as a whole.
d. Identify a set of "next steps" and implementation activities (including the potential for recommending additional study needed).

10.4.2 Major Deliverables

1. CRM Solution and Approach: diagrams and overview of CRM principles, service architecture, and process.
2. Bronze-level services definition and priority.
4. Service costs and savings potential for each of the service. This will be passed to other service teams, and the results will be tallied to build a business case for each of the IT services.
5. Identify any integrating tools that will be required/involved with establishing policies and standards.
6. Determine appropriate strategies and methods for the education and training of staff and customers (including partnership opportunities with SHR T&D). There are remaining questions about the fine line between training and IT support where the IT staff person trains the client.

10.4.3 Major Project Interdependencies:

1. IT Culture, Values and Symbols
2. Principles that guide client relationship management.
3. Project Management / Portfolio Management
4. Scope management and service lifecycle input for managing and evolving services.
5. IT Funding Model
6. Help with determining funding approach for services.
7. Workstation Support
8. Information about hardware and software standards.

Notes: The CRM team will look at both the organizational and technological needs for an effective, enterprise strategy to manage client relationships.