

Collaborative Tools Strategy

University of California, Berkeley

Executive Summary

This document presents a strategy for supporting the sweeping changes in scholarly and administrative work brought on by a new generation of computer- and internet-based collaborative tools available to, and in use at, the University of California, Berkeley. This strategy arises from an explosion of collaborative tools and technologies available to the faculty, students, and staff of UC Berkeley. Like many other universities nationally and internationally, the campus is wrestling with how best to handle the costs of supporting these technologies, how to manage the responsibilities and risks they present, and how to help its members appropriately and productively adopt the new options before them.

The current landscape

The landscape in which the campus operates has a number of salient features. Collaboration is fundamental to scholarly work, yet technologically-mediated collaboration is often too hard today. Innovation is rapidly occurring outside the campus, and new collaborative tools and services hosted by outside providers offer great appeal to members of the UC Berkeley community. However, use of these external services may expose the users and the University to unacceptable risk of legal and financial liability, breach of privacy, and loss of valuable data, with dire consequences. Driven by the pace of innovation in industry and pressures for cost efficiency, information technology (IT) organizations at UC Berkeley have begun moving towards a new approach to supporting the needs of campus, blending services sourced through multiple providers and delivery models. Yet, increasingly, funding for IT is limited. In this environment, it will be even more challenging to provide the new or enhanced services the campus needs to support collaboration.

The higher education community is just now facing these challenges. Across higher education, not just at UC Berkeley, IT planners are grappling with the challenges presented by this new landscape.

Why establish this strategy?

... [I]ncreasing emphasis on collaboration [is] a critical factor for UC's future success ... an imperative is to develop tools and services to enable communities within UC to work more effectively together and with partners outside UC.

— Information Technology Guidance Committee, University of California, *IT Guidance Report*, December 2007

If this strategy is successful, it will help the campus community more effectively engage in the activities at the heart of its mission: teaching, research and public service. Doing collaboration well delivers important competitive advantages to the campus and University, extending not only into particular disciplines and scholarly activities, but also into public service, campus business, and other endeavors. Finally, and perhaps most crucially, doing technologically-mediated collaboration well is necessary for the campus community to play an important role in tackling humankind's important challenges.

The strategy: expand choice and lower barriers

The fast pace of innovation in the field of collaborative tools, when viewed in conjunction with the other challenges in the current landscape, leads us to conclude that the best option for supporting collaboration through information technology is to "embrace the chaos." This tenet is at the core of the UC Berkeley Collaborative Tools Strategy.

"Embrace the chaos": a two-part strategy. Embracing the chaos means providing a structure to manage a rich set of possibilities – to help well-informed people make smart choices about using and supporting collaborative tools – by investing in activities that:

Provide guidance to expand choice. Provide the campus community and campus IT providers with several, parallel types of guidance related to collaborative tools and services, with the intent of expanding the range of tools and services available to users and facilitating informed selection among these choices.

Lower barriers to collaboration. Lower the barriers that currently make it difficult for campus people to work together, and with outside partners, by improving infrastructure and adopting frameworks that foster collaboration.

Implementing the strategy: seven goals

Provide guidance to expand choice

GOAL 1. Provide enhanced information and guidance to all members of the campus community on collaborative tool selection and use.

- a. *Guide informed choice by building communities around the use and support of collaborative tools.*
- b. *Provide guidance around storing and using university data in collaborative tools.*

GOAL 2. Establish a common framework and vocabulary for defining support for collaborative tools.

Define a vocabulary of tiered support for specific collaborative technologies to allow more fine-grained discussions about the utility of, and appropriate uses for, a given tool.

GOAL 3. Provide criteria and guidance to IT staff to assist decisions about which collaborative tools to formally support.

This should lead to the selection of tools that are based on the collaborative needs and practices of their users, are made broadly available to the users that need them, and avoid user or data lock-in to a particular tool choice.

Lower barriers to collaboration

GOAL 4. Provide enhanced identity management services.

Current identity management offerings need increased investment to enable members of the campus community to easily:

- Collaborate with people who aren't part of the campus community.
- Maintain and discover communities, particularly communities of practice.
- Manage access to collaborative resources by group and role.

GOAL 5. Train our workforce to work with and support new collaborative technologies and architectures, while protecting privacy and keeping data secure.

One of the risks of "embracing the chaos" is that using and providing collaborative tools and services can become more confusing and cumbersome, for both customers and IT providers, in an environment where services are sourced from different providers and delivery models. Additionally, restricted and sensitive data may be at a higher risk of inappropriate access. The campus will need to develop the skills of its workforce to mitigate these risks. Specific areas of training should include:

- a. *Data handling skills.*
- b. *Information technology skills* for rapidly building IT services, often from blended components.
- c. *Business process analysis and user-centered design skills* so that collaborative tools and services can be used effectively and productively by customers, while reducing ongoing support costs.

GOAL 6. Make it easier to use and share data in collaborative tools.

- a. *Make institutional data more readily available for use in collaborative contexts* by clarifying and streamlining data availability, ownership and governance.
- b. *Use open standards for data representation and transport.*
- c. *Provide a shared pool of storage and related services that collaborative tools can use* to facilitate the rapid interchange of data and reduce the overhead of managing quotas and other user administration issues.

Periodically reevaluate the collaborative landscape

GOAL 7. Periodically re-evaluate collaborative practices/needs and technologies.

Campus collaborative needs and technological environments change rapidly, making it necessary to re-evaluate this strategy and its goals at periodic intervals.