

# Usability Resources for E-Government

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**Sanjay J. Koyani**

Senior Usability Engineer  
Office of the Assistant Secretary for Public Affairs  
Health and Human Services



# Key Usability Resources

- *Usability.gov*
  - <http://usability.gov>
- *Research-Based Web Design and Usability Guidelines*
  - <http://usability.gov/pdfs/guidelines.html>
- *Usability Test Report Templates*

Your resource for designing usable, useful and accessible Web sites and user interfaces

## Usability Basics

- What is usability?
- Why is usability important?
- How much does it cost?

## Methods for Designing Usable Web Sites

- Planning
- Data collection
- Prototype development
- Usability testing
- Web site promotion

## Guidelines & Checklists

- Web design and usability guidelines
- Quick fixes for usability problems
- Usability checklists, tools

## Lessons Learned

- Lessons learned from Web designs/redesigns
- Before and after examples

## Links to Other Usability Sites

- Comprehensive usability resources
- Interface and content design
- International usability issues

## Accessibility Resources

- Federal guidelines (Section 508)
- Tools/techniques for accessible systems
- Articles, newsletters

## Server Log Analysis

- Techniques for measuring system performance and traffic
- Articles, Web sites

## Statistics & Market Research

- Statistics on Internet usage, trends, demographics
- Internet survey results
- Search engine statistics

## Events & Meetings

- Here's What You Missed
- Events at NCI/Washington, DC area
- Conferences of Professional Societies
- Training courses, seminars

## Newsletters & Current Publications

- U-Group listserv
- Newsletters from experts in Web design and usability
- Books, journals

## What's New



• [New Usability Lessons Learned: Online Booklets](#)

• [More Tech Companies See the Value - and Profitability - of Usability](#)

• [New W3C Guidelines Will Help Disabled Persons Enjoy More of the Web](#)

• [Health Consumers Like Technology, But Are Still Wary of It](#)



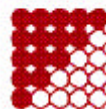
**NCI Cancer Communications Priorities**

• [Extraordinary Opportunities in Cancer Communications](#)

Updated 05/08/02

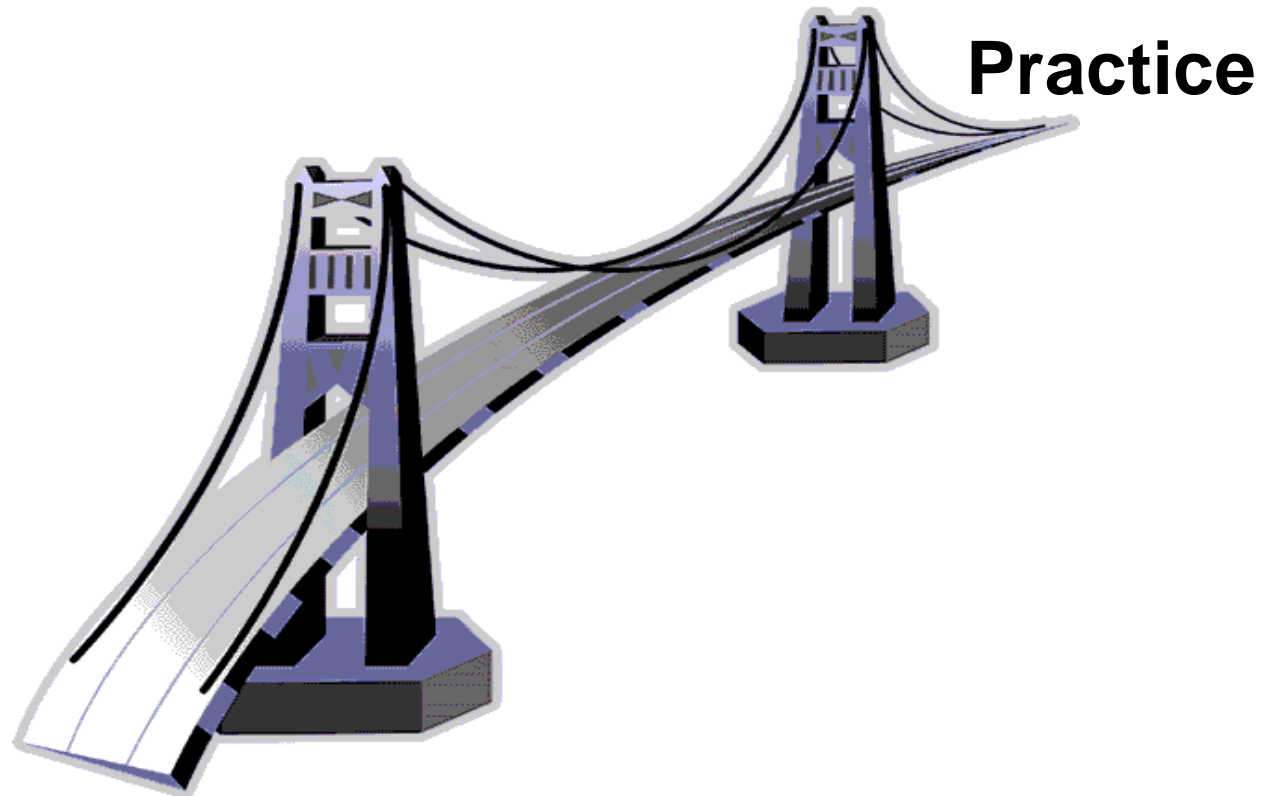


# Research-Based Web Design & Usability Guidelines



OFFICE OF COMMUNICATIONS  
NATIONAL CANCER INSTITUTE

# Why Evidence-Based Guidelines



**Research**

**Practice**

# Project Goals

## Goals

- To create a resource that would provide the latest Web design and usability findings
  - *Focus: research-based*
  - *Format: easy-to-use, practical*

# Steps

1. Analyze existing guidelines
2. Create new set based on research
3. Develop 'relative importance' and 'strength of evidence' scales for each guideline
4. Finding graphic examples for each

# Guideline Chapters

- **Design Process and Evaluation**
- **Increasing User Friendliness**
- **Accessibility**
- **User's Hardware and Software**
- **The Homepage**
- **Overall Page Layout**
- **Navigation**
- **Scrolling and Paging**
- **Headings, Titles, and Labels**
- **Designing Links**
- **Text Characteristics**
- **Lists**
- **Data Entry and Widgets**
- **Graphics and Images**
- **Writing Web Content**
- **Organizing Content**
- **Searching the Site**



# Provide Clickability Clues

- **Guideline:** Provide sufficient cues to clearly indicate to users that an item is clickable.
- **Comments:** Links should be visually apparent. Always use underlines or some other visual indicator (e.g., a stacked list of items) to indicate that words are links. Items that are in the top center, or left and right panels have a high probability of being considered links. This is particularly true if the linked element looks like a real-world tab or pushbutton. Users should not be expected to move the cursor around a website (minesweeping) looking for links. Using the eyes to quickly survey the options is much faster than minesweeping. Similarly, relying on mouse-overs to designate links can confuse newer users, and slow-down all users as they are uncertain about which items are links.
- **References:** Bailey, 2000; Farkas and Farkas, 2000; Tullis, 2001; Bailey, Koyani, and Nall, 2000; Lynch and Horton, 2002.

# Provide Consistent Clickability Cues

Importance 

Evidence 

Sources: 5

## ▣ Health Information

A-Z index of NIH health resources, clinical trials, health hotlines, MEDLINEplus, drug information

## ▣ Grants & Funding Opportunities

Grants news, Applications, grants policy, NIH Guide, award data, research training, research contracts, CRISP database

## ▣ News & Events

In the News, press releases, calendars, radio & video, media contacts, special reports

## ▣ Scientific Resources

Human Embryonic Stem Cell Registry, Intramural research, special interest groups, library catalogs, journals, training, labs, scientific computing

## ▣ O&A

About NIH

## ▣ Career

Opportunities

## ▣ Visitor

Information

## ▣ Employee Information

▣ Información en español

▣ Search the NIH Web Site

Right-facing arrows are very strong clickability cues for users.

# Provide Consistent Clickability Cues

Importance 

Evidence 

Sources: 5



MedicineBox: Pharma iMarketing Summit 2002 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://www.medicinebox.com>

**PHARMA iMARKETING SUMMIT 2002**

**MedicineBox**

Tomorrow's Leaders are using the iMarketing Technologies to reach Physicians- How will you compete and win?

Attend The MedicineBox Pharma iMarketing Summit 2002

Yesterday's marketing tools won't win tomorrow's business. Learn about new marketing technologies that will!

- Discover how leading pharmaceutical companies are using emerging technologies to build physician and patient communities.
- Understand how to effectively send customized messages to targeting physician and patient groups.
- Leverage technology in marketing and product strategies to reach no-see physicians
- Consider new marketing tools to compliment your existing marketing efforts.

**JANUARY 23RD & 24TH, 2002**

Princeton Marriott Forrestal Village

**KEYNOTE SPEAKERS:**

**January 23, 2002**  
**Kirk Schueler**  
*Sr. VP Aventis*  
"Using iMarketing to capture physician and patient communities"

**January 24, 2002**  
**Satjiv Chahil**  
*Chief Marketing Officer, Palm, Inc.*  
"Palm's Healthcare Initiatives"

**BRANDING EXPERTS:**

**Nancy Turett**  
*President and Global Director*  
Edelman Health

**Ken DeLor**  
*President and CEO*  
The DeLor Group

**Rob Dhable**

PHARMA iMARKETING SUMMIT 2002

Tomorrow's Leaders  
are using the iMarketing  
Technologies to reach  
Physicians- How will you  
compete and win?

Attend The MedicineBox  
Pharma iMarketing Summit  
2002

Yesterday's marketing tools won't win  
tomorrow's business. Learn about new  
marketing technologies that will!

- Discover how leading pharmaceutical companies are using emerging technologies to build physician and patient communities.
- Understand how to effectively send customized messages to targeting physician and patient groups.
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**Rob Dhoble**

iMARKETING

# Optimize the Homepage

- **Guideline:** Treat your homepage as the key to conveying the quality of your site.
- **Comments:** In terms of conveying quality, the homepage is probably the most important page on a website. One study found that when asked to find high quality websites, about half of the time participants looked only at the first page. You will not get a second chance to make a good first impression on a user.
- **References:** Amento, et. al., 1999; Mahlke, 2002; Coney and Steehouder, 2000; Nielsen and Tahir, 2002.



# Optimize the Homepage

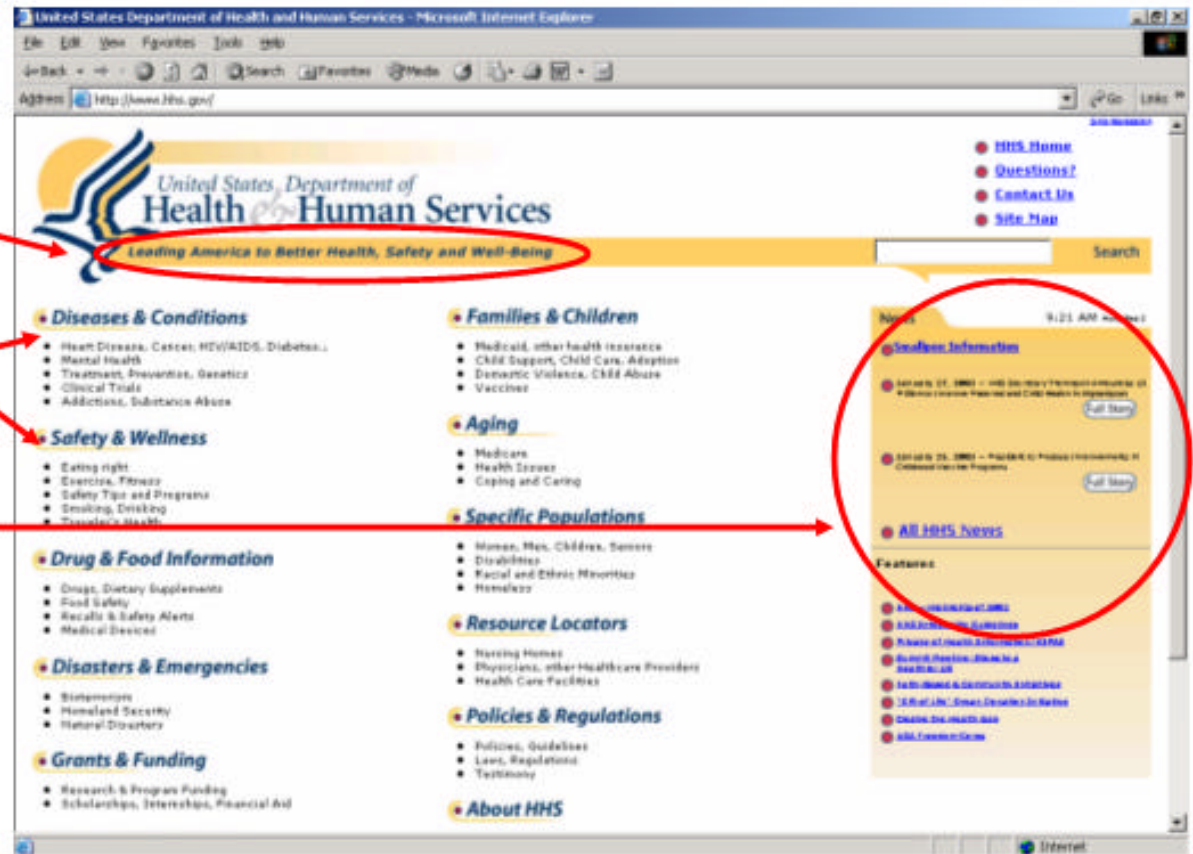
Relative Importance ●●●●●

Strength of Evidence ●●●●○

Example:

This homepage makes a positive first impression:

- Tag line increases users understanding of site,
- Key topic areas are presented and easy to scan, and
- Up-to-date news stories are available.

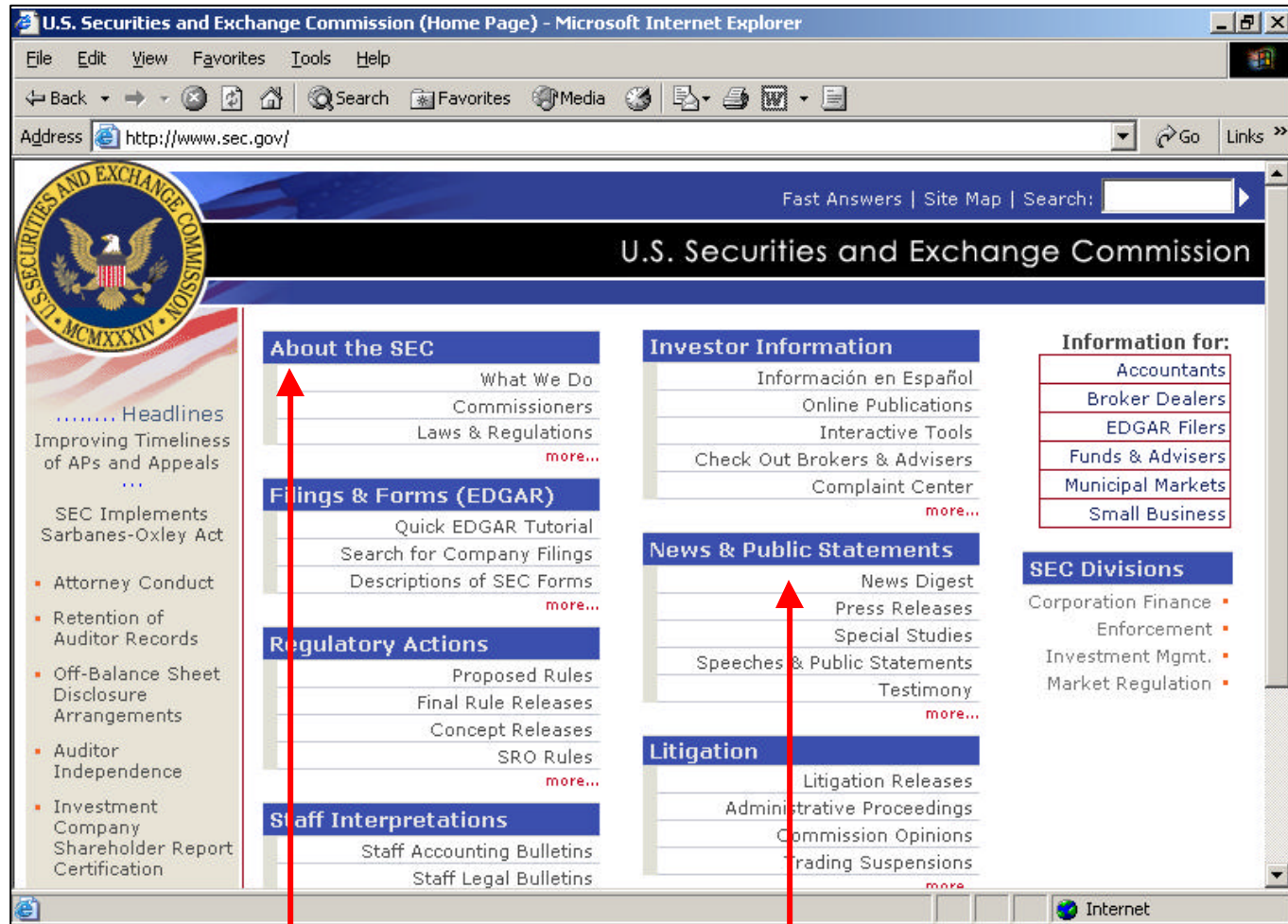


# Show All Major Options on the Homepage

Importance 

Evidence 

Sources: 4



U.S. Securities and Exchange Commission (Home Page) - Microsoft Internet Explorer

Address <http://www.sec.gov/>

Fast Answers | Site Map | Search:

## U.S. Securities and Exchange Commission

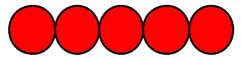
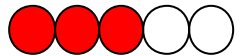
- About the SEC**
  - What We Do
  - Commissioners
  - Laws & Regulations
  - [more...](#)
- Investor Information**
  - Información en Español
  - Online Publications
  - Interactive Tools
  - Check Out Brokers & Advisers
  - Complaint Center
  - [more...](#)
- Information for:**
  - Accountants
  - Broker Dealers
  - EDGAR Filers
  - Funds & Advisers
  - Municipal Markets
  - Small Business
- SEC Divisions**
  - Corporation Finance
  - Enforcement
  - Investment Mgmt.
  - Market Regulation
- Filings & Forms (EDGAR)**
  - Quick EDGAR Tutorial
  - Search for Company Filings
  - Descriptions of SEC Forms
  - [more...](#)
- Regulatory Actions**
  - Proposed Rules
  - Final Rule Releases
  - Concept Releases
  - SRO Rules
  - [more...](#)
- News & Public Statements**
  - News Digest
  - Press Releases
  - Special Studies
  - Speeches & Public Statements
  - Testimony
  - [more...](#)
- Litigation**
  - Litigation Releases
  - Administrative Proceedings
  - Commission Opinions
  - Trading Suspensions
  - [more...](#)

..... Headlines  
Improving Timeliness of APs and Appeals  
SEC Implements Sarbanes-Oxley Act

- Attorney Conduct
- Retention of Auditor Records
- Off-Balance Sheet Disclosure Arrangements
- Auditor Independence
- Investment Company Shareholder Report Certification

All major topic areas and categories are presented at the homepage level.

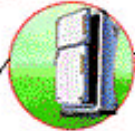
# Show All Major Options on the Homepage

Importance   
 Evidence 

Sources: 7


Don't do this—

**Open the Door...**



It starts by simply looking inside your refrigerator...

**Open the Door to a Healthy Heart**



The Healthy Refrigerator

**Good Nutrition**  
A Family Affair

- Are you a "Flip Flopper" When It Comes To Nutrition?
- Heart-Healthy Recipes Encourage Satisfaction
- What Should I Eat? Tips to Choose More Often and Less Often
- Women's Eating Habits
- Good Nutrition: A Wiser Investment

**Good Nutrition**  
A Family Affair

*For Immediate Release*

For more information:  
 Barbara Levin, Ph.D., R.D.,  
 New York World Journal Observer  
 312-375-7707  
 Sue Teresi, M.S., R.D.  
 464-233-3665  
 The Edible Company

**National Consumer Energy Conference: Americans Flip Flop on Food Choices When Nutrition Studies Conflict**

One Good Nutrition Study After Another: Why Making Choices in the Grocery Store is So Complicated

New York (December 12, 2009) - Turn on the TV or open a newspaper or magazine and there it is: The "nutrition study of the week" is grabbing your attention and often even eliciting the previous study as a "nutritional health advisor." But do Americans take conflicting or conflicting nutrition news to heart, and does the latest research actually cause them to change their eating habits?

Yes to both questions, according to a new national survey conducted by TasteWise® Partners and not released by Cornell's National Nutrition Information Center. Not only do an overwhelming majority of Americans (84%) believe there is a strong relationship between the foods they eat and their overall health, nearly one out of 10 (10%) or 10.7 million adults admit that conflicting nutrition information has convinced them to change their eating habits over the last couple of years.

The survey identified four foods that Americans have been the most confused about in recent years, resulting in "flip flopping"...



# Put labels Close to Entry Fields

Importance 

Evidence 

Sources: 4

Contact Information

**\* First Name**

**\*Last Name**

**\*Address:**

**\*City**  **\*State**  **\*Zip Code**

**Phone Number**

**\*Email Address**

**Email Format:**  
 :Text  :HTML

# Put labels Close to Entry Fields

Importance 

Evidence 

Sources: 4



**\* 1. Establishment Name:**

**NOTE: In order for OSHA to fully process your complaint, complete and accurate information about the worksite is necessary.**

**\* 2. Site Street:**

**\* 3. Site City:**

**\* 4. Site State:**

**\* 5. Site ZIP Code:**

**6. Mailing Address (if different):**

**7. Management Official:**

**8. Telephone Number:**

**9. Type of Business:**

# Guideline Benefits

- **Practitioners**
  - Provide a clearer roadmap
  - Avoid repetition of mistakes
  - Reduce influence of opinion
- **Managers**
  - Provide overview and remind them of the wide range of issues
  - Provides a standard of usability for web designers
  - Helps prioritize web design issues
- **Researchers**
  - Know where new research is needed
  - Know where research is needed to fill 'gaps'

# Usability Testing Report Templates

## Table of Contents

- Purpose of the evaluation
- Executive summary
- Usability test objectives
- Summary of usability test findings
- Methodology
- Findings – website performance summary
- Findings: detailed usability findings by scenario
- Findings: participant preferences summary
- Appendix A: detailed task performance
- Appendix B: task list
- Appendix C: participant demographics
- Appendix D: glossary of terms

# Contact Information

**Sanjay J. Koyani**

Sanjay.Koyani@hhs.gov

202-205-7015

