To: Gene Lucas, Chair, Operational Effectiveness Steering Committee  
Fr: Douglas Drury, Divy Agrawal, Co-Chairs  
Information Technology Operational Effectiveness Committee  
RE: IT OE Committee Delivery  

April 12, 2012

On behalf of the Information Technology Operational Effectiveness (IT OE) Committee, we would like to submit the committee’s final recommendations to address the campus IT needs to the OE Steering Committee. The IT OE Committee was charged with the following responsibilities:

- Provide direction for campus IT governance structure  
- Identify the principles and responsibilities of campus IT governance  
- Define the scope of OIST to address Infrastructure, Policy, and Standards  
- Provide oversight for the Office 365 campus email and calendaring project

The attached document entitled IT Governance Structure describes the recommended structure, principles, and responsibilities necessary to efficiently meet campus IT needs. Our recommendation centers upon the formation of the IT Council (ITC) to provide guidance for campus IT. The attached document entitled IT Council Memo is provided as a draft for the purpose of inviting specific individuals chosen by the campus to participate on the IT Council.

The attached document entitled Assessment of OIST Portfolio addresses the scope of OIST which the committee feels meets the campus need for enterprise infrastructure support. The matters of Policy and Standards are topics to be coordinated by the ITC.

The attached document entitled Office 365 Project describes and a phased approach to the Office 365 which will identify required resources, budget, and detailed implementation plans for the deployment of Microsoft Office 365 as the email and calendaring tool for faculty and staff.

As a final recommendation, the IT OE committee recommends that the OE Steering Committee, through the IT Board, coordinate with campus vice chancellors to communicate the IT OE recommendations to all levels of the campus community.
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Operational Effectiveness
Committee Delivery

3/26/2012
Introduction
The UCSB Operational Effectiveness Steering Committee convened the Information Technology Operational Effectiveness Committee in September 2011 with the following charge:

Establish campus IT governance structures which will allow IT to:

- Effectively receive input from the campus,
- Effectively provide feedback to the campus,
- Effectively carry out campus objectives with transparency

As the committee began its work, the charge was enhanced to include:

- Specify the principles and responsibilities of IT governance
- Define the scope of an OIST organization that addresses Infrastructure, Policy, and Standards
- Provide oversight for MS Office 365 project

This delivery package provides the IT OE committee’s recommendations regarding each of the committee charges.

IT OE Committee Members
The following is a list of the individuals who were members of the Information Technology Operational Effectiveness committee. This document is a result of their efforts, expertise, campus understanding, and wisdom.

- Divyakant Agrawal (co-chair) Professor Computer Science, Director Engineering Computing Infrastructure
- Willie Brown Director Housing and Residential Services
- Doug Drury (co-chair) Director Administrative Service Information Technology
- Christine Griffin (admin) Administrative Services
- Chuck Haines Director Capital Development
- Karen Hanson Assistant Vice Chancellor of Research
- Jody Kaufman Executive Director of Academic Affairs
- Richard Kip Assistant Director Engineering Computing Infrastructure
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<th>Name</th>
<th>Position</th>
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<tr>
<td>William McTague</td>
<td>Executive Director Student Affairs Resource Planning and Information Technology</td>
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<td>Alan Moses</td>
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<td>Pierre Wiltzius</td>
<td>Dean Mathematical Life and Physical Sciences, Letters &amp; Science</td>
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A Recommendation for Campus IT Governance Structure

3/26/2012
IT Governance Structure

Introduction
The proposed IT governance model described in this document recognizes centers of expertise distributed across multiple IT organization on campus while building communication and decision structures necessary to align IT planning with campus strategic objectives. As such, the model seeks to ensure coordination of and confidence in shared, enterprise-wide IT efforts while enabling distributed innovations and operations contributing to overall IT service excellence. The Information Technology Operational Effectiveness committee submits this proposal for the establishment of a UCSB IT governance committee: the IT Council. The guiding principles of this proposal describe a governance structure which:

- reports to the IT Board and will complement the ITB decision making authority
  - the ITB is comprised of campus academic and business control points
  - the ITB also includes leaders from several academic organizations
- aligns IT actions with campus objectives
- is representative of the campus academic and administrative units
- facilitate effective progress on various IT projects and initiatives
- encourages collaboration and clustering of IT organizations to achieve efficient operation
- provides oversight for enterprise IT projects
- provides assessment of and feedback to enterprise projects
- evaluates project proposals relative to campus objectives and provides primary input to the IT Board decision making process for IT issues of enterprise scope
- manages the process of evaluation and oversight of enterprise level projects on behalf of the ITB.

Committee Composition and Representative Nature
The IT Council will align IT actions with campus objectives. As such, the makeup of the committee should be representative of the entire campus. While adequately reflective of the academic, business, and IT leadership segments of the campus, the committee membership should be limited to assure effective and productive governance. Given the limited number of committee participants, it will be incumbent upon the members of the committee to actively reach out to their constituent groups and become familiar with the breadth of their needs.

The IT Council composition is a balanced blend of representatives of academic/business leaders and IT organization leaders. The ITB will appoint business and technical leaders from campus control point units as well as academic representation. The optimal size of the IT Council is 10-12 members. The following is the recommended composition of the IT Council:
Executive Vice Chancellor Representation: 5 Allocated Seats (proportionally allocated among business, academic and technical representatives)

Administrative Services Representation: 2 Allocated Seats (1 Business, 1 Technical)

Student Affairs Representation: 2 Allocated Seats (1 Business, 1 Technical)

Institutional Advancement Representation: 1 Allocated Seat (Business or Technical)

Research Representation: 1 Allocated Seat (Business, Academic, or Technical)

Chancellor Representation: 1 Allocated Seat (Business, Academic, or Technical)

It shall be the responsibility of each cluster of members within a control point to serve as a conduit for engaging input from, and disseminating information to, the business and IT organizational leaders within their area. It is also the expectation that committee members will work together across functional areas to encourage campus-wide collaborative efforts amongst both business and IT organizations.

Many of the projects considered by this committee will be enterprise-level projects with multi-year lifecycles. Therefore, to achieve a level of consistency through the project lifecycle, it is suggested that the membership of the committee should serve a term sufficiently long to address multi-year projects.

Committee Relationship to ITB and Campus Governance Structure
This proposal recommends that the formal structure of IT governance consist only of the IT Board, this committee, and this committee’s subcommittees. It is therefore critical that the new committee ensures that 1) the broad campus technical community has an avenue to identify gaps in campus IT, and make proposals to address those gaps and take advantage of opportunities for coordination, 2) the integration of academic planning processes and IT planning processes is explicitly mapped out in the new committee structure, and 3) major enterprise efforts across campus are coordinated at an appropriate level. This committee will have the authority to manage the lifecycle of its standing and ad-hoc subcommittees. In conjunction with the suggested structure of this committee, the structure of the ITB should consists of campus vice chancellors, budget office director, CIO, and 3 academic members to be appointed by the executive vice chancellor. The current ITB membership should no longer include members who represent the previous IT bodies of the campus.

Committee Responsibilities
- evaluate proposed projects to determine the level of campus impact. The committee will establish the method of evaluation. ¹
- evaluate proposed projects to determine the consistency with campus objectives

¹ The UCLA project evaluation process can be used as one of the possible models
• consider the IT needs associated with academic and administrative planning and integrate those needs into the committee’s processes
• advise the IT Board with regard to enterprise-level projects as well as projects with the potential to impact campus objectives
• provide oversight for projects determined to have significant impact on the campus
  o assure that appropriate project management is applied to the project
  o assure that appropriate lifecycle support is applied for the entire operational life of the project
  o assess the performance of the project team with respect to the project plan, budget, and schedule
• maintain the definitive campus list of IT projects – projects which fall below a specified level of campus impact (based on the evaluation process in bullet 1 of this section) do not need to be raised to this committee.
• establish the process by which IT need is communicated from any portion of the campus to the committee
• establish criteria by which IT organization performance can be measured
• establish the process for conducting periodic evaluation of IT organizations
• utilize the IT organization measurement to determine appropriate service providers for campus level needs
• frequent communication with constituents

Additional Considerations
• IT projects of significant campus impact may be initiated from outside the campus, or dictated based on critical campus need. In these cases, this committee should be engaged to assess the project plan and provide appropriate guidance, support, and oversight
• The strategic direction for several key IT components and systems has already been set by the campus and in some cases the UC Office of the President. Those directions must be taken into account and supported by this committee
• Campus departments may have business or academic needs that dictate that certain projects must proceed. In these cases, this committee should be engaged to ensure appropriate project execution and to minimize duplication of effort or conflicts with other campus projects.
APPENDIX I

The following list of the individuals who were members of the Operational Effectiveness Information Technology committee. This document is a result of their efforts, expertise, campus understanding, and wisdom.

Divyakant Agrawal  (co-chair)  Professor Computer Science, Director Engineering Computing Infrastructure
Willie Brown  Director Housing and Residential Services
Doug Drury  (co-chair)  Director Administrative Service Information Technology
Christine Griffin  (admin)  Administrative Services
Chuck Haines  Director Capital Development
Karen Hanson  Assistant Vice Chancellor of Research
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Pierre Wiltzius  Dean Mathematical Life and Physical Sciences, Letters & Science
Draft Committee Appointment Memo

3/26/2012
Draft Committee Appointment Memo

To: Committee Appointee
Fr: Control Point

Subject: Appointment to the Information Technology Council

Based upon the recommendation of the Operational Effectiveness Steering Committee, we are restructuring the information technology governance on our campus. We will retain the Information Technology Board (ITB), however we will revert the ITB to its original composition of campus academic and administrative leadership.

Furthermore, we will now establish the Information Technology Council (IT Council) which will consist of 10 to 12 academic/business leaders and IT organization leaders. The IT Council will report to the ITB and serve in an advisory capacity in an effort to facilitate effective IT decision making. The IT Council will share the responsibility representing the larger IT community on our campus.

This restructured IT governance model recognizes centers of expertise distributed across multiple IT organizations on campus while building communication and decision structures necessary to align IT planning with campus strategic objectives. As such, this governance structure seeks to ensure coordination of and confidence in shared, enterprise-wide IT efforts while enabling distributed innovations and operations contributing to overall IT service excellence.

By means of this memo, I would like to appoint you as a representative of XXXX (Control Point Area). It will be your responsibility to serve as a conduit for engaging input from and disseminating information to the business and IT organizational leaders within our division. You are also asked to engage other IT Council members and work together across functional areas to encourage campus-wide collaborative efforts among both business and IT organizations. I fully understand that your appointment to this committee represents significant efforts on your part to facilitate the sharing and collection of information within our division.

I am very hopeful that you will accept my nomination to the IT Council. If you have any questions or concerns, please contact me. I would also encourage you to contact XXXX if you have any other questions regarding the IT Council. For your reference I have attached the specific IT Council responsibilities to this memo.
IT Council Responsibilities

- evaluate proposed projects to determine the level of campus impact. The committee will establish the method of evaluation.
- evaluate proposed projects to determine the consistency with campus objectives
- consider the IT needs associated with academic and administrative planning and integrate those needs into the committee’s processes
- advise the IT Board with regard to enterprise-level projects as well as projects with the potential to impact campus objectives
- provide oversight for projects determined to have significant impact on the campus
  - assure that appropriate project management is applied to the project
  - assure that appropriate lifecycle support is applied for the entire operational life of the project
  - assess the performance of the project team with respect to the project plan, budget, and schedule
- maintain the definitive campus list of IT projects – projects which fall below a specified level of campus impact (based on the evaluation process in bullet 1 of this section) do not need to be raised to this committee.
- establish the process by which IT need is communicated from any portion of the campus to the committee
- establish criteria by which IT organization performance can be measured
- establish the process for conducting periodic evaluation of IT organizations
- utilize the IT organization measurement to determine appropriate service providers for campus level needs
- communicate frequently with constituents
An Assessment of OIST Scope and Service Portfolio

3/26/2012
OIST Scope and Portfolio Assessment

Introduction
One of the charges of the IT Operational Effectiveness Committee was to conduct an assessment of the current Office of Information Systems and Technology (OIST). The committee addressed the scope of OIST as well as the current portfolio of OIST. Within the context of the committee’s other discussion regarding governance of IT from an enterprise perspective, the committee evaluated the current portfolio of the OIST to assess whether each of the services of OIST were or were not enterprise in scope.

This document represents the results of the committee’s assessment of the current OIST portfolio. While an assessment of each OIST service with regard to whether it is enterprise in scope or not is provided by this document, the committee wishes to make it clear that it is the responsibility of the IT Council to review campus services on a regular basis and assess the provider’s ability to execute and that appropriate governance processes are followed to ensure alignment with campus priorities. The IT OE committee feels that these are more important for successful enterprise services than organizational location of the service provider.

OIST Scope
The OE IT committee agreed that the scope of OIST should be enterprise in nature and should address the areas of Enterprise Infrastructure Services, IT Policy, and IT Standards.

Portfolio Assessment Result
During the course of the assessment of OIST, the committee considered each of the following services within the current portfolio of OIST and made a determination as to whether the service is enterprise or not enterprise. The following service descriptions are provided by OIST and were not audited by the IT OE committee for completeness or accuracy.

Fee For Service: Not Enterprise

Unix & Office Systems Group (UOSG) provides
- work station support
- server support
- windows terminal server thin client support
- installation of customer equipment in data center

The USOG also supports imail and Oracle Calendar.
Mainframe Systems (includes server farm)  Enterprise (as it presently functions)

The mainframe still supports major campus systems including the
- Student information system
- Financial accounting systems
- Miscellaneous business applications

The Computer Center group provides basic operations, operating system administration, and administration of the Software AG Adabas and Natural systems. Application programming and maintenance is handled by customers.

Student Affairs is expected to move all of its processing to a Microsoft .NET environment by Summer 2012. Replacement of the financial accounting systems and the miscellaneous systems is still in the planning stages. OIST expects to be running the mainframe for at least 2 more years.

Some applications involve front-end processes that run on the virtual server farm and access the mainframe online. Examples include Transfer Of Expense (TOE) and Transfer Of Funds (TOF), etc. The virtual farm was built to support these services. Deprecation of the mainframe will remove 80-90% of the business reasons for the virtual server farm.

Oracle Calendar:  Not Enterprise, but MS Office 365 will be Enterprise

Oracle is dropping support for the Oracle Calendar service by 2013. A just-completed study of calendaring and email recommends adoption of Microsoft Office 365 as the campus standard for calendaring, as well as associated email. This service never had specific funding—the mainframe funding was used for direct support of this service.

Imail (faculty/staff email):  Not Enterprise as is, but MS Office 365 will be Enterprise

Basic email services provided at no cost to customers. This service never had specific funding—the mainframe funding was used for direct support of this service. Future plan is to move these customers to Microsoft Office 365.

Data Warehouse:  Enterprise

The data warehouse is one of the most widely used applications on campus for accessing financial data. Funding exists for two FTE but it consumes about four FTE. While OIST expects to continue to have a data warehouse in the future, the choice of a new financial system may change the way it is implemented, potentially increasing some functions while reducing others. OIST is not planning any intermediate realignment of resources due to this current uncertainty.

Identity Management:  Enterprise
The current system provides standards-based identity management that provides authentication and enables federated identity management. It also enables the campus to participate in the UC Trust federation. OIST is currently working with Student Affairs as they develop a new identity system. It is anticipated that by Summer 2012, SA and OIST will be in a new steady state relationship as regards to an identity management solution on campus.

Listserv: Not Enterprise

Campus listserver processing runs in the same infrastructure that was used for supporting the imail and calendaring. Over a hundred lists of various types exist. Steady state. Supported on the margin. Has been relocated to virtual server farm.

Web Hosting: Not Enterprise

A number of customer created web sites exist within the same infrastructure that has been used for imail and calendaring. Steady state. Supported on the margin. In the process of moving to the virtual farm.

Library Proxy: Enterprise

EZ Proxy is a contract from the Library for creating access to publisher IP. Properly funded under the contract. Steady state, although OIST anticipates a developmental push as the Libraries move to alternative authentication proxy methods with the publishers (Hathitrust, etc.)

Umail (Student Email): Enterprise

OIST recently agreed to manage the Umail service. The agreement amongst the parties is that student email will transition to an outsourced service provider for which OIST will provide the business and relationship management. Even with the agreed upon funding transfer, Umail is currently structurally underfunded.

Misc Umail/Collaboration Activities: Not Enterprise

This is a catch all for some pieces of work that came along for the ride as OIST was handed Umail and as OIST hired Randall (he had made some prior commitments to other campus offices). One of them, Drupal management services, will be turned into a sanctioned rate and recharge based service.

North Hall Data Center: Enterprise

Governance and financial comes out of a senior executive group. OIST will manage the NHDC on behalf of the campus. This is the infrastructure as a service (IaaS) model in that OIST provides 'ping and power' to equipment brought in by customers. Service layers above that may be an arbitrary collection of
campus organizations. OIST is designing all of its processes with that in mind, while staying true to commonly accepted data center management practices.

**Campus Network Service:**

This includes the following components: communications infrastructure, data backbone network, campus wireless network, Unet, and network services required to operate a data network.

Communications Infrastructure: Planning, documentation, and support of the cable plant used to transport various IT services: Campus Data Backbone Network, Cable Television, and the Telephone System. (Construction projects are funded by a variety of sources, not necessarily OIST.) Responding to DigAlert requests to protect the Fiber network. Consultation on network and wiring projects.

Data backbone network: The Border: connections to external networks (CalREN-2, Internet 2 and the Commercial Internet), As well as contracted data circuit service and support to remote connections (SHRC). The Backbone: Equipment and support to connect the campus buildings. This network extends to the building switch within each supported building. Local Area Network (LAN) service beyond that is provided by the building occupant or their LAN service provider.

Campus Wireless Network: Equipment and support for wifi service. Wireless frequency trouble-shooting and conflict resolution.

UNET: Initially this extended the centrally supported network beyond the building switch to individual floors to support the Campus Wireless Network. Now this network is evolving to support IP-based building systems, such as security cameras, door access systems, and fire alarms, etc.

North Hall Data Center Network service: We will provide the internal network connectivity to the NHDC.

Copyright Infringement and Regulatory Compliance, and CyberCrime response and support.

Network Operations: There are a variety of operational services required for the network to function. Current examples include domain name service (DNS) and network time protocol (NTP). To keep the network performing well, there need to be systems that can monitor network performance and availability and can alert staff to problems. There is a security component of running a network, including systems that detect and notify staff of security threats in network traffic. Also included is secure access to campus resources from off-campus locations i.e., the VPN server. There are also a few campus-wide services that are provided that are not directly related to the operation of the network, but benefit from being centrally operated. Examples of these are the campus ftp server, campus IT mailing lists and SMTP relaying services.

**Campus Information Security:**

Enterprise
A campus-wide information security program led by a Chief Information Security Officer, assisted by an Information Security Analyst, and supported by security systems. The security program includes training, course development, policy development, network-based security services, and centrally provided security tools and evaluation services to enhance departmental security efforts. Last year OIST implemented a scanning tool for SSNs and Credit Card numbers.

**Website Support:**

www.ucsb.edu - Enterprise;

Remaining functions – Not Enterprise

OIST provides backend support for the campus web server (www.ucsb.edu), and full support for it.ucsb.edu, the campus update blog, and departmental web servers. In addition the OIST funds the Web Standards Group’s campus-wide training activities.

**Super Computer Service:**

Not Enterprise

OIST facilitates the UCSB academic community member’s use of the High Performance Computing resources only available from the national supercomputing centers: SDSC (San Diego Supercomputer Center) and TeraGrid. This includes providing direction for choosing a HPC architecture, help with system configuration and performance issues, training, and account support.

**Telephone Service:**

Enterprise

OIST provides single or multi-line telephone service to UCSB faculty and staff: In a Voice over IP (VoIP) environment, it will likely become more complex to provide multiple line appearances (the same telephone number in multiple locations) than it has been with a copper based telephone line. VoIP will require each telephone to have its own telephone number assigned to it in addition to shared line appearances.

**Digital Key Telephone Systems:**

Enterprise

It is expected for these aging systems will likely to be replaced with VoIP systems. It’s possible some technological conflicts may arise in departments that are geographically split and where key systems are in use by one group and the other uses VoIP.

**Voicemail:**

Enterprise

As departments move to more feature rich calendaring systems which may include a voice mail or other unified messaging element, use of a centralized campus voice mail system will dilute and become a less valuable tool to forward messages to another or broadcast campus-wide messages.

**Two-way Radios:**

Enterprise

The campus’ existing two-way radio system serving public safety and day-to-day operations will cease to be supported by 2017. Most of the current radio equipment is old analog technology and will not
transition to a replacement digital system. This replacement system will need to be identified and put in place well before 2017.

**Cable Television:** Enterprise

While the campus’ currently gets its programming from Cox Communications, the provider that holds the local franchise. Television consumers are increasingly receiving television content via their IP data network. While broadcast television will likely continue to have a local value, the manner by which consumers receive and subscribe to this service is prone to change as will the local broadcast content, channel line ups and broadcast times.

**Contraction with Communication Carriers:** Enterprise

Plan, negotiate, execute, and administer commercial cellular site installation agreements and licenses (approx. $300,000 annual revenue to the campus). Execute agreements for wire line communications carrier services, commercial cable television and satellite television content carrier services, agreements for Internet Services Provider services, and software and/or equipment supporting services OIST provides to the campus.

**Internal LAN & Productivity:** Not Enterprise

Each unit provides their own LAN, email, productivity tools, and file server support. Much of this support is tightly coupled with support of the network and telephone services.

**IT OE Committee Recommendation**

As with the review of all future enterprise IT services, the IT OE Committee leaves it to the IT Council to determine the appropriate actions to be taken with regard to the OIST portfolio.
Office 365 Project

3/26/2012
Introduction
Phase I of the IT OE initiative identified inconsistent email, calendaring, and collaboration tools for campus faculty and staff as being a major stumbling block to efficient operation of the campus. An IT Planning Group (ITPG) subcommittee, chaired by Jamie Sonsini, was already actively evaluating email and calendaring options for a subset of the campus in anticipation of Oracle Calendar (Corporate Time) becoming unsupportable. The Phase I IT OE committee asked that ITPG committee to broaden its scope and consider email, calendaring and collaboration tools and identify a campus-wide solution. That committee unanimously identified Microsoft Office 365 as the appropriate solution for the campus. The Office 365 recommendation was endorsed by the ITB. As part of the charge to the second phase of IT OE, the OE Steering committee requested that the IT OE committee provide oversight for the campus Office 365 project. This document provides the IT OE committee oversight recommendation for the campus Office 365 project.

Office 365 Project Approach
The Office 365 project approach is a multi-phase approach to be executed as follows.

– Proof of Concept – Led by Jamie Sonsini (OIST)
  • will conduct evaluation of Microsoft Office 365 to identify all tasks and establish reliable estimates for all effort required to support Office 365 for current Corporate Time customers and OIST faculty/staff email customers
  • will include project budget and schedule for Phase 1 and will explicitly identify incremental costs with this effort as well as existing resources

– Phase I – pilot implementation
  • will deploy Office 365 to OIST faculty/staff email customers
  • will deploy Office 365 calendar to campus Corporate Time users
  • will include project budget and schedule for campus-wide deployment and will explicitly identify incremental costs associated with extending the service as well as existing resources

IT OE Recommendation
Consistent with the IT Governance recommendation, the IT OE committee recommends that beyond the proof of concept phase of the Office 365 project, the IT Council should provide guidance for further implementation phases of the project. Specifically, the IT Council will help identify the organization that will conduct Phase I and follow-on phases of the project.