



OFFICE OF BUSINESS RESUMPTION

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Submission for the Larry L. Sautter Award

Project Title:

Restarting Berkeley: a planning tool for the resumption of teaching, research, and public service following any disaster

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Project Summary:

Restarting Berkeley is a web-based tool for business continuity planning, designed specifically for higher education. It uses an intuitive interface to guide users through a “fill-in-the-blanks” process that removes the mystery from this type of planning.

The intended users of *Restarting Berkeley* are all the sub-units of the campus:

- all sizes: colleges, schools, departments, and occasionally smaller units
- all types: instructional, research, service, and administrative-support units.

The *Restarting Berkeley* tool produces a campus-wide database of disaster-readiness information. For each planning unit, it produces a printable business continuity plan.

We believe that *Restarting Berkeley* is the first (and only) tool of its kind. It adapts best practices in the field of business continuity planning to the unique environment of higher education. By making continuity planning easy-to-understand and easy-to-do, it will help prepare our campus to continue its mission of teaching, research and public service despite any disaster.

Project Description:

The goal of business continuity planning is to prepare the institution to carry on its mission despite adverse events or, if that is not possible, to resume the mission rapidly following an interruption.

At the University of California, the “business” in “business continuity” is teaching, research and public service.

In 2001, the Berkeley campus developed a Campus Business Resumption Plan.** Among other conclusions, this plan recognized that the core activities of the institution (teaching, research, service) are performed essentially at the department*** level; hence preparations to continue these activities during disaster must occur at that level as well as at the campus administration level.

That 2001 plan directed departments across campus to develop business continuity plans. However, a number of obstacles stood in the way:

- Business continuity planning was an unfamiliar concept, imported from the corporate world. No one knew what it should look like in the university setting, or how to do it.
- The campus has 300-400 departments that would be expected to plan.
- The campus organization and culture are notoriously decentralized and independent.
- Heavily-burdened faculty and staff have little time or patience for a long-term planning activity of uncertain benefit.
- Few resources were available; certainly NO added resources at the department level.
- No models could be found at other campuses.

To facilitate continuity planning at UC Berkeley, the Office of Business Resumption was created, with a single staff position (Manager).

** The terms “business resumption” and “business continuity” differ mainly in emphasis; we consider them to be synonyms and use them interchangeably.

*** The term “department” is used broadly to mean any subunit of the campus: college, school, academic department, research unit, public-service unit, administrative support unit.

The Office of Business Resumption attempted several approaches:

1. **Training Model.** A sequence of training sessions was developed, aimed at teaching departmental staff to do corporate-style business continuity planning. With a single trainer, 300-400 departments, and no resources to do follow-up and enforce consistency of outcome, this approach failed. The few plans actually produced were not consistent or useful.
2. **Scenario-based Template.** Next, a planning template was adopted (created by the UC Office of the President) that posed four disaster-scenarios and asked the same detailed questions about how the department would respond to each scenario. While this planning process appeared to have value for the individuals who participated, the product (the plan) lacked focus, and was of uncertain value for coping with disaster scenarios different from those considered. Moreover, staff found the process of completing the template to be both tedious and agonizing.
3. **Function-based Template.** A second planning template was developed, focusing on how to carry on a department's critical functions in the absence of the usual resources (regardless of the nature of the disaster event). This template won more acceptance. It was used by approximately 40 campus units from 2004-2006 and viewed by those units as a reasonable planning exercise.

But the function-based template, while conceptually on-the-mark, was process-deficient. It was an MS Word document where one-to-many relationships were handled by copy-pasting additional sections. The resulting plan WAS the template, with content sometimes obscured by the voluminous instructions. And worst of all, the plans produced by different departments could not be compared or queried.

4. **Web-based Planning Tool (*Restarting Berkeley*).** The deficiencies of the function-based MS Word template led to our current approach – a web application (*Restarting Berkeley*) that produces BOTH printable departmental business continuity plans AND a query-able database. Funding for the project was obtained via an academic/administrative collaboration between UCB's Institute of Urban and Regional Development and our Disaster-Resistant University Program. That collaboration obtained a \$67,000 FEMA grant that enabled us to transform the function-based template (above) into a web application. A clear set of design principles was used in developing the web application:

- **Intuitive.** Intuitive user interface so that little-or-no user training is required.
- **User Help.** Generous on-screen user assistance, on the “just-in-time” model.
- **Easy to Approach, Easy to Use.** A moderate number of screens, and a moderate number of questions-per-screen, to make the process appear do-able rather than daunting.
- **A Useful Product.** An output document (the plan) that is moderate in length, readable, useful, and automatically produced.
- **Bias for Action.** A built-in bias for action as opposed to “planning”. The most prominent feature of the plan is its list of “Action Items” that can be done pre-disaster to increase readiness and recoverability.
- **Mechanism for Collaboration.** Departments can propose Action Items that are outside their own scope, for referral to other departments or to the campus administration.
- **Query-able Database.** A query-able database of all plans (using Jasper Reports).
- **Integration of Planning and Exercising.** The Action Items provide the “hook” for an annual departmental exercise, with on-line updates to the Action Item list (and other parts of the plan) happening during the exercise. See Attachment 1.

How to Access. The *Restarting Berkeley* application is accessed via UCB's “Blu” business portal (<http://blu.berkeley.edu/>). This requires UCB user-authentication; guest logins can be arranged.

Alternatively, a “Demonstration Version” of the *Restarting Berkeley* application can be viewed (without login) at <http://obr.berkeley.edu/RestartingBerkeley.htm>. This Demonstration Version shows all screens, but is HTML-only (no database functionality). Sample data is included where needed to aid the flow of the screens. We recommend that all potential users view this Demonstration Version before using the full application.

The Demonstration Version also includes an explanation of how access is granted and controlled (users are authorized for specific plans only), as well as a completed Sample Plan.

[Please note: *Restarting Berkeley* is currently being upgraded to Version 2, which will be renamed *The Berkeley Continuity Planning Tool*. On May 21 (projected), the Demonstration Version of *Restarting Berkeley* will be replaced with the Demonstration Version of *The Berkeley Continuity Planning Tool*. The Production Version of *The Berkeley Continuity Planning Tool* will be launched in early June, at which point the name *Restarting Berkeley* will no longer be used.]

Finally, higher-education institutions that wish to install & modify the application for use on their own campuses may download the complete site (with documentation) at <http://obr.berkeley.edu/download.html>. This service is provided by UCB at no charge, in alignment with its commitment to collaboration and public service.

Technology Utilized:

Restarting Berkeley is a web application:

- HTML and CSS based
- ColdFusion MX 7 presentation and application layer
- Microsoft SQL Server back-end database
- Adobe Acrobat (PDF) printable business continuity plan.

Timeframe of Implementation:

July 2005	<i>Restarting Berkeley</i> team begins conceptual design and screen design.
October 2005	HTML programming begins. Database design begins.
April 2006	Database connections added to screens.
May 2006	Final functional review by design team.
June 2006	Usability testing with key campus users.
July-August 2006	Final revisions based on user testing results.
September 15, 2006	Launch of production version ("Version 1").
Sept. 2006 to May 2007	65 campus departments use the <i>Restarting Berkeley</i> tool to create business continuity plans (many complete, many still in process).
February 2007	Development of Version 2 begins (significant upgrade)
May 21, 2007 (est.)	Release of Version 2 begins with a "Demonstration Version" (http://obr.berkeley.edu/RestartingBerkeley.htm). Version 2 is renamed <i>The Berkeley Continuity Planning Tool</i> .
Early June 2007 (est.)	Release of Version 2 (Production Version). <i>The Berkeley Continuity Planning Tool</i> replaces <i>Restarting Berkeley</i> .

Customer Satisfaction Data:

Evidence of customer satisfaction is in several forms:

1. **UC Berkeley:** From September 2006 to May 2007, 65 campus departments began continuity plans using the *Restarting Berkeley* tool. Many plans are complete and most others are well along. (Total estimated number of potential user departments at UCB is 300-400, depending on how the count is done.) A complete list of users can be viewed within *Restarting Berkeley* (production version).

Though quantitative data has not yet been collected, the prevailing user opinion expressed is that the process is surprisingly easy and the product valuable.

In addition, UCB's School of Public Health has adopted the *Restarting Berkeley* tool as the central instrument of its Disaster-Resistant School of Public Health Project – whose goal is to make that School a model of academic disaster-preparedness.

2. **UCLA:** In March, 2007 UCLA AIS (Administrative Information Systems) requested (and has begun) to use the *Restarting Berkeley* tool for a planning project on its campus. (UCLA is using UCB's version via guest logins.)
3. **Other Universities:** The UCB Office of Business Resumption gives the *Restarting Berkeley* software, upon request and with no charge, to other institutions of higher education (see above). To date (May 2007), 50 universities (including a few other organizations) have contacted UCB to inquire about the tool. Of these, 33 have downloaded the site files (obtainable at <http://obr.berkeley.edu/download.html>). It is not known how many have yet installed the application for their use.

A list of these universities is included (see Attachment 2). Remarkably, this response has occurred largely through word-of-mouth and word-of-Google; we have refrained from active publicity (except for one UC systemwide meeting), preferring to wait for Version 2 before making announcements beyond our campus.

4. **Potential UC-Wide Collaboration:** In summer 2007, UCB will host a web-conference of interested people from the other UC campuses, UC medical centers, UC national labs, and UCOP. The topic will be whether the group would be interested in collaborating on a common UC-wide version of this continuity planning tool, to be hosted on UC Berkeley servers (thereby eliminating, for the other members of the collaboration, the technical issues of installing and modifying the tool).
5. **NACUBO:** NACUBO (National Association of College and University Business Officers) announced several weeks ago that UCB has been selected as one of three recipients of its 2007 Innovation Award for the *Restarting Berkeley* tool (<http://www.nacubo.org/x8608.xml>).