AGENDA

1. (1:00-1:05): Approval of December 10, 2012 Meeting Summary

2. (1:05-1:45): Funding Structures Review – Recommendations for Shared Infrastructure Service Offerings & Common Good Software/Licensed Services (Jerry Kang/John Mamer/Jim Davis)

   [Action: Endorsement; The Funding Structures Review Committee has established a framework of principles and recommendations for funding “Infrastructure Service Offerings” and “Common Good Software/Licensed Services,” and is now requesting formal endorsement as a “statement of practice.” The CSG has also reviewed the framework and provided a recommendation on issues that should be addressed.]

3. (1:45-1:55): Recommendation for UCLA engagement with MOOCs (Jim Davis)

   [Action: Review and Discussion]

4. (1:55-2:00): Next meeting and adjournment (Jerry Kang)
Information Technology Planning Board  
Meeting Summary  
Monday, December 10, 2012  
YRL 11348

ITPB Attendees: Julie Austin, Cameron Campbell, Jim Davis, Jerry Kang, Christopher Lee, John Mamer, Warren Mori, Susan Parker (for Gary Strong), Janice Reiff, John Riley, Guy Rodgers, Robert Trelease

Michelle Chen, recorder


Invited Guests: Robin Garrell, Annelie Rugg

Resources: Ross Bollens, Kent Wada, Andrew Wissmiller

Chair Jerry Kang called the meeting to order at 1:05 PM.

**Agenda Item #1: Approval of November 9, 2012 Meeting Summary**

The summary from the November 9, 2012 meeting was approved.

**Agenda Item #2: Funding Structures Review – Recommendations for Shared Infrastructure Service Offerings & Common Good Software/Licensed Services (Jerry Kang/John Mamer/Jim Davis)**

The Funding Structures Review is aimed to ensure fund structures are aligned with incentives and technological changes, rather than fund sources. The review committee, made up of the chairs of each governance group and a few executives, have created recommendations on the fund structure for 4 different categories of initiatives. The recommendations are meant to be a “statement of expected practice,” and are going through the governance process for ITPB and CITI endorsement.

Case studies 1&2 deal with infrastructure service offerings in both the lower left-hand and lower right-hand quadrants. The different between the two quadrants is that with the LLH quadrant, there is an expectation of campus use unless there is an exception, and for LRH, there is no a priori expectation of using the shared service. In both studies, the group focused on data centers, storage, and servers. The group reaffirmed the expectation to use common services where possible, that inflection points are opportunities for transition, and that the services should be provided using a market-driven, fee-for-service structure that is not mandated. If a loan or investment is needed in order to be competitive, the sponsoring group can go through CITI. Pricing will be set through POSSSE, though it will be up to the sponsoring group to conduct thorough analysis and provide good projections.
Case studies #3&4 are about end-user based common good software/licensed services. The difference between the two is that Study 3 deals with discretionary services while Study 4 deals with mandatory services. The default is to use local funding and the two cases to flip out of the default are an economic case or a policy case. Reasons for the economic case are economies of scale or leveraging network effects; and reasons for a policy case would be how mission-critical the service is, negative externalities, copyright, or privacy issues. In an economic case, the sponsoring unit sets up a sales/service account and charges users for the service. In a policy case, institutional funding may be possible.

The review committee will be exploring other areas of the IT2020 strategic plan and will bring additional recommendations back to the Board. The current recommendations will be going to CSG for formal input, and then brought back to the ITPB for an official endorsement.

Agenda Item #3: Role of ITPB relative to the Senate Committee on Instructional Technology (CIT) and Senate and Executive Administration organizing for Online Learning (John Mamer/Jim Davis)

This is a reprise of the Online Education discussion of previous ITPB meetings.

The UCLA Online Education initiative is currently aimed at undergraduate degrees. The principle for online education is to use it to enhance the education of enrolled students by integrating with current in-class learning. There are a number of issues still to be determined, such as: a technology framework that is mainly faculty driven, how to define and assess the quality of academic performance, program administration, infrastructure, and more. There are currently a number of committees involved to discuss these issues: the Committee for Instructional Technology, Senate and Executive Administration committee, and the Instructional Enhancement Initiative committee. ITPB’s role in the Online Education discussions is to deal with some of the policy or directional issues involved, such as treatment of faculty intellectual property for online courses.

This topic will be brought to ITPB again for future discussions.

Agenda Item #4: Next meeting and adjournment (Jerry Kang)

The meeting was adjourned at 2:47 PM. Doodle polls for the Winter 2013 meetings will be sent out to the Board.
Recommendations

IT Funding Structures Review of Infrastructure Services

Background

The proposal to review and align IT Funding Structures was brought to ITPB, CITI and CSG in early 2012. All three boards supported the proposal and agreed to participate in the review. Funding structures is defined as the combination of funding, service, cost, incentive, management and accountability to form a structure that encourages/ensures desired outcomes.

The members of the Funding Structures Recommendations committee are:

ITPB Chair & Vice Chair – Jerry Kang and John Mamer
CITI Co-Chairs – Steve Olsen and Gary Strong/Robin Garrell
CSG Chair & Chair-Elect – Tom Phelan and Julie Austin
Jim Davis – Office of Information Technology
Glyn Davies – Academic Planning & Budget
Jack Powazek – Administration
John Power – CAO School of Law
Marcia Smith – Office of Research Administration
Andrew Wissmiller – Information Technology Services

The committee agreed to examine case studies for establishing recommendations on funding structure principles. The attached prospectus documents the recommendations for the first groups of services:
Case Study #1 and #2: Lower LH and Lower RH Quadrant Infrastructure Service Offerings

Case Study #1 is characterized as lower left-hand quadrant infrastructure services with respect to the IT2020 plan – “IT infrastructure services (lower left quadrant) are based upon institutional or regional instantiations with blended delivery of services - local deployments are by exception. (e.g. data centers/machine rooms)” These services are further characterized as infrastructure services (e.g. data center, server, storage) commonly used throughout the campus but which function is generally independent of facilities deployment (unlike middleware for example). The proposed ITS data center, server and storage services were used as the specific test cases.

Case Study #2 is characterized as lower right hand quadrant services with respect to the IT2020 plan. By definition these services are market driven. There is no a priori expectation of shared services. They are developed only if there is research demand and value. “Specialized research and educational IT infrastructure services (lower right quadrant of earlier graphic) must be deployed locally - sharing occurs when value can be demonstrated.” The proposed OIT archival storage services for researchers were used as the test case.

Case Study #1

- The expectation for campus units to use common infrastructure services provided by ITS or as substantial regional services is generally supported.

  The services offered in the lower left-hand quadrant are campus-wide, common infrastructure services. Benefits of using campus services include:
  - IT infrastructure that is more productive, leaner, greener and cost effective
  - Supports consolidation of data center / server room space and the transformation of legacy IT assets to modern private or public cloud type solutions
  - Other benefits could include improved service levels, lower total cost of ownership, optimized power and cooling usage, higher resource utilization rates, increased operational efficiency and reduced information security risks

  The group agreed that campus units are expected and encouraged to take advantage of these enterprise-level services where possible.

- Because of the extensive installed base of investment in distributed facilities and staff, the opportunities for transition are with inflections in investment, e.g. major upgrades, building moves, etc.

  The committee agreed that because the maturity of systems and investment status within different units varies widely, the opportunity for a local unit to transition its services over to a central or regionally shared infrastructure service is when there is a transition need for hardware/software upgrade, building moves, staffing issues, etc.

IT Services presented two case studies where a local unit transitioned its data center over to IT Services when presented with a major investment decision. One group needed to hire its own group of IT staff in order to run its own data center, while the other was considering an upgrade
to its current data center room. After analysis, both groups determined it would be more cost-effective to make use of IT Services’ offerings.

- **A market-driven, fee-for-service structure ensures value and commitment for client and ensures service-cost alignment.**
  Even though the IT2020 plan states an expectation for shared, consolidated services, a market-driven funding structure allows the cost for services to be kept at market value to attract clients, while the fee-for-service structure provides commitment to the client that they will receive the level of service they pay for. This structure is also beneficial for the provider of the IT services in that it can ensure alignment between the cost to provide the service and the fee to charge clients.

- **Use of the services should not be mandated (market decides).**
  In order to have a market-driven approach, the committee agreed that the use of common infrastructure services should be encouraged, but not mandated. It is up to the client/market to analyze and determine the cost-effectiveness of the service offerings for their units.

- **Procedures need to be established for flagging investment inflections and ensuring an appropriate value analysis.**
  The committee recommended establishing a procedure for flagging major investment decisions, such as when a unit requests quotes from Facilities or a major hardware/software purchase, so that the unit can be provided with more information about the common infrastructure services. The decision to use a campus-service resides with the local unit provided that they have completed a value analysis. The committee further recommended there be a checklist and protocol for the value analysis in determining whether it is worthwhile to move over to the campus service.

  At this time, the group agreed to let IT Services deploy their initial communications plan to inform units of their services before discussing the procedure for flagging investments.

  **Case Study #2**

- **With Case Study #2, lower right hand quadrant services, by definition market driven, the recommendation that Case Study #1 be market driven causes the funding structure for both to become nearly the same**
  The committee established that the requirements for storage services were sufficiently different to warrant separate researcher oriented archival storage services. There can, however, be overlaps. The market driven approach will require researcher and general campus markets to review feature sets and costs to determine value. OIT will also work with the campus to flag archival storage purchases.
With Case Study #1 and #2 together

- For infrastructure services to be both attractive and cost effective for units there needs to be a full array of services in place upfront. This implies upfront investment potentially involving campus investment or a campus loan while the client base builds. CITI is the designated Governance Committee for resolving recommendations on requests for campus investment vs. loans.

In order to attract clients, IT infrastructure services need to include a full suite of managed services. It is not sufficient to provide piecemeal services and expect to grow toward a full service array. Upfront expenditure is also the way to drive costs down.

IT Services will request investment capital from the campus to build up the infrastructure and services from the beginning of the project and to create incentives for not only cost recovery, but recovery of other benefits such as space. OIT will request a loan to build the upfront services infrastructure which will be aimed at cost and research data preservation benefits. In both cases the client base is expected to grow and the service is expected to become self supporting or it needs to change.

- Pricing will be set through POSSSE.
POSSSE is the responsible organization for approving the rates of the service offerings.
Recommendations

IT Funding Structures Review of Discretionary and Mandatory Common Good Software and Services

Case Study #3 and #4: Discretionary and Mandatory Common Good Software and Licensed Software Services

Scope
Case Study #3 encompasses software and license software services in which there may be a common good basis for institutional procurement and management. This recommendation focuses on end-user based services only – individual and/or department, and does not include business-critical software, such as financial systems, or common good infrastructure services, such as middleware. Existing examples considered included Lynda.com, Microsoft, and Cayuse. These have been funded respectively by the university, a pass-the-hat approach, an institutionally managed license that allows for individual units to decide and pay. This case study is important because licensed services (Software as a Service) are proliferating. As an example, Box.net is a new service the university is considering.

Case Study #4 includes common good software and license software services that are procured to comply with mandatory or mission critical needs, including but not limited to: legal compliance, security, and standardization of administrative tasks. Existing examples include Sophos and Cognos. Historically, Sophos has been funded institutionally, while the campus-wide license for Cognos was funded by IT Services.

Recommendations Working Principles

- The default assumption is that user software and licensed software services are decided and funded locally
- The ‘market’ should make decisions on discretionary user-based software licenses and services, NOT the University
  - University funding and pass-the-hat funding are rarely sustainable because value and funding are typically not aligned with subsidy
    Subsidies whether university or unit may not reflect market value. Common good is not sustainable unless value and funding are aligned.
  - Technology changes
    Another justification for market-driven approaches is that technology changes. The market will determine the usefulness of the product and the time to change.
• There are ‘market driven’ reasons that ‘market-driven’ services should be considered for institutional funding and management:

  o **Economies of scale**
    If there are cost-savings involved when funding software licenses institutionally, such as volume purchase agreements or efficiency of administrative overhead, then an institutional approach to management and/or funding could be justified.

  o **Leveraging network effects**
    Software and services could be funded institutionally or centrally in order to prevent duplication of systems or the cost of dealing with a diversity of systems. The benefits of having a single system could justify the campus shouldering the cost, since it often outweighs the cost involved for various units to implement different versions of the same system.

• There are institutional reasons that services should be considered for institutional funding and management:

  o **Regulatory and policy mandates or to avoid negative externalities**
    Justification for institutional funding is if the software is needed to prevent external issues that would hinder the work of others on campus, such as copyright and privacy issues or computer virus infections. Policy 401 requires all computers connecting to the campus network meet a certain level of security. Having Sophos available to users free-of-charge through central funding allows them to easily comply with the campus policy.

  o **Critical to a business or operational need**
    The more business-critical a software or service is, the more justification it holds for institutional funding and prescription. For example, the institutional use of Cognos to standardize end user reporting.

• The principles for institutionally funded software licenses and services include:

  o **Efficiency**
    Licenses and services should be more cost or operationally efficient when provided institutionally than if units were to procure them in a distributed fashion.

  o **Avoid mandatory use of central services**
    Services should only be funded institutionally when it makes sense that they are. If a distributed system is more effective and its benefits outweigh the cost of having multiple systems, centralization should not be pursued. Institutionally funded services
should only be purchased because campus users find that it adds value, rather than a service that is imposed on units.

- **Minimize incentives for people to opt-out**
  These services should be overall more attractive when funded institutionally than those units are able to provide for themselves. Units cannot otherwise lose benefits. Users should not prefer to opt-out of institutionally funded services, either from a cost perspective or a features perspective.

- **Transparency**
  Centrally and institutionally funded services need to provide transparency in process, cost, benefits, usage, etc. in order to prove value to the campus and be able to justify why it should receive central funds.

- **Fairness**
  Services provided institutionally should strive to be fair to all constituents, from price to access to service quality.

### Recommendations **Operations**

- **There is a high bar for mandatory or required end user software services at a campus level.**
  Mandatory or prescribed software services require unit sponsorship and IT Governance endorsement whether institutional funding is sought or not.
  - Software licenses and services are generally deemed discretionary unless (as above) the case is made for mandatory or prescribed. It is also important to clearly define what is being “mandated.” In the Sophos example, virus protection is mandatory, but the use of Sophos as the tool to meet compliance is not.
  - CITI and/or ITPB endorsement is required for mandatory or prescribed software services
  - The University generally expects the sponsoring unit to fund campus-use software (cost of operation), especially if there is internal savings
  - Institutional funding including TIF, Department Fees and/or user fees and loans may be sought through CITI, ITPB and POSSSE processes.

- **Institutional discretionary software licenses and services involve unit sponsorship for market driven management**
  - It is assumed that a sponsoring unit will set up a sales and service model for end users and/or department fees that will be approved by POSSSE.
  - A unit that sponsors a discretionary software service can benefit from the savings/value, but must also assume the risk in procuring the license and/or delivering the service. The sponsor can work with POSSSE to set prices to recover costs, including costs of evaluation, overhead, keeping services up-to-date, as well as funds for evaluating new technologies and services.
- The unit can request a loan (to be paid back) through the POSSSE process.
Proposal: The Funding Structures Review Committee is requesting CSG review of proposed recommendations for Infrastructure Services and Common Good Software/Services

**Recommendation:** The CSG endorses ITS’ deploying their communications plan to inform units of their services; however, there is a concern that transparent procedures need to be developed for the flagging and subsequent evaluation of investments. The proposal includes servers and storage (very broad categories), data centers and data center modifications as targets for flagging. With this in mind, the CSG proposes that we work with ITS and OIT to draft details of any procedure to flag and evaluate IT investments while providing encouragement to transition to central or substantial regional facilities. Until such time that there is an official procedure, the CSG requests notification, at an early stage, of any specific instances of flagging in order to provide technical recommendations, unless the requesting unit specifically indicates they do not wish the issue to be reviewed by the CSG.

**Driving Forces**
(Those which currently exist & support or drive the desired change)

**Infrastructure Services:**
- Provide a campus location for those services that departments do not want to build an infrastructure for or where creation of an infrastructure may be excessive

**Common Good Software/Services:**
- Provide the campus with a clear understanding of how software is determined to be a common good and how that software is funded

**Restrainting Forces**
(Forces that may inhibit the implementation of the desired change.)

- Establishment of approved transparent procedure for the flagging and evaluation of investments
- Since POSSSE does not have the expertise to examine technical details related to project proposals CSG involvement is needed to ensure proper checks and balances
- Additional details are needed on the process in which common good services are identified and whether they are categorized as “mandatory” vs. “discretionary”
- Lynda.com should be removed as an example; there is disagreement on whether it should be considered “discretionary” or “mandatory”; per the IT2020 plan - Digital Citizenship and training of our community is integral to moving us forward

**Actions To Be Taken:** 17 yes votes, 0 no votes, 1 abstain vote, and 10 no response.
As the current proposal is in draft form, the CSG is requesting an additional review of the final proposal.