



ca.gov

Citizen-Centered Design in California Next Steps

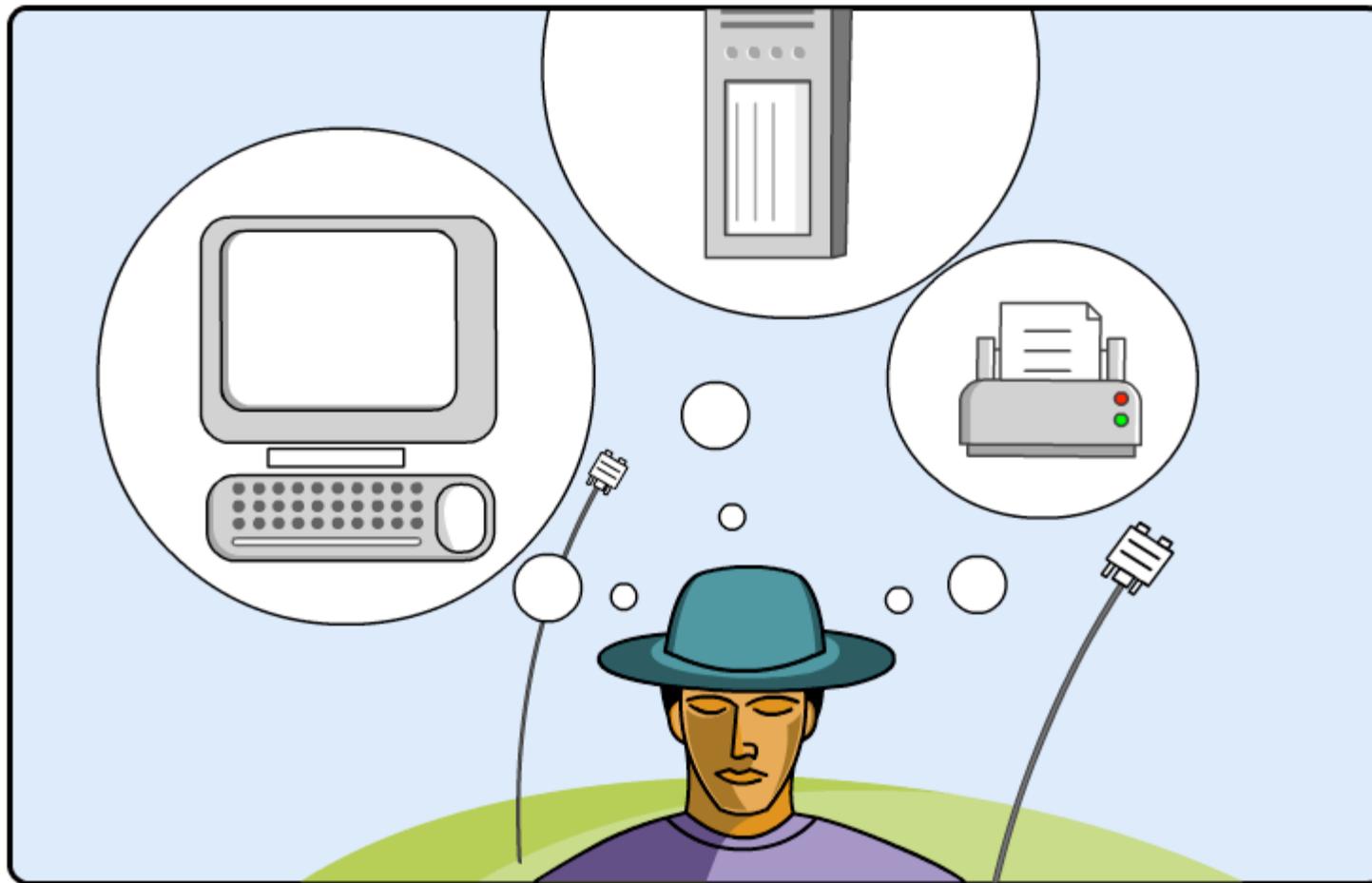
Commissioned by
The California State
July 2006

Table of Contents

- Introduction
- What We Have Seen
- Recommended Next Steps

First wave of the information age...

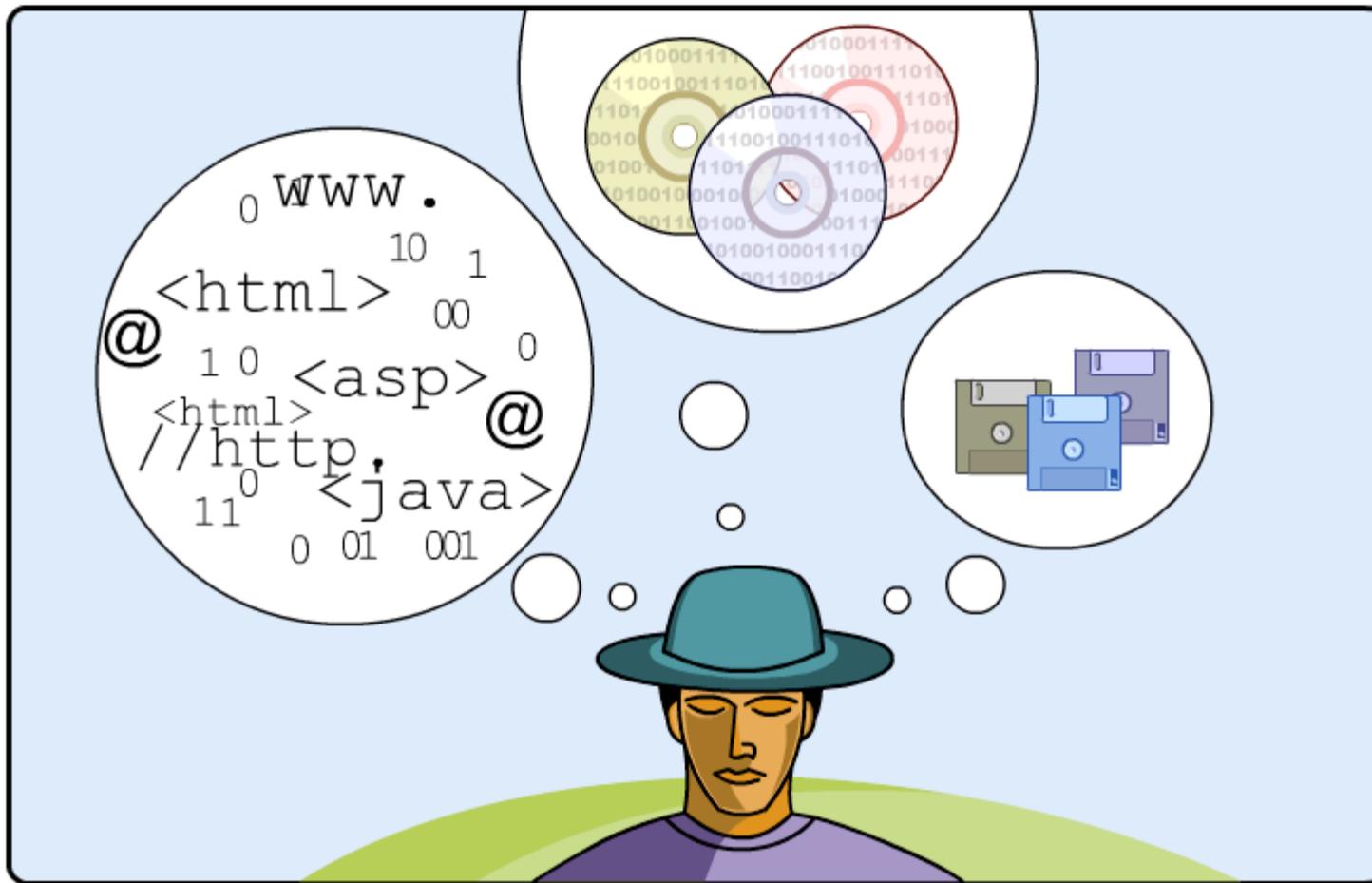
Hardware
1980



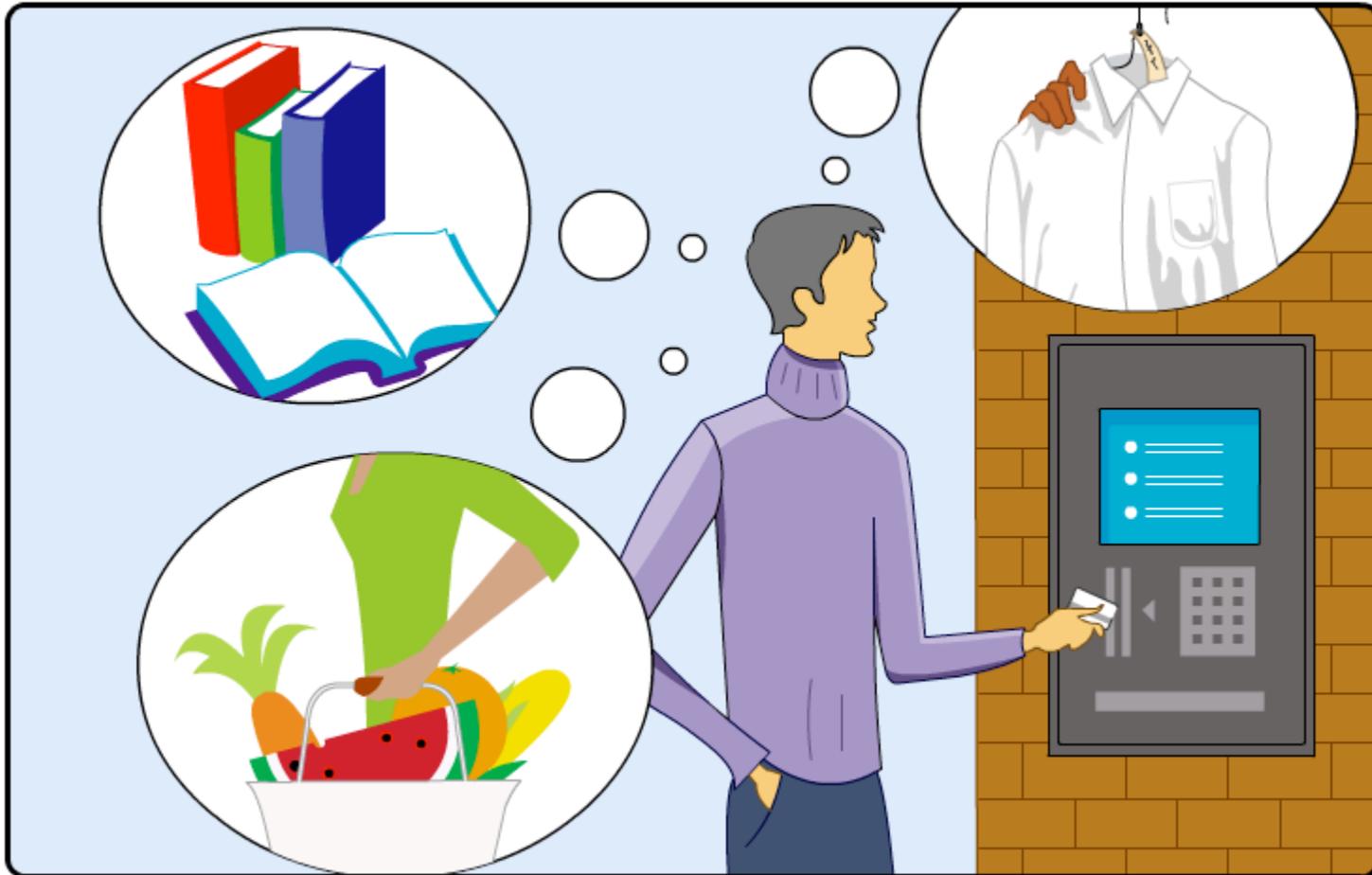
Second wave of the information age...

Hardware
1980

Software
1990



A shift to self-service...



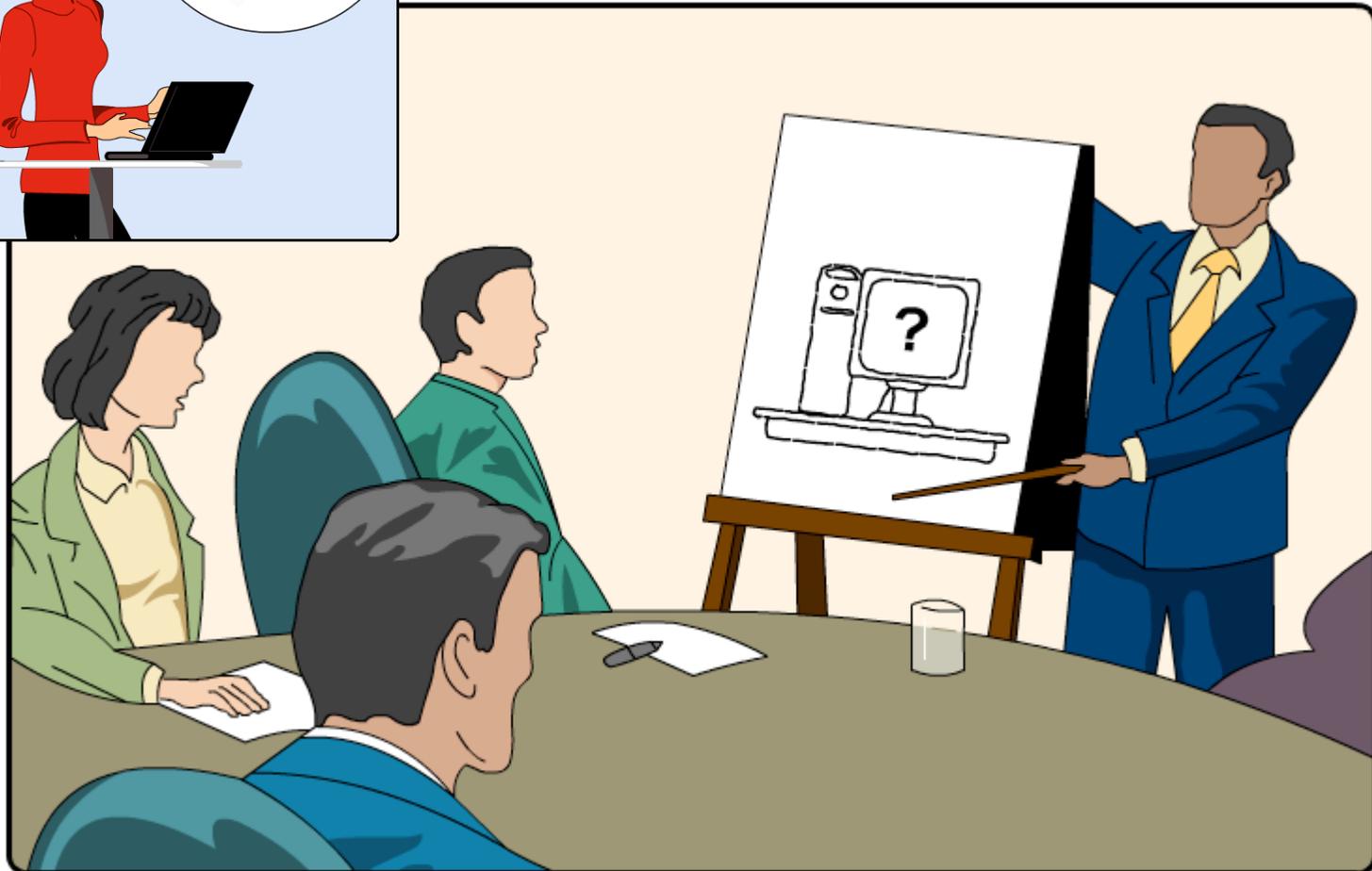
Third wave of the information age...



A shift to self-service...

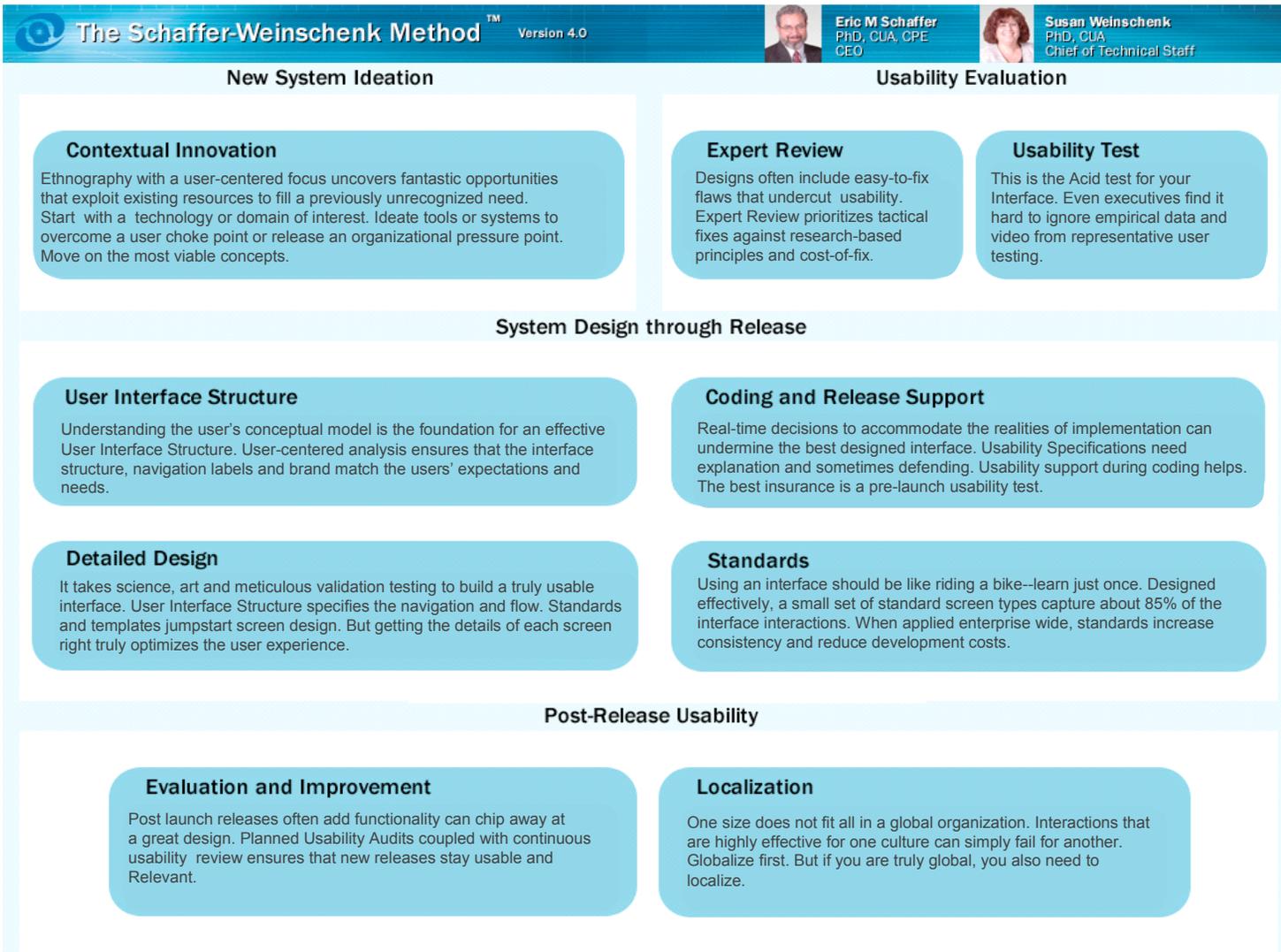


Implications of supporting self-service in California



So how do you meet the need?

Citizen-Centered Design



The Schaffer-Weinschenk Method is the user-centered design process evolved over 25 years at Human Factors International, Inc. | www.humanfactors.com | © 2006 Humanfactors International, Inc. All rights Reserved.

But citizen-centered design is hard...

Designers Know Too Much

The FedEx logo is displayed in a rounded rectangular frame. The word "Fed" is in a bold, purple, sans-serif font, and "Ex" is in a bold, grey, sans-serif font. The "E" and "x" are connected.

If you designed it, you know how it works...

But citizen-centered design is hard...

Designers Know Too Much

FedEx

FedEx

If you designed it, you know how it works...

But citizen-centered design is hard...

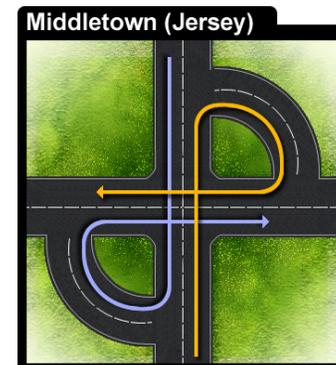
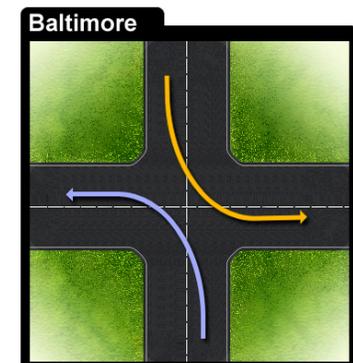
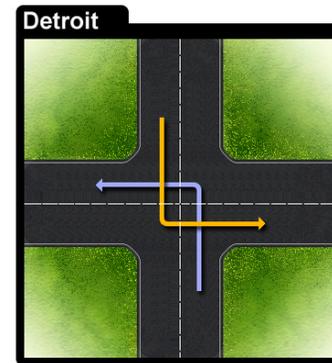
Designers Know Too Much

FedEx

FedEx

If you designed it, you know how it works...

Users Think Differently



How do you do it efficiently?

Tactical Usability

Reactive

- Piecemeal Projects
- As-needed Approach
- (Re-)Invented Tools
- Just-in-time Intervention

Haphazard Processes /
Haphazard Success

How do you do it efficiently?

Tactical Usability

Reactive

- Piecemeal Projects
- As-needed Approach
- (Re-)Invented Tools
- Just-in-time Intervention

Haphazard Processes /
Haphazard Success



Institutionalized Usability

Proactive & Integrated

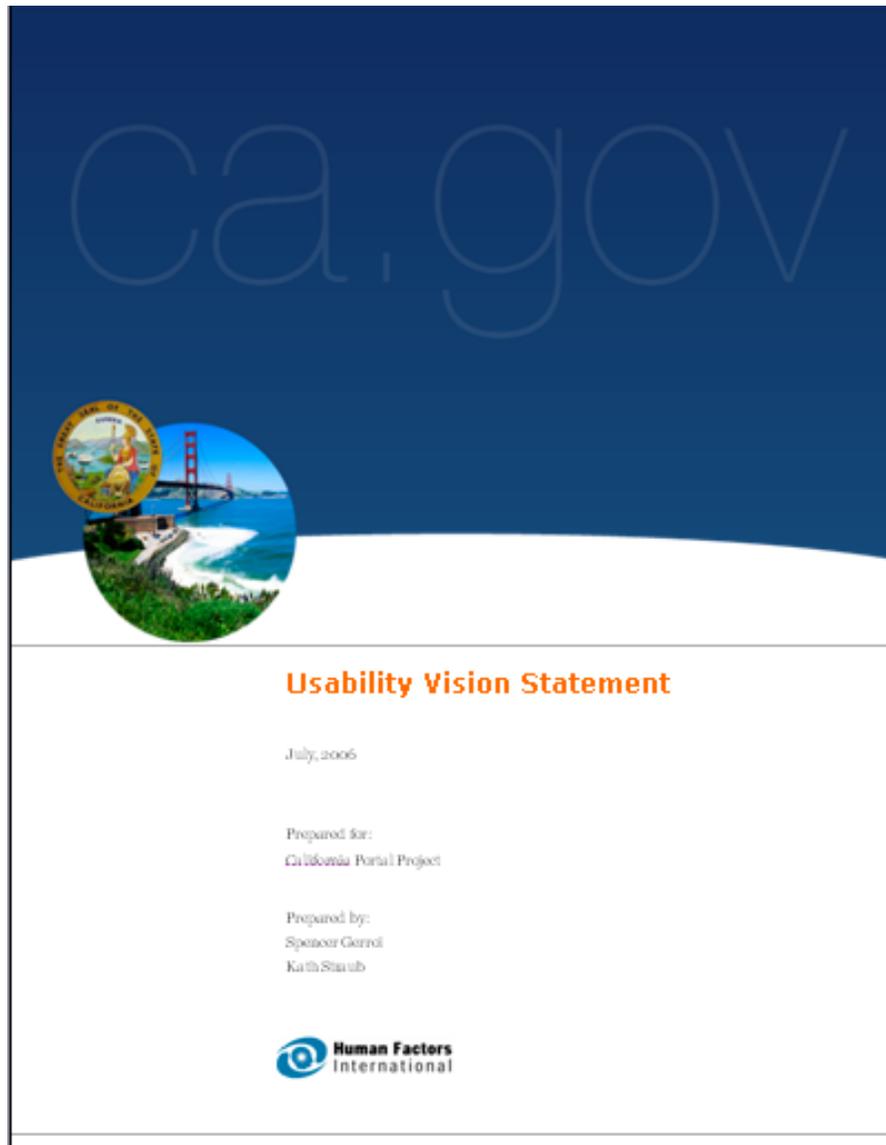
- Long Term Initiatives
- Common Methodology
- Shared Tools
- Continuous Improvement
- Consolidated Learnings

*Routine Processes /
Routine Success*

Table of Contents

- Introduction
- **What We Have Seen**
- Recommended Next Steps

Stakeholder Interviews and Vision Statement



Objectives

Sites should...

- Be citizen-focused
- Support agency goals
 - G-to-C
 - G-to-B
 - G-toG
- Be produced cost-effectively
- Leverage resources across the state
- Reduce agency effort

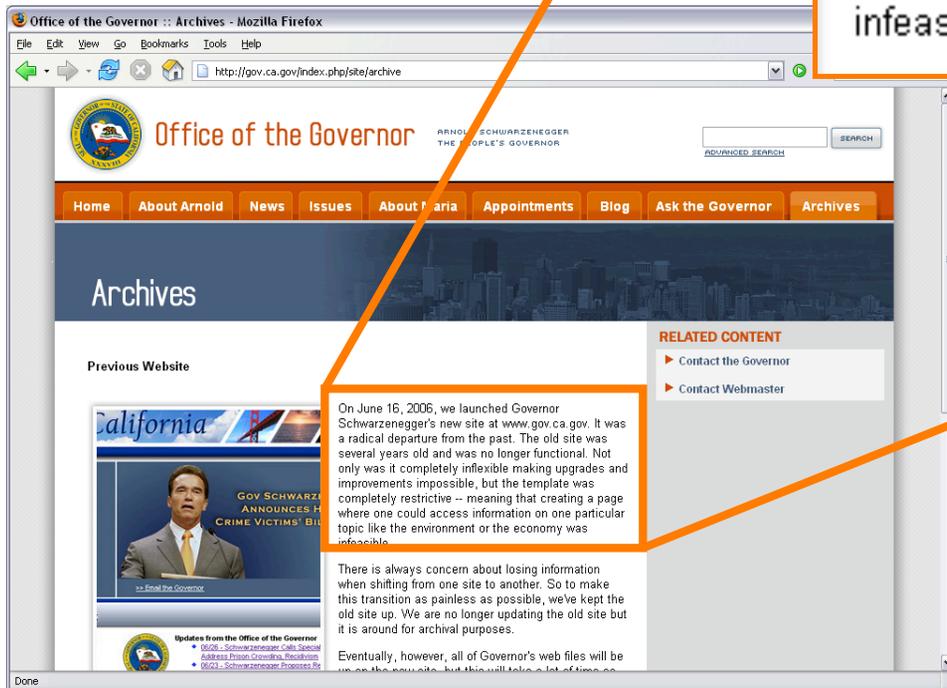
Stakeholder Interviews

Underlying Concerns

- **Limited enterprise attitude** means decisions are not made to support business, identity, and communication objectives
- **Internal focus** with decisions based on government convenience lead to designs that reflect government structure and are hard for citizens to understand
- **Inflexible standards** and templates do not meet the needs of the agencies, who hesitate to adopt
- **Lack of tools** makes adopting even harder and results in suboptimal usability and inconsistent designs
- **Limited of citizen-centered design skills** makes employees feel helpless and results in usability challenges
- **Efforts are piecemeal** across agencies, are not cost-effective, and result in reinvented wheels which create inconsistencies

Inflexible Standards – example feedback

On June 16, 2006, we launched Governor Schwarzenegger's new site at www.gov.ca.gov. It was a radical departure from the past. The old site was several years old and was no longer functional. Not only was it completely inflexible making upgrades and improvements impossible, but the template was completely restrictive -- meaning that creating a page where one could access information on one particular topic like the environment or the economy was infeasible.

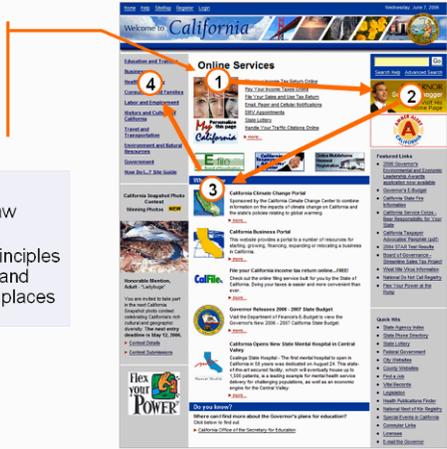


The screenshot shows a Mozilla Firefox browser window displaying the 'Office of the Governor' website. The address bar shows 'http://gov.ca.gov/index.php/site/archive'. The page features a navigation menu with items like 'Home', 'About Arnold', 'News', 'Issues', 'About Maria', 'Appointments', 'Blog', 'Ask the Governor', and 'Archives'. The main content area is titled 'Archives' and includes a section for 'Previous Website' with a news item dated June 16, 2006, which is highlighted by an orange box. The news item text is identical to the text in the callout box above. To the right of the news item is a 'RELATED CONTENT' section with links for 'Contact the Governor' and 'Contact Webmaster'. At the bottom, there are 'Updates from the Office of the Governor' and a 'Done' status bar.

Expert Review

Homepage: Visuals compete with priority content

Likely visual sequence
Users may not notice key opportunities because their eyes are drawn by visuals to the wrong places



Recommendation

- Understand what visuals draw attention first (Faces!)
- Use visuals and grouping principles to support content meaning and draw users eyes to the right places

Visual attributes that control focus

Scientific research indicates that the eyes tend to move from:

Large to small		Size
Irregular to regular		Shape
Dark to light		Shade
Saturated to desaturated		Color

Navigation: Navigation should provide a sense of place

You-are-here cues are not provided in the navigation panel



Suggested design

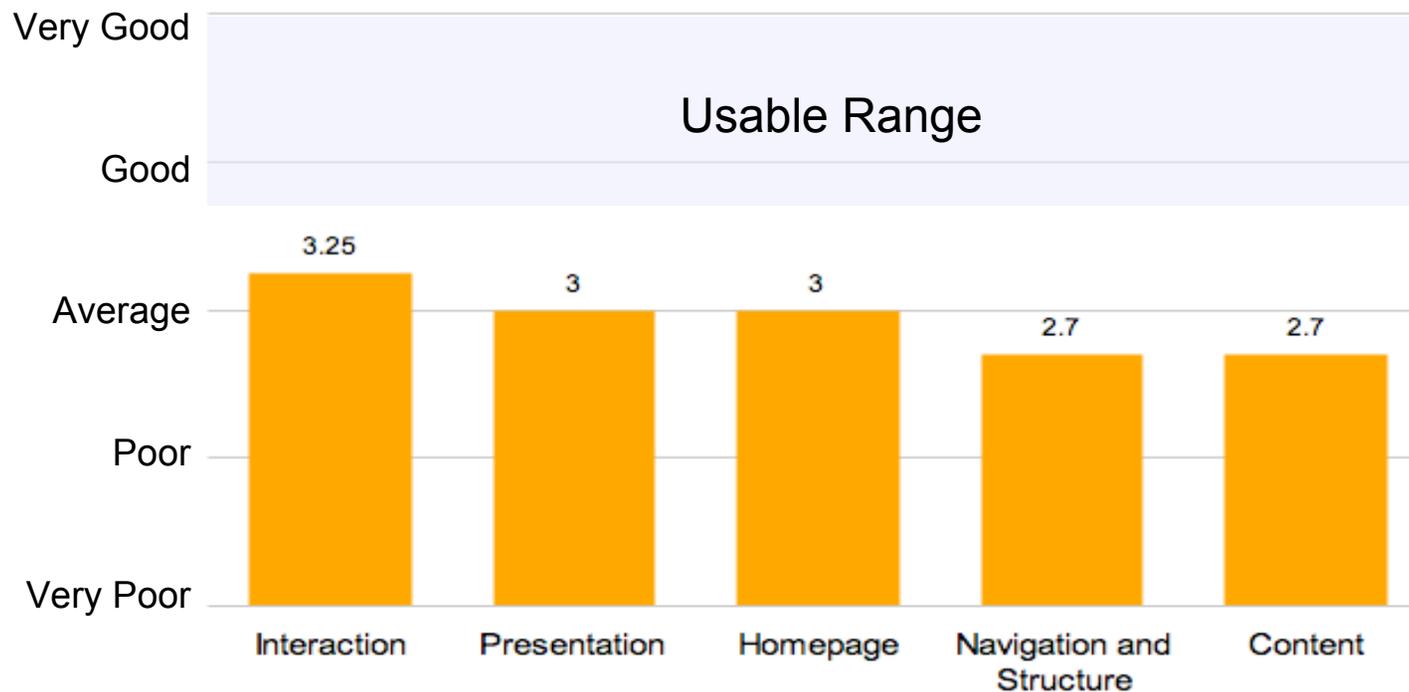
```

Item
Item
Item
Selected Item
Item
Item
Item
Item
Item
Item
    
```

Grouping: Gestalt Principles

	Size	Shape	Shade	Color
Similarity:				
Proximity:				
Common region:				
Connectedness:				

Expert Review Scorecard



5	Very good	Foreshadows future best practices based on contextualized knowledge of user needs, tendencies and behaviors, and cutting-edge interface design.
4	Good	Applies many current best practices. The design supports but could still be improved to support the user needs, the business goals or both.
3	Average	Violates some usability best practices. May trip users. Getting the task done is possible but not easy.
2	Poor	Violates many best practices. The design presents major hurdles to task completion.
1	Very poor	Defies usability best practices. The design is a possibly insurmountable obstacle to completing key tasks.

Expert Review and Usability Testing

	Expert Review	Usability Testing
Addresses this question	Is the design optimized based on what we know about how people interact with computers?	Can users <ul style="list-style-type: none"> • find the information • complete the transaction
Recommendations derived from...	<ul style="list-style-type: none"> • Current HCI & Cognition research • Industry standards and best practices • Sector and user-group specific experience 	<ul style="list-style-type: none"> • Direct observation of users doing tasks on the site • Analysis of GAP between users' conceptual model of use and site model
Benefits	<ul style="list-style-type: none"> • Rapid results • Tactical recommendations • Comprehensive evaluation 	<ul style="list-style-type: none"> • Synthesizes recommendations across the task experience • Contextualizes recommendations to the specific objectives of the site and the limitations of the users
Complimentary Benefits	Focuses on what the design brings to the users	Focuses what the users bring to the design

Usability Testing

Methodology: Usability Testing

When: June 2006

Where: Elliot-Benson Testing Facility
Sacramento, CA

Testing Room

One-way mirror

Observation room



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What worked

- The site contains A LOT of useful information
- The ability to do these things online is very important
- Citizens generally trust a government website

Participants said...

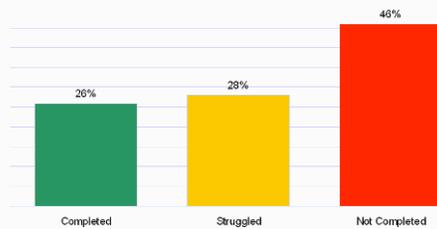
- "It's the first place for info on California"
- "It's a lot easier and saves gas to do it at home"
- "It's better than sitting on hold on that automated voice thing"
- "Pretty comprehensive"



Human Factors International

Overall success rates

169 tasks attempted



* Industry Standard Target = 80%
(but strive to be better)

Human Factors International

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Secondary navigation doesn't reflect best-practices

- Participants were confused by the shifting navigation
- 5 of 13 of the participants clicked repeatedly on the links thinking that it would take them to a different page

Clicking here...

... causes this to expand...

... and the rest of the navigation to drop down to here

Recommendations

- Create a navigation model that supports multiple levels of information and employs an intuitive interaction
- Provide 'you are here' cues to help citizens learn how the site works

Participants asked...

- "Why is 'For Students' there?" [at the top]
- "Why is the page not loading?" [clicking the same link]
- "Where did the other choices go?" [below]



Human Factors International

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Priority Recommendations

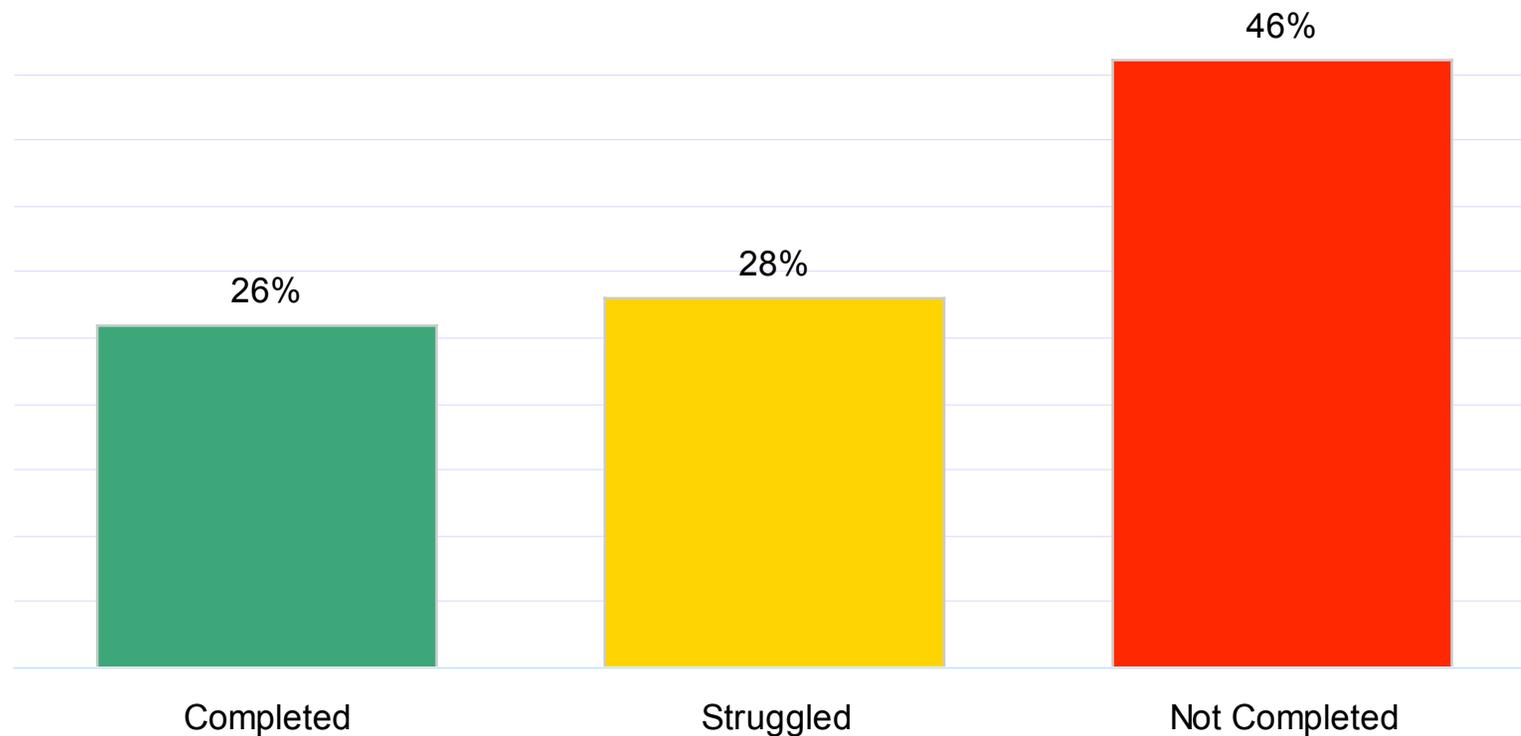
- Use data to organize a **service-oriented, citizen-centered architecture**
- Develop a **comprehensive main navigation model** with a clear entry point
- Design a **guided path** that supports progressive disclosure and opportunistic learning, streamlining the information levels to match citizens' expectations
- Invest in a **usable search engine and train developers** to implement effectively
- Establish a **visual design paradigm** in which *graphics are meaningful* and citizens' eyes are *guided according to a hierarchy* of importance
- Design **flexible branding and extensible page templates** to support agency needs
- Catalogue all **Spanish content**, provide it one central location, and continually add more
- Invest more time **creating and updating information** and less time supporting personalization
- Provide **reusable resources and training** to empower and teach staff to create effective designs

Human Factors International

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Usability Testing Overall Success Rates

169 tasks attempted



*** Industry Standard**
Target = 80% completed
(but should strive to be better)

Expert Review and Usability Testing

Primary Challenges

- Navigation and information structure do not support citizens' tasks

In other words...

Where is it? How do I get there?

Where am I now? How did I get here?

How do I get back to where I was?

- Visual design is not used effectively and is distracting

In other words...

What can I do? Where do I start?

Where am I supposed to look?

What are they trying to tell me?

Home Help SiteMap Register Login Tuesday, July 25, 2006

Welcome to California

Education and Training
Business
Health and Safety
Consumers and Families
Labor and Employment
History and Culture of California
Travel and Transportation
Environment and Natural Resources
Government
How Do I...? Site Guide

NEW
May 12, 2006
California Snapshot
Photo Contest
Winners

Honorable Mention,
Adult - "Poppies Blooming
Through Chainlink Fence"

You are invited to take part in the next California Snapshot photo contest celebrating California's rich cultural and geographic diversity. The next entry deadline is November 10, 2006.
▶ Contest Details
▶ Contest Submissions

Flex your Power

Online Services

File Your Income Tax Return Online
Pay Your Income Taxes Online
File Your Sales and Use Tax Return
Email, Paper and Cellular Notifications
DMV Appointments
State Lottery
Handle Your Traffic Citations Online
▶ more...

Personalize this page
My California

E-file
Board of Equalization

Handle Traffic Citations Online

Search the Cal e-AGG Database

What's New

California Climate Change Portal
Sponsored by the California Climate Change Center to combine information on the impacts of climate change on California and the state's policies relating to global warming.
▶ more...

California Business Portal
This website provides a portal to a number of resources for starting, growing, financing, expanding or relocating a business in California.
▶ more...

File your California income tax return online...FREE!
Check out the online filing service built for you by the State of California. Doing your taxes is easier and more convenient than ever.
▶ more...

Governor Releases 2006 - 2007 State Budget
Visit the Department of Finance's E-Budget to view the Governor's New 2006 - 2007 California State Budget.
▶ more...

California Opens New State Mental Hospital in Central Valley
Coolidge State Hospital - The first mental hospital to open in California in 50 years was dedicated on August 24. This state-of-the-art secured facility, which will eventually house up to 1,500 patients, is a leading example for mental health service delivery for challenging populations, as well as an economic engine for the Central Valley.
▶ more...

Do you know?
Is the California Driver Handbook available online?
Click below to find out
▶ California Driver Handbook

Search Help Advanced Search Go

GOVERNOR Schwarzenegger
Click To Visit His Home Page

AMBER ALERT CALIFORNIA

Featured Links

- 2006-07 Budget
- 2006 Governor's Environmental and Economic Leadership Awards application now available
- California State Fire Information
- California Service Corps - Bear Responsibility for Your State
- California Taxpayer Advocates' Pamphlet (pdf)
- 2004 STAR Test Results
- Board of Governance - Streamline Sales Tax Project
- West Nile Virus Information
- National Do Not Call Registry
- Flex Your Power at the Pump

Quick Hits

- State Agency Index
- State Lottery
- Federal Government
- City Websites
- County Websites
- Find a Job
- Vital Records
- State Phone Directory
- Legislation
- Health Publications Finder
- National Next of Kin Registry
- Special Events in California
- Computer Links
- Licenses
- E-mail the Governor

Web Content Accessibility

Back to Top of Page

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Meanwhile...

What works – Persistent tabs

The use of persistent tabs provides a clean route of entry to information

Tabs clearly show the scope of the site upfront



Before Users' attention is not focused

User is left wondering 'what can I do here?', 'where do I start?'



Navigation – Sense of place

Feedback on location assists learning, efficient navigation and reduces memory load

Headers provide accurate cues but users tend to look to the tabs for this information

'Read More' link on homepage takes user to the Press Release page but there is no cue to indicate where they now are within the site



Recommendation

- Flip Banner and Tabs
- Highlight tabs to provide accurate cues to location and reduce redundant navigation

Example of highlighted tabs



Top Story
Schwarzenegger Signs Executive Order to Expand Statewide Firefighting Efforts

Issue Spotlight
Education Investing in our

Table of Contents

- Objectives
- What We Seen
- Recommended Next Steps

So NOW what?

- Develop a cohesive identity system
- Tactical redesign of California Portal
- Templates and standards
- Customized tools
- Redesigns key sites
- Socialize usability / citizen-centered design
- Training

Identity System

- The logo serves as **landmark** indicating that this is an official California government site
- Logos present an **identity** that conveys the State's brand pillars

The image shows the word "California" in a bold, red, sans-serif font. The letters are thick and rounded, with a distinctive wavy, organic feel. The 'C' is a large, open curve. The 'l' is a simple vertical bar. The 'i' has a small dot. The 'f' is a simple vertical bar with a small hook. The 'o' is a simple circle. The 'r' is a simple vertical bar with a small hook. The 'n' is a simple vertical bar with a small hook. The 'i' has a small dot. The 'a' is a simple vertical bar with a small hook. The overall style is modern, clean, and dynamic.

Concept Keywords -

Contemporary, Dynamic, Responsive, Open

Identity System



Concept Keywords -

Contemporary, Dynamic, Responsive, Open

CALIFORNIA  **GOV**

Concept Keywords -
Solid, Vital, Honest

Identity System



Concept Keywords -
Understanding, Citizen Oriented

Identity System

California

Search: [Search](#)



Home Link Link Link Link Link Link Link Link



Search: [Search](#)



Home Link Link Link Link Link Link Link Link

CALIFORNIA.GOV

Search: [Search](#)



Home Link Link Link Link Link Link Link Link

California 

Search: [Search](#)



Home Link Link Link Link Link Link Link Link

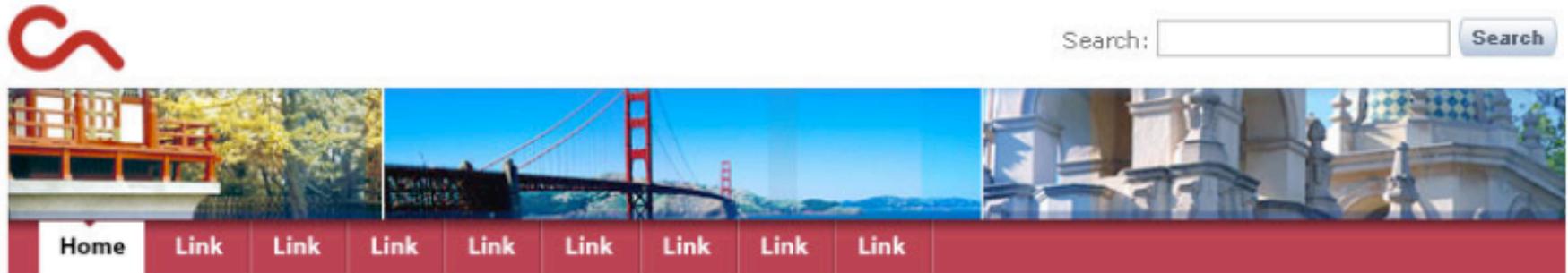
Identity System - Banners

- Banners create interest and reinforce the California 'brand'
- Should convey meaning
- Should be flexible and extensible



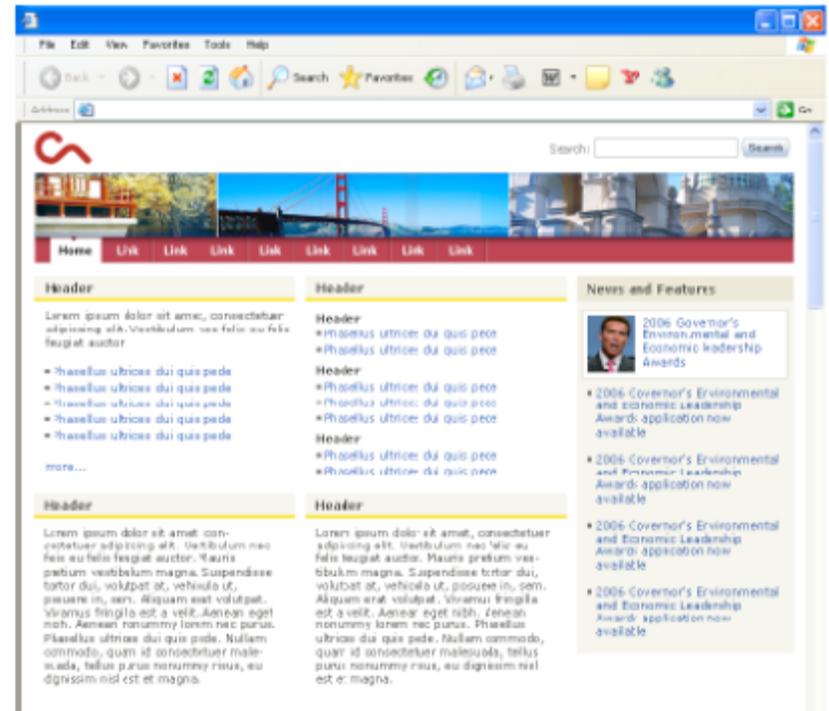
Identity System - Banners

- Flexible layout and rotating pictures add interest



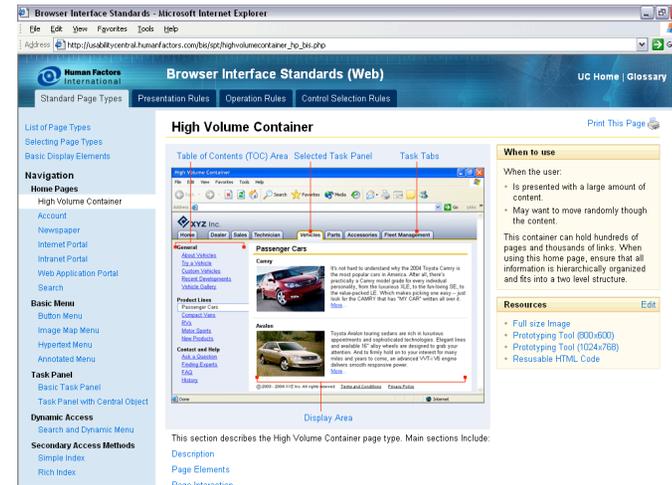
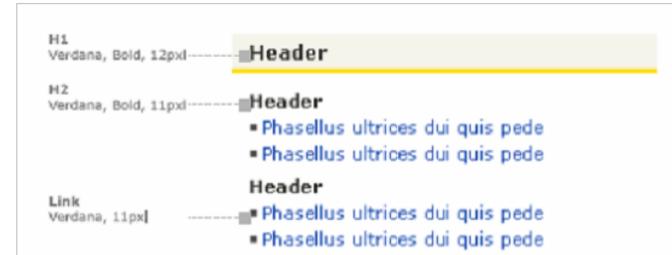
Tactical Redesign of California Portal

- Fresh look & feel
- Applies usability best-practices



Templates and Standards

Flexible, modular templates for varied design environments, interactive visual style guide with a graphics library



Resources [Edit](#)

- Full size Image
- Prototyping Tool (800x600)
- Prototyping Tool (1024x768)
- Reusable HTML Code

Customized Tools

Citizen-centered design guidance supporting best-practices

The screenshot displays the 'Usability Central – Best Practices™' website. The header features the Human Factors International logo on the left, the site title in the center, and navigation links for 'UC Home' and 'Glossary' on the right. Below the header, the page is organized into three main columns, each with an 'Edit' link in the top right corner. The first column, 'Methodology', lists categories such as 'Idea for New Facility', 'Existing Facility Evaluation', 'Design Through Release', and 'Post Release Usability', each with sub-links. The second column, 'Interface Standards', includes 'Windows™', 'Browser', 'All Resources', and a sub-section 'Graphics' with links for 'Design Process', 'Style Guide', 'Icon Library', 'Object Library', 'Image Library', and 'All Resources'. The third column, 'Knowledge', lists 'Essentials of Usability', 'Putting Research into Practice', 'Advanced Usability', and 'All Resources'. A footer at the bottom contains copyright information, version details, and contact information.

Human Factors International Usability Central – Best Practices™ UC Home | Glossary
Hub of Usability Training, Best Practices, Examples, Standards, and Services

Methodology Edit

- Idea for New Facility**
Contextual Innovation
- Existing Facility Evaluation**
Expert Review
Usability Testing
- Design Through Release**
User Interface Structure
Standards
Detailed Design
Coding and Release Support
- Post Release Usability**
Evaluation and Improvement
Localization
- All Resources

Interface Standards Edit

- Windows™
Browser
- All Resources

Graphics Edit

- Design Process
- Style Guide
- Icon Library
Object Library
Image Library
- All Resources

Knowledge Edit

- Essentials of Usability
Putting Research into Practice
Advanced Usability
- All Resources

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Customized Tools - Methodology

Methodology

Edit

Idea for New Facility

Contextual Innovation

Existing Facility Evaluation

Expert Review

Usability Testing

Design Through Release

User Interface Structure

Standards

Detailed Design

Coding and Release Support

Post Release Usability

Evaluation and Improvement

Localization

All Resources

The image shows two overlapping screenshots of a web application for Usability Testing. The top screenshot displays the 'Overview' page, which includes a navigation menu on the left and a main content area with a flowchart of the testing process. The bottom screenshot displays the 'Test Protocol' page, which provides detailed information about the testing process, including objectives, tasks, deliverables, staff requirements, and assumptions.

Overview Page:

- Navigation:** Overview, Planning, Test Preparation (Initial Briefing, Test Protocol, Procedure to get Participants, Participant Recruiting), Conducting the Test (Pilot Test, Test), Analysis and Presentation (Quick Wins Readout, Analysis, Video Editing(Optional), Report and Presentation).
- Overview Content:**
 - Objectives:** Evaluate needs for redesign, Document capabilities, Create list of alternatives flow, Identify areas for long-term improvement.
 - Starting Requirements:** Existing or prototype facility.
 - Timeframe:** 3-4 Weeks.
 - Staffing:** Meeting Staff.
 - Test Preparation Flowchart:** Initial Briefing → Test Protocol → Procedure to get Participants → Participant Recruiting.
- Resources:** No resource available.

Test Protocol Page:

- Navigation:** Overview, Planning, Test Preparation (Initial Briefing, Test Protocol, Procedure to get Participants, Participant Recruiting), Conducting the Test (Pilot Test, Test), Analysis and Presentation (Quick Wins Readout, Analysis, Video Editing(Optional), Report and Presentation).
- Test Protocol Content:**
 - Always Required:** Test Protocol.
 - Objectives:** Prepare a study design and a detailed description of how the testing procedure will be completed. Include all procedures and equipment. This must also identify each item to be completed and the approximate time required. Also, attach all required questionnaires and other test material.
 - Process:**

Tasks	Test Protocol
	<ol style="list-style-type: none"> Select types of tests needed Sequence the testing procedures Prepare documentation of test flow Prepare questionnaires and forms and insert as needed Iterate the Protocol with Stakeholders
Deliverables	<p>Test Protocol</p> <p>Detailed description of how the test will be completed, with all necessary equipment specifications and forms. This also includes a section on how the test will be analyzed. Generally a protocol will be about 25 pages long.</p>
Staff and Timeframe	<p>Meeting requires major team members...</p> <ul style="list-style-type: none"> Team Leader (9 1/4 hours) Usability Analyst (3 days) <p>Real Time – About 3 1/4 days</p>
Assumptions and Risks	<p>Design of usability tests is a highly demanding activity. Experimental design expertise must be applied or the results can easily be unreliable and/or</p>
 - Resources:** No resource available.

Customized Tools - Standards

[Edit](#)

Windows™
Browser

[All Resources](#)

Browser Interface Standards (Web)

[UC Home](#) | [Glossary](#)

Standard Page Types Presentation Rules Operation Rules Control Selection Rules

List of Page Types [Print This Page](#)

Navigation

Home Pages

- [High Volume Container](#)
- [Account](#)
- [Newspaper](#)
- [Internet Portal](#)
- [Intranet Portal](#)
- [Web Application Portal](#)
- [Search](#)

Display and Explore

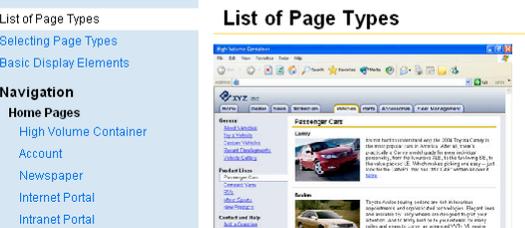
Display- only

- [Document](#)
- [Display-Only Form](#)
- [Display-Only Table](#)

Data Exploration

- [Table of Contents](#)

Data Manipulation



Browser Interface Standards (Web)

[UC Home](#) | [Glossary](#)

Standard Page Types Presentation Rules Operation Rules Control Selection Rules

Web Color Palette [Print This Page](#)

The color guidelines listed below are the default palette for all of the page templates in Usability Central™. This palette can be used as a sample. You can use the colors specified in your corporate style guide. Using a color palette with fixed colors for specific elements provides a consistent look and feel across all pages.

Basic Elements

The colors below apply to all pages.

Style	Color	Name (Code)	Where used
Banner Background		Slate Blue (#A7A9C4)	<ul style="list-style-type: none"> • Global Banner gradient • Footer
Page Background		White (#000000)	<ul style="list-style-type: none"> • Page body
Selected Global Button Background		Gold Gradient (#FFD700 to #FFFFFF)	<ul style="list-style-type: none"> • Currently selected top level navigation button
Selectable Global Button Background		Blue Gray Gradient (#A7A9C4 to #FFFFFF)	<ul style="list-style-type: none"> • Top level navigation buttons
Feedback Line Background		Red (#FF0000)	<ul style="list-style-type: none"> • Feedback line

Text Colors

The colors below apply to text on all pages.

Style	Color	Name (Code)	Where used
-------	-------	-------------	------------

Customized Tools – Graphics Library

Graphics

Edit

Design Process

Style Guide

Icon Library

Object Library

Image Library

All Resources

The image displays two screenshots of a web browser window showing a style guide for a website. The browser is Microsoft Internet Explorer, and the address bar shows the URL: http://usabilitycentral.humanfactors.com/gfx/sg/hypertextmenu_sg_gfx.php. The page title is "Style Guide" and the logo for "Human Factors International" is visible in the top left. The page content is titled "Hypertext Menu" and shows a screenshot of a web browser displaying a menu with various banking services. Red annotations indicate font specifications: "Arial Bold, 0.8em" and "Hex #000000" for the main text, and "Arial, 0.8em" and "Hex #0000FF" for the links. Dimensions are also shown: 15px for the menu items, 10px for the link text, and 8px for the sub-menu items.

The second screenshot shows the same browser window with the URL: http://usabilitycentral.humanfactors.com/gfx/sg/twocolumngrid_sg_gfx.php. The page title is "Style Guide" and the logo for "Human Factors International" is visible in the top left. The page content is titled "Two Column Grid" and shows a screenshot of a web browser displaying a two-column grid layout. Red annotations indicate dimensions: 50px for the banner, 15px for the column height, 10px for the column width, and 30px for the footer.

Page Elements

- Banner
- Footer
- Central Object
- Search
- Text Headers
- Portlet
- Table
- Button Menu
- Simple Form
- Advanced Form
- Table of Content
- Dynamic Index
- Simple Index
- Rich Index
- Hypertext Menu
- Annotated Menu

Grid

- Single Column Grid
- Two Column Grid
- Three Column Grid
- Four Column Grid

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Customized Tools - Knowledge

Knowledge

Edit

Essentials of Usability
Putting Research into Practice
Advanced Usability

All Resources

The image displays two screenshots of a web browser showing the 'Knowledge Space' interface. The top screenshot shows the 'Essentials of Usability' page, which includes a navigation menu on the left, a main content area with the title 'Basics of Usability', and a 'Support Material' box on the right. The bottom screenshot shows the 'Advanced Usability' page, which includes a navigation menu on the left, a main content area with the title 'Checklist on Accessibility', and a 'Related Links' box on the right. Both pages feature the Human Factors International logo and navigation links like 'UC Home' and 'Glossary'.

Essentials of Usability

Overview

Basics of Usability

User-Centered Analysis

IA & Navigation Design

Writing Online Content

Detailed Page Design

Usability Testing

Basics of Usability

The "Basics of Usability" seminar provides an overview of the user-centered design process. It summarizes the critical practices and techniques that enable creation of user-centered Web sites and applications. This serves as a perfect introduction to the other five focused seminars contained in the 'Essentials of Usability' seminar suite.

Individuals completing this course will be able to:

- Organize content and functions so that users can find them easily
- Select the appropriate site and page navigation model for a particular use
- Increase the consistency between pages by creating a design standard
- Add depth to designs using good color principles

Support Material Edit

- HFI Training Chart
- The SW Method v3.2
- Glossary
- Usability Resources
- Routine Usability

Advanced Usability

Overview

Accessibility

Introduction

Laws & IT Standards

Accessibility Guidelines

Testing your site/application

Checklist on Accessibility

Basic Implementation

Globalization

Introduction

Cultures

Metaphors

Language

Colors

Graphics

Formats

Quiz

Institutionalization of Usability

Introduction

How to Institutionalize Usability

Checklist on Accessibility

The following checklist helps to validate a website for accessibility compliance and hence take action to make it accessible.

- Embedded Applications: Make them accessible or provide an alternative
- Font Element vs. Cascading Style Sheets
- Language and character encoding
- Design pages to re-flow text so they are readable without horizontal scrolling
- Provide a print-only version of your Web page
- "Skip Navigation Menu" link
- Don't rely on client-side scripting
- Handling HTML tables
- Have a text equivalent for every non-text element
- Is your HTML valid?

Embedded applications: Make them accessible or provide an alternative

What's it like to browse the Web with Special Access Technology?

An application embedded in a Web page needs to have an accessible interface. This means all the features of the interface need to be operable from the keyboard as well as with a mouse. Text in the interface has to print to the screen and not be embedded in a graphic.

For example, for Java applications, Sun Microsystems provides the technology that allows assistive technologies to obtain accessible information about the user interface objects in the Java Virtual Machine. Java Accessibility supports version 1.1 and up of the Java platform and is provided in several ways:

A Java Accessibility API toolkit that provides "boiler plate" interfaces for UI components. These interfaces allow the user to obtain information that is common to all "accessible" components, as well as information that is more component specific.

Related Links Edit

- No resource available

Use citizen-centered methods to redesign key sites

Showcase projects...

- **Model** the citizen-centered design process
- **Demonstrate the value** of citizen-centered design
- **Build momentum** for institutionalization of usability
- **Establish a baseline** and demonstrate improvement after redesign

Socializing Usability

- **Promote understanding** of citizen-centered design
- **Encourage adoption** of citizen-centered designs and methods
- **Enable State employees** to become leaders in citizen-centered design

Citizen-Centered Design Training and Certification

Provide California employees with a practical skill-set in citizen-centered design

1 User-Centered Analysis and Conceptual Design

Introduction

1. Introduction to UCA U
2. Creating a Design Strategy U

Uncovering the Users' Conceptual Model

3. Profiles and Personas U
4. Field Studies U
5. Complementary Data Gathering Methods U

Deriving the User-Experience Model

6. Scenario and Task Analysis U
7. Primary Nouns U
8. Information Architecture U
9. Getting Ready for Detailed Design U

2 The Science and Art of Effective Web and Application Design

Introduction

1. Design is Science and Art D

Navigation Design

2. High-Level User Interface Structure U

Detailed Design

3. Page Types D S
4. Page Layout D
5. Editorial Style D
6. Typographical Elements D
7. Color Management D
8. Graphics D
9. Effective Controls D
10. Error Handling D

Unique Design Challenges

11. Web Applications D
12. Intranets D
13. Technology D
14. Accessibility D
15. Internationalization L

Making Usability Routine

16. Toward Institutionalization of Usability E

3 Practical Usability Testing

1. Introduction E
2. Designing a Usability Test E D
3. Early Prototype Testing U D
4. Advanced Prototype Testing D
5. Analysis and Reporting E D
6. Remote Testing E D
7. Comparison Studies E D
8. Live Site Analysis E R
9. Refining your Facilitating Technique E
10. Ten-Point Checklist E

4 Putting Research Into Practice

Think Straight About Cognition

- Mental Models and Applied Cognition

Recent Findings / Design Decisions

- Users & Trends, Design, Navigation,
- Presentation, Content and Interaction

User-Centered Methodologies

- Data Gathering and Evaluation

Think Straight About Usability Research

Phases in the Schaffer-Weinschenk Method™

1. Evaluation and Plan E
2. User Interface Structure U
3. Standards S
4. Detailed Design D
5. Code
6. Release R
7. Localized Design L



HFI's Certification Track

Become certified by the world's leading user-centered design firm and join hundreds in the growing CUA community of credible usability practitioners.

Training and Mentoring

HFI	California
Leader	Learner
Trainer	Apprentice
Mentor	Jr. Collaborator
Support	Collaborator
	Leader

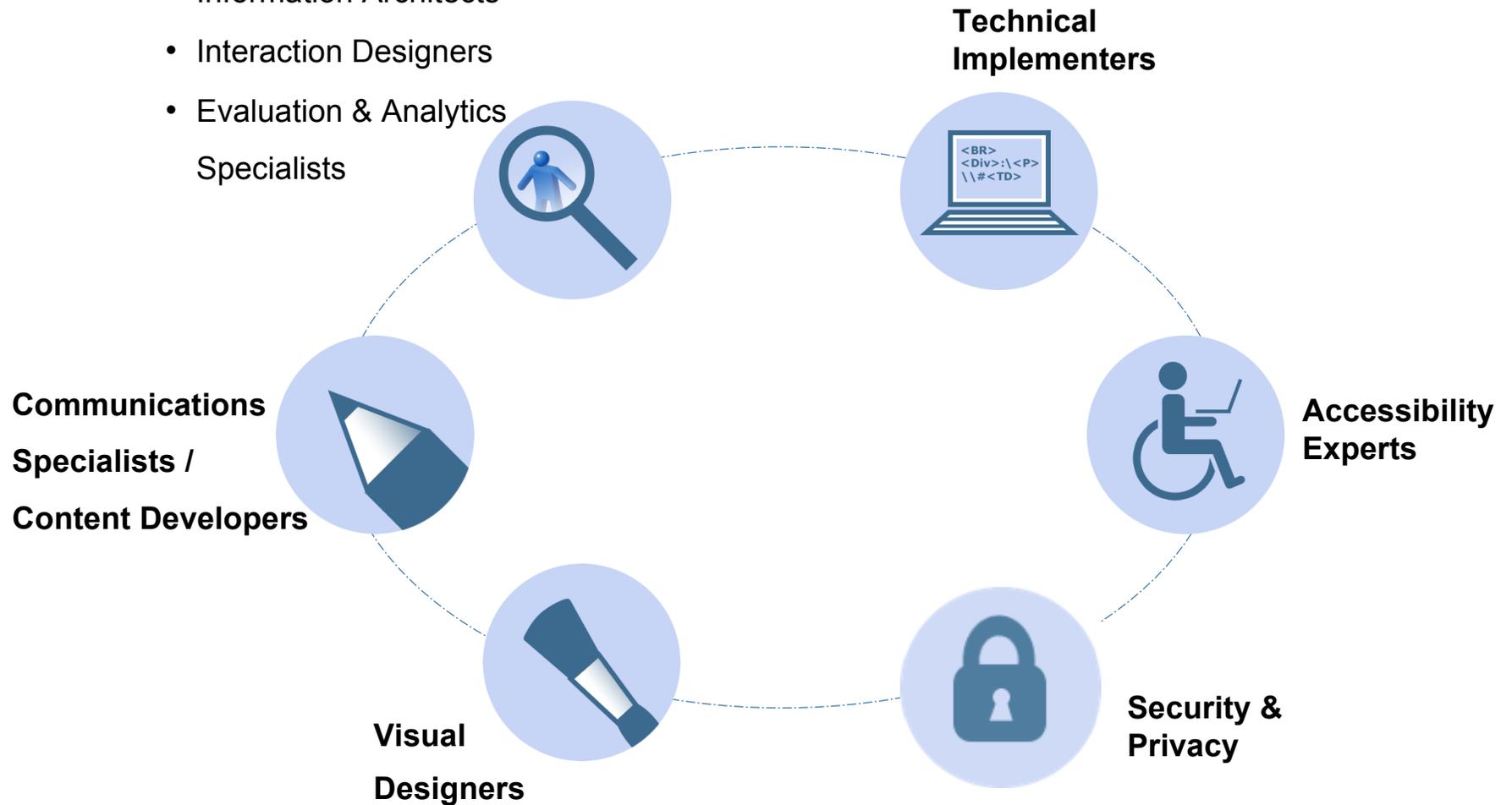
**Supporting
Institutionalization**



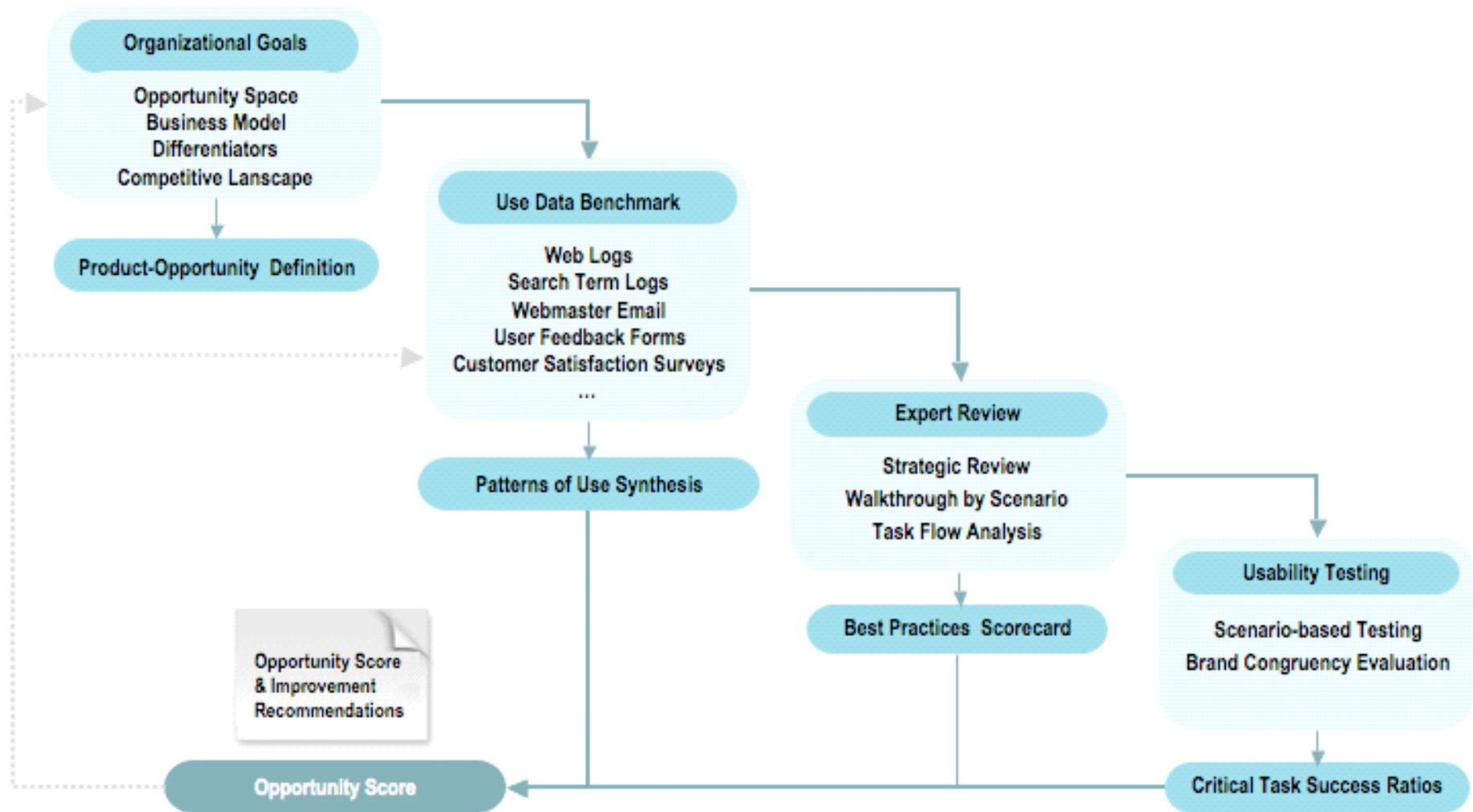
Ideal e-Services Team

Usability Specialists

- User-needs Researchers
- Information Architects
- Interaction Designers
- Evaluation & Analytics Specialists



Continuous Usability



What does California get out of it?

For the government

- Cohesive California government identity
- Reduced effort in support
- Flexible, extensible standards and templates
- Citizen-centered resources/tools
- Trained e-services employees
- Sustainable process

- Cost savings through centralization
- Measurable success
- Satisfied citizens

For the citizens

- Service-oriented government
- Easy to use designs
- Self-service opportunities
- Consistent e-Gov experience
- Customer satisfaction
- Increased public trust & confidence

California is ready to make a commitment...

California Home Wednesday, July 26, 2006

Welcome to **California**

SCIO Home

State IT Program

IT Strategic Plan

- California Portal
- GIS
- Common Business Apps & Systems
- Security & Privacy
- Enterprise Architecture
- Strategic Sourcing
- IT HR

IT Governance

- IT Calendar
- IT Council
- Technology Services Board
- IT Leaders
- IT Policies
- Procurement

Services & Operations

- DTS

California IT Strategic Plan

California Portal

IOUCA Recommendations
 Government Services on the Web: "California In-Touch"
 Policy and Management Issues Framework: Statewide Portal Project
 Recommendations adopted by the Portal Steering Committee

California Service Centers:

- California Service Center:** California portal.
- Business Service Center:** Provides a portal to a number of resources for starting, growing, financing, expanding or relocating a business in California.
- California Tax Service Center:** Provides a portal to a number of tax resources supported by FTB, EDD and BOE programs.
- California Climate Change Portal:** Service center for combining information on the impacts of climate change on California and the state's policies relating to global warming.

Portal Governance Chart

Portal Steering Committee

- Meeting Schedule
- Committee Charter
- Committee Membership
- Enterprise Architecture and Committee Governance
- Portal Planning Needs Chart

Committee Review Board

- Meeting Schedule
- Review Board Charter
- Review Board Membership

Information Organization, Usability, Currency & Accessibility (IOUCA) Working Group

- Web Accessibility Training** is available by contacting Neal Albritton at nalbritt@dor.ca.gov.
- IOUCA Recommendations
- Meeting Schedule
- Working Group Charter
- Member Contact List

Portal Redesign Project

- Project Charter

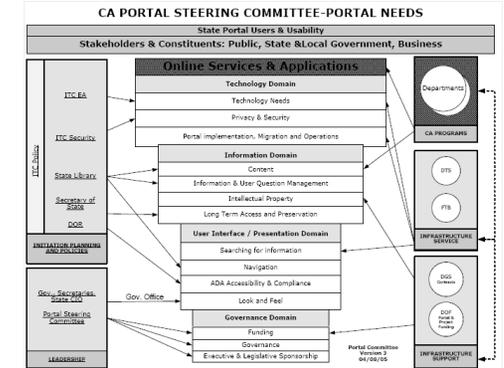
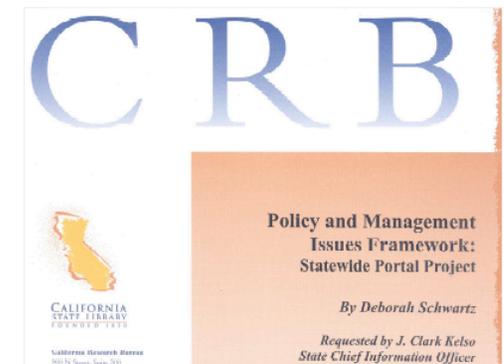
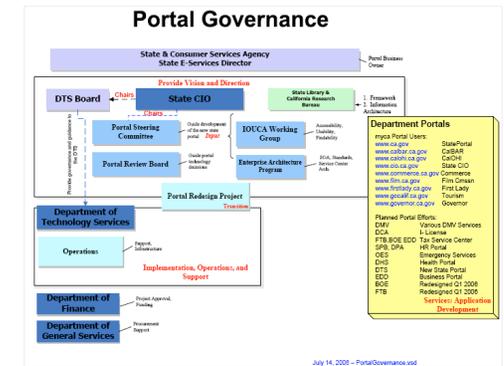
California Service Centers

Portal Steering Committee

Committee Review Board

Information Organization, Usability, Currency & Accessibility (IOUCA) Working Group

Portal Redesign Project



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Thank You!

