

Usability Training & Testing at State Board of Equalization:

A Low-Cost Approach

BOE Usability Training/Testing

- Budget constraints dictated a low-cost approach
- Hired usability vendor to train Web Team to conduct usability study/analysis
- Used BOE's own Internet site as the target for the training workshop
- Purchased MORAE software

Usability Presentation to BOE Management & Stakeholders

- Educated BOE management and website stakeholders on usability concepts
- Utilized actual testing footage to underscore findings of our analysis
- Garnered buy-in for Web Team's efforts
- Convinced program areas that web design should be handled by trained staff

The following slides represent the presentation given to BOE's divisional web content coordinators, their management, and key executive management and other website stakeholders in early 2009.

Certain slides have been modified to remove embedded links to the MORAE software video footage of the actual usability testing conducted. (At the time, we promised the participants in writing that the footage would be viewed only by State personnel for business purposes and would never be viewable on the open web).

BOE Website Usability Study & the Forthcoming Redesign

External Affairs Department
Web & Media Services Division

Background

- Early 2007 - Interviews with Divisional Web Content Coordinators
- Frustration over previous site redesign
- Training of WSU team in web usability principles and methods

Website Usability

- Understanding how people read webpages
- Colors and contrast
- Intuitive link-names → drill-down paths
- Customer-centric logical design, i.e., task-based navigation
- Effect of graphics, logos, and animations



[New on the Site](#)

[Data Tools](#)

[American FactFinder](#)

[Jobs@Census](#)

[Catalog](#)

[Publications](#)

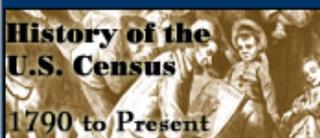
[Are You in a Survey?](#)

[About the Bureau](#)

[Regional Offices](#)

[Doing Business with Us](#)

[Related Sites](#)



[2010 Census](#) · [News](#) · [Become a Census Taker](#)

[American Community Survey](#) · [Census 2000](#)

People & Households

[Estimates](#) · [Projections](#) · [Housing](#) · [Income](#) | [State Median Income](#) · [Poverty](#) · [Health Insurance](#) · [International](#) · [Genealogy](#) · [More](#)

Business & Industry

[Economic Census](#) · [Get Help with Your Form](#) · [Economic Indicators](#) · [NAICS](#) · [Survey of Business Owners](#) · [Government](#) · [E-Stats](#) · [Foreign Trade](#) | [Export Codes](#) · [Local Employment Dynamics](#) · [More](#)

Geography

[Maps](#) · [TIGER](#) · [Gazetteer](#) · [More](#)

Newsroom

[Releases](#) · [Facts For Features](#) · [Minority Links](#) · [Broadcast & Photo Services](#) · [Embargo/News Release Subscription](#) · [More](#)

Special Topics

[Census Bureau Data and Emergency Preparedness](#) · [Events Calendar](#) · [Training](#) · [For Teachers & Students](#) · [Statistical Abstract](#) · [FedStats](#) · [USA.gov](#)

Apply now to be a census taker!

Data Finders

[Population Clocks](#)

U.S. 305,695,945

World 6,756,623,545

18:29 GMT (EST+5) Jan 27, 2009

[Population Finder](#)

city/ town, county, or zip

or state
Select a state

[Find An Area Profile with QuickFacts](#)

Select a state to begin
Select a state

[Latest Economic Indicators](#)

- [Housing Starts/Building Permits](#)
- [Manufacturing and Trade Inventories and Sales](#)

[Economic Indicators](#)

Select an indicator
Select an indicator



2006
County Population Estimates

County Population Estimates

New on the Site

Data Tools

American FactFinder

Jobs@Census

Catalog

Publications

Are You in a Survey?

About the Bureau

Regional Offices

Doing Business with Us

Related Sites

Understanding Federal Statistics Workshop
June 25 - 28, 2007

SEARCH

2000 Census

[Your Gateway to Census 2000](#) • [2010 Census](#) • [Census 2000 EEO Tabulations](#) • [Immigration \(1990-01\)](#) • [Search by ZIP Code](#)

People & Households

[Estimates](#) • [American Community Survey](#) • [Elections](#) • [Housing](#) • [Income](#) | [State Median Income](#) • [Lifestyle](#) • [Health Insurance](#) • [International](#) • [Demography](#) • [More](#)

Business & Industry

[Economic Census](#) • [Economic Indicators](#) • [Deliver with Your Form](#) • [NAICS](#) • [Survey of Business Owners](#) • [Government](#) • [E-Stats](#) • [Foreign Trade](#) | [Export Codes](#) • [Local Employment Dynamics](#) • [More](#)

Geography

[Maps](#) • [TIGER](#) • [Geotitles](#) • [More](#)

Newsroom

[Releases](#) • [Fact For Features](#) • [Monthly Links](#) • [Broadcast & Photo Services](#) • [Embassy Request](#) • [More](#)

Special Topics

[Historical Data and Emergency Preparedness](#) • [Census Calendar](#) • [Training](#) • [Census 2000](#) • [Statistical Abstract](#) • [EEOStats](#) • [EEO](#)

NEW - Annual Capital Expenditures Survey 2005

Data Finders

Population Clocks

U.S. 301,465,625

World 6,294,760,029
1 in 43 GMT (EST - 5) Mar 26, 2007

Population Finder

city, town, county, or zip

or state
Select a state

Find An Area Profile with Quick Facts

Select a state to target
Select a state

Latest Economic Indicators

- [GDP without Oil](#)
- [Household Wealth](#)

Economic Indicators

Select an indicator
Select an indicator

General Web Usability Findings

- Users don't read on the Web, they scan the text
- Users want real content, not "cool" features, mission statements, or self-promotional content.
- Download times are becoming ever more critical and sites need to design for speed.
- Users look at text before any graphics; only 3 types of graphics are generally looked at: faces, erotic images, and "fake" dialog boxes.
- Fancy Formatting = Looks Like a Promotion = Ignored

Website Usability Study

- Contract with usability professionals
- Additional usability training for WSU team
- Interviews with Taxpayer Information Section phone technicians
- Live testing with 4 non-BOE participants
- Analysis of test results

TIS Phone Technician Interviews

- Field daily complaints re BOE website
- Constant customer walk-throughs of site
- Described most commonly attempted tasks on website
- Basis for usability testing scenarios

Success Rate by Test Scenario

1. Opening business; BOE forms needed — 75%
2. Closing a business; how to notify BOE — 50%
3. Sales tax waiver document for wholesaler — 0%
4. Obtain copy of reg. without downloading — 0%
5. Find sales tax rate in West Sacramento — 100%
6. Doc listing all city/county sales tax rates — 75%

Success Rate by Test Scenario

7. Confirm/explain sales tax rate increase — 50%
8. Law supporting a bill for use tax due — 0%
9. List of proposed changes to a BOE reg. — 67%
10. Report sales tax evasion — 25%
11. Submit complaint re BOE employee. — 75%

Scenario Success Rates

Participant 1: 36%



Participant 2: 64%



* used search box after giving up on site navigation

Participant 3: 50%



Participant 4: 36%



Test Observations

- Users resort to alternate means when website navigation proves inadequate
 - E-mail interfaces
 - 800 phone number
 - Search engine
 - “All Forms” list

[Displayed excerpts of MORAE footage illustrating the above observations.]

Test Observations

- Preference for content layout in bullets and short lists
- Long narratives / long lists are unwieldy

[Displayed excerpts of MORAE footage illustrating the above observations.]

Test Observations

- Links followed but expected content is not found
- Links to desired content are seen but not followed

[Displayed excerpts of MORAE footage illustrating the above observations.]

Test Observations

- Expectation of task-driven links corresponding to one's taxpayer situation
- Links followed across various program area pages despite content irrelevance

[Displayed excerpts of MORAE footage illustrating the above observations.]

Findings/Conclusions

- Need for task-based links corresponding to what customers want to do
- Customers don't necessarily know to which program area their situation corresponds
- Expectation of consistent navigation
- Narrative-style content should be reformatted into readable "chunks"

Findings/Conclusions

- Forms should be presented in categorized, task-oriented manner
- Search results are often unusable due to poor form titling and lack of metadata
- Need for a consistent, controlled vocabulary of terminology, i.e., a Glossary of Terms

Prototype Site Redesign

- Use of State web templates
- Task-driven links addressing the most common customer situations
- Site-universal left navigation panel
- Consolidation of similar/associated content even if from different program areas
- Reformatting of narrative-style content



Welcome to the California State Board of Equalization

The Board of Equalization collects California state sales and use tax, as well as fuel, alcohol, and tobacco taxes and fees that provide revenue for state government and essential funding for counties, cities, and special districts. [More about BOE...](#)

- » [Online eServices](#)
- » [Field Offices](#)
- » [City & County Tax Rates](#)
- » [Glossary of Tax Terms](#)
- » [Frequently Asked Questions](#)

- » [Law Guides & Annotations](#)
- » [Legislation](#)
- » [Rules & Regulations](#)
- » [Access to Public Records](#)
- » [Current Litigation](#)
- » [Public Meetings & Participation](#)



QUICK LINKS

How Do I...?

News, Notices, & Reports

Meetings & Seminars

- | | |
|---|---|
| » File my Return | » Appeal a Tax Ruling |
| » Make a Payment | » Report Suspected Tax Fraud |
| » Register for a Permit or License | » Find the Form or Publication I Need |
| » Verify a Permit or License | » Start, Buy, Sell, or Close a Business |
| » Change My Address on my Permit | » Find California Income or Payroll Tax Information |
| » Get an Extension on Paying My Taxes | » Find Property Tax Information |
| » Get BOE Updates | » Find Sales & Use Tax Information |
| » Start a Career at BOE | » Find Special Taxes & Fees Information |

IN THE SPOTLIGHT

- » [BOE Headquarters Building Assessment](#)
- » [BOE is Going Paperless – Sales and Use Taxpayers Transition to Electronic Filing](#)
- » [California Use Tax Information](#)
- » [Largest Sales and Use Tax Delinquencies in California](#)
- » [Statewide Compliance and Outreach Program](#)

