

**Executive Summary:** This position paper is intended to document how Pacific manages its technological diversity and to clarify the role of the office of Information Technology (OIT), the units (schools/divisions) and the Information Technology Planning Committee (ITPC). The key points are as follows:

- 1) Pacific believes that technological diversity should be managed to maximize efficiency and minimize cost.
- 2) Pacific encourages the units to acquire technology from the list of supported technology approved by the ITPC.
- 3) Pacific encourages the units to take responsibility for their technology decisions by allowing those units that are a) willing to established acquisition policy, process and procedure and b) have the resources necessary to support exceptions, to more directly manage their technological diversity.
- 4) In general, it is the responsibility of the unit to support technology not on the ITPC list of supported technology.
- 5) OIT will continue to review acquisition requests for units that are unable or unwilling to assume the additional responsibility.
- 6) OIT will continue to ensure the successful application of information technology at Pacific by all, in part by an increasing focus on communicating with, and assisting, unit support providers with the goal of increasing seamless support across the institution.

The net effect of this position that differs from prior practice:

- 1) Stockton units with acquisition policy and procedure may, if their local support structure allows, appropriately manage their technical diversity without explicit review by OIT. (The Dental and Law schools can already do this).
- 2) Many acquisitions that do not go through purchasing (like donations) will be managed in the same fashion as those that do.
- 3) Units that increase their technological diversity are explicitly held responsible for that action.
- 4) Service expectations from OIT for non-standard equipment are explicitly defined.
- 5) OIT has formed and will continue to facilitate a University-wide association of unit technical support providers (TSPs) to foster two-way communication and policy/practice alignment.

**Position:** Pacific believes that it is in its best interest to manage the diversity of information technology hardware and software from a total cost of ownership (TCO) point of view. In addition there may be financial advantage in either bulk purchases or services available to a critical mass of similar systems. However, Pacific also recognizes that special requirements of individual faculty, students, staff members, individual departments and individual schools or divisions must be taken into consideration. Teaching and Learning may demand specific technology in specific disciplines. Likewise an academic community needs to experiment and change with the times. The University also believes that the school or division level technology committees and support structures, where they exist and as informed by university-wide considerations and standards, are in the best position to understand the needs of their constituencies and to subsequently manage technology diversity.

Within an understanding of the context of University standards, schools and divisions are encouraged to adopt unit technology acquisition process, policies and/or standards based on their ability to support a given degree of technological diversity. Unit technology committees (or their designees) are thereby empowered to make appropriate acquisition exceptions from University approved technology, understanding that their unit will remain responsible for support, if any, of those exceptions. Of course, units are always free to use, and pay for, third party or vendor support for diverse technology. Units without local support structures, or those unwilling or unable to assume the burden of a more diverse environment, are expected to adopt policies and procedures that enforce the acquisition of University approved equipment. Unit support

providers should follow unit policy and procedure in review, approval or denial of unit technology acquisition, including purchases, donations, loans, rentals and leases. Stockton's operational procedure for acquiring desktop computers and servers through Purchasing is attached to this document.

OIT will continue to support the default set of hardware and software specifically approved by the ITPC. OIT, as an agent of the University, will continue to review technology purchase requests (or other acquisition requests, if presented) for units, or parts of units, without process, policy or technical support. OIT's labeling of an acquisition as "unsupported," does not halt acquisition. Units using this process are strongly urged to not proceed with unsupported technology acquisitions.

Regardless of the review process, for technology not on the ITPC approved list, OIT will offer limited assistance directly to the unit support providers, where they exist. That is, OIT wants the unit support to be as successful as it can be. Helpdesk calls on non-ITPC approved technology that may require a significant investment of central support time will be directed to the unit support providers where they exist. It therefore follows, that Stockton units without the ability to support increased technological diversity themselves or to pay to have others support such technological diversity, should generally approve or accept only those systems supported by OIT as approved by the ITPC. Not doing so may result in the use of unsupported systems that may put the user or the University at risk. Note that this applies to gifts and loans and as well as purchases, rentals or leases. OIT will continue to look at vendor relations that would provide significant advantage to the University.

While Pacific supports a great variety of technology, as of this writing, the ITPC has established the following list of approved and supported technology:

- Dell desktop and laptop systems
- Under data center co-location, rack mounted Dell and SUN servers
- Windows 98 and above
- Mac OS version 8.6 and above
- Microsoft Office 97 and above

Complete information on what Pacific supports and what it recommends for purchase may be found on its web site. Operational procedure for acquiring desktop computers and servers on the Stockton Campus follows below. Note that OIT does not support unit owned servers that are not co-located in OIT. Even for co-located unit owned servers, OIT offers assistance only with the operating system and is not staffed to provide application level support (see OIT Co-location Agreement).

OIT has formed and will continue to facilitate a University-wide association of unit technical support providers (TSPs) to foster two-way communication and policy/practice alignment. This is part of Pacific's effort to provide ubiquitous, seamless and effective support. As time goes by, Pacific believes unit support providers should increasingly focus on the support of academic and administrative initiatives and decreasingly focus on desktop or "helpdesk" activities. Therefore, OIT will work with this group to minimize desktop support problems, to better understand local support requirements, to leverage central resources and to anticipate future support needs.

## **Q&A:**

### **Q1. If Pacific is really interested in TCO, wouldn't we move away from technological diversity, not encourage it through this position?**

A. This position is intended to put in place a system that appropriately manages diversity. This position puts all the schools on an equal footing in regards to this matter. If units are to take responsibility for the use of technology and its support costs, they must be free to make informed decisions. The job of the ITPC and OIT then becomes one of keeping these decision makers informed. This position is based on the confidence that schools, being informed of University standards and support structures, will do what is in their best interest, and that TCO, including managing technological diversity is clearly in their interest.

### **Q2. Wouldn't the University be better positioned to take advantage of volume purchases and other offers if we all used the same equipment?**

A. With the exception of two laptop programs, the University doesn't normally buy equipment in mass. Today, margins on equipment are so slim that companies are unlikely to be able to offer significant volume discounts beyond our normal educational discounts. However, having a critical mass of similar equipment (and subsequent expertise) can be very helpful to schools and the University at large. The benefits of utilizing University recommended equipment, where appropriate, should be obvious to decision makers.

### **Q3. Doesn't this position mean that departments can do anything they want?**

A. School or division technology committees, where they exist, will set standards and approve exceptions for those departments and those technologies they will support. Departments without technology support should (but are not currently required to if they don't want support,) continue to acquire only technology approved by the ITPC. Local support providers, where they exist, will be responsible for supporting acquisitions not supported by OIT, so choosing acquisitions carefully would seem to be prudent. Communications with OIT on possible non-standard acquisitions is highly encouraged.

### **Q4. Doesn't this position tend to increase technological diversity?**

A. The experience of the CIO suggests the exact opposite. When units have to pay the bill for support (including staff), managing technological diversity and aligning their standards with general university standards becomes a much more important issue. For Stockton, the process and procedure encouraged by this position should also catch acquisitions that would not normally go through purchasing (and are not seen by OIT).

### **Q5. Won't the OIT CSC end up bailing units out that make wrong decision?**

A. OIT will continue to provide full support based on its knowledge of ITPC approved technology. OIT will attempt to answer end-user questions on centrally unsupported technologies, but cannot invest significant time (like site visits) for such hardware or software. OIT will refer non-trivial questions to local support where it exists. OIT wants unit support providers to be successful. Therefore, OIT will assist unit support providers, short of doing the work for them, even if they are supporting unapproved acquisitions. Clearly it is in the interest of unit support providers to be aligned as much as possible with the technology supported by OIT as approved by the ITPC.

### **Q6. Will OIT still provide support for schools that already have local technical support?**

A. Given that some schools and units may not have sufficient local support, support for all departments, support targeted at desktops or laptops, or the ability to fill in for absent desktop/laptop (only) support staff, OIT will continue to provide support for technology on the ITPC approved list. OIT will continue to take calls from any user. OIT may redirect calls by agreement with local support and/or redirect calls best handled locally, especially on unsupported technology. Such redirection will be through Pacific's problem management system (via Heat tickets). Wherever possible and appropriate, OIT will support local providers as if they were an extension of OIT. However, OIT cannot backfill for absent local support providers except to take calls on individual desktop/laptop issues. OIT intends that distributed support be seamless and successful and stands behind local support providers. OIT will encourage the unit support providers to use the central HEAT system for problem tracking, call histories and issue redirection to OIT.

**Q7. Will OIT answer questions on un-supported technology?**

A. If OIT immediately knows the answer, it will tell the caller. If the user's problem on unsupported technology requires "looking into," it will be referred to the local unit support provider if he or she exists, hopefully via HEAT. If local support does not exist, the user will be referred to external third party providers. If the call is a local support provider (by job description) working on a user problem, OIT will do what it can to assist the support provider, short of hands-on intervention with the user's system.

**Q8. Will all the units and schools now have to immediately get their own local technical support?**

A. This position allows the schools and divisions to determine a support model that is appropriate to their needs, goals and resource situation. Those units willing and able to provide knowledgeable local support are encouraged to enhance support for technology and to determine what technology is appropriate for their unit. The OIT Customer Support Center (CSC) will continue to provide excellent centralized support for ITPC approved technology.

**Q9. Doesn't this model duplicate CSC "help desk" services on the Stockton campus?**

A. One might believe that with unit resources being scarce, local support would be used in a manner that provides the best return for the unit. This may be supporting approved desktop technology, but at least by this position, it will be supporting technology unsupported by the CSC. Moreover, a unit's support resources are envisioned to increasingly be supporting local or co-located servers, local unit specific software, local labs or electronic classrooms, web content development, faculty assistance, enterprise business applications sponsored by the unit and assisting OIT with rollout of new or changed technology. It may also be that relationships, understanding unit priorities and goals, and knowledge of unit desktop technology are valued as much as object efficiency (through centralization). It could be important to a unit that support be viewed holistically, across the gamut of unit technology and across its entire user base. While few would argue about hardware support, some believe that general desktop support is inseparably integrated with higher-level support. These things should, over time, sort themselves out.

**Q10. What does the ITPC think of this position?**

A. The ITPC supports this position (7 to 3), with reservations. The ITPC values the clarification of roles and responsibilities as well as the documentation of the acquisition process. However, the ITPC has a continuing concern about how distributed and centralized support fits into the larger fabric of IT planning. Within that, the ITPC is specifically concerned that, on the Stockton Campus, units may use local support in an inefficient manner, unnecessarily duplicating low-level desktop support services of OIT's CSC. The ITPC would rather see unit support resources targeted at higher-level support activities, especially the support of academic endeavors and key administrative initiatives. On the other hand, there was some concern that if all local support moved entirely away from general desktop support, OIT might not have the resources to cover the increased load. Contrarily, one member argued that today's desktops are reasonably standard, reliable and most come with substantial warranties. Moreover, desktop productivity software is generally standardized (on Microsoft products). It was therefore suggested that the low-level support issue could, over time, become largely moot, resulting in both local support and OIT essentially leaving the desktop support business and becoming free to work on higher-level issues.

## Operational Procedure for Acquiring Computers and Servers

1/27/03

This procedure covers the acquisition of servers, laptops and desktop computers only. It is part of the University's efforts to manage technological diversity to control costs and improve service. Acquisition includes, but is not limited to, purchase, lease, long-term borrowing, rental and donations. Questions on this procedure should be directed to Faye Snowden in the OIT Customer Support Center.

All computers to be acquired under this operating policy must be reviewed by the appropriate parties, in the acquiring unit or by OIT. Reviewed requests will be stamped with an official Pacific Computer Review (PCR) stamp (available from OIT). This stamp will be given to Units that have a local technology acquisition review process in place and, normally, appropriate staff to provide local support.

If you are acquiring a computer on any campus:

1. Take the acquisition request to your designated unit support provider for review according to unit guidelines. Units may, and in fact are urged to, turn down noncompliant requests that cannot be supported by the unit.
2. If you do not have a designated local support provider, forward the request to the OIT Customer Support Center for review. Making an appointment and "walking it through" is recommended. OIT does not turn down requests, but may indicate the acquisition is "unsupported." OIT highly recommends that only supported equipment be acquired.
3. For acquisitions handled by Stockton Purchasing, forward the stamped request to Purchasing. Purchasing will not accept requests for computers without the PCR stamp. Unstamped requests will be returned to the requestor.

The stamp looks like:

### **Pacific Computer Review**

Reviewed by \_\_\_\_\_

Unit \_\_\_\_\_

Date \_\_\_\_\_

Pacific Standard Acquisition, Supported by OIT \_\_\_\_

Pacific Standard Acquisition, Supported by Unit \_\_\_\_

Non-standard Acquisition, Supported by Unit \_\_\_\_

Non-standard Acquisition, Supported by Third Party \_\_\_\_\_

Non-Standard Acquisition, Unsupported \_\_\_\_

Signed \_\_\_\_\_

**Note: This stamp will only be provided, by OIT, to units that have established acquisition policy and procedure and are willing and able to manage their technological diversity.**