Overview: Introducing Usability and User-Centered Design (UCD)

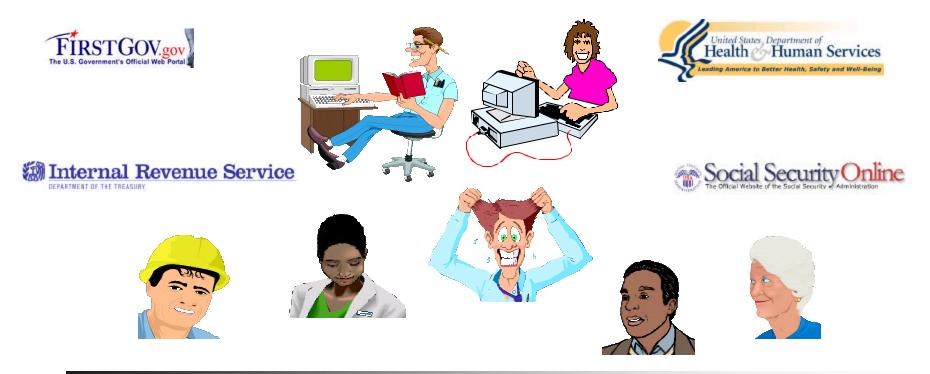
Janice (Ginny) Redish, Ph.D. President Redish & Associates, Inc.

6820 Winterberry Lane Bethesda, MD 20817

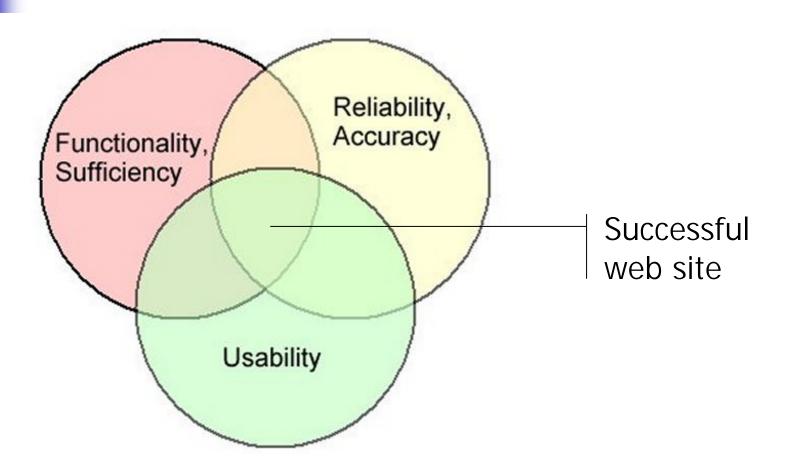
voice:	301-229-3039
fax:	301-229-2971
e-mail:	<pre>ginny@redish.net</pre>
web:	www.redish.net

Why worry about usability?

- Web sites (information-rich or e-gov applications) exist only to be used.
- Without users, why have an application or a web site?
- If users can't figure out the application or web site...

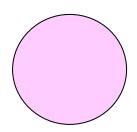


What do users want?

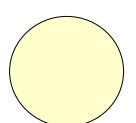


These are different attributes.

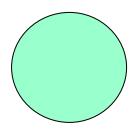
What's the difference?



Sufficiency = What I'm looking for is there. Functionality It lets me do what I need.



Accuracy = I can trust what it says. Reliability It works the same way every time.



Usability = I can find what I need and understand what I find.

All three are necessary for a successful web site.

What is usability?

Usability means making sure that

- the people who will use your web site
- can use it to do their work productively, to answer their questions, to reach their goals
- within their own physical and social environments
- easily (effectively and efficiently defined by the users)

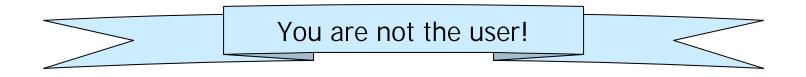
Usability means providing value that users can see themselves.

Who decides what is usable?

- Users do. They decide
 - whether to use your web site
 - when to use it
 - how to use it
 - how much to use it
- Users satisfice.

They trade off time and effort for benefit.





How do you assure usability?

- by building it into products
- through a process called User-Centered Design

Usability = User-Centered Design

Usability is not a polish that you spread over a web site at the end.

It is an integral part of the process of creating the web site from the first moment you start to think about the need for the web site.

What is user-centered design (UCD)?

- A process for focusing on users throughout planning, design, and development
- Not having users dictate functionality
- Not having users do the design
- Yes finding out
 - who users are
 - why they come to the web site (tasks, scenarios)
 - where and how they work (context, environment)
 - how they use the site (frequency, motivation...)
- Yes designing with users in mind
- Yes exploring and evaluating plans and designs with users
- Yes refining the design based on feedback

Why do agencies want e-government?

- Benefits to agencies
 - serves citizens and businesses
 - allows them to meet expectations of citizens and businesses
 - promotes reusability
 - facilitates electronic interactions among agencies
 - saves money, saves costs for data entry, paper, mail
 - reduces phone calls
 - reduces errors (built in edits)
 - speeds transactions (immediate answer)
 - improves efficiency and productivity





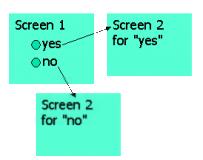
But only if the applications are easy for people to find and use!

Why do users want e-government?

- Benefits to individuals and businesses
 - available anytime
 - reduces need for mail, phone
 - speeds transactions
 - reduces errors (if...)
 - improves efficiency (if...)
 - keeps them from seeing what is not relevant to them







But only if the applications are easy for people to find and use!

How do we do UCD? Use the toolkit.

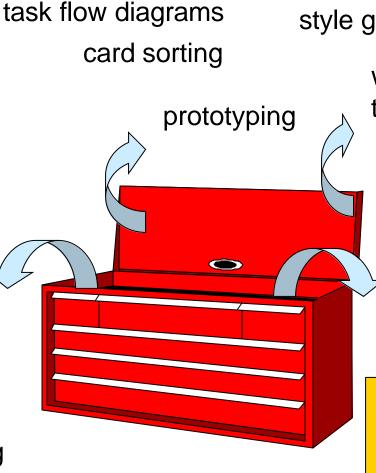
measurable usability goals workflow analysis task analysis

scenarios

personas / user profiles

watching, listening to, and talking with users as they work

> understanding business goals



style guide and templates

walkthroughs think-aloud protocols

rapid, iterative try-outs of prototypes with users

expert review; heuristic evaluation

usability testing

Use each of them -- when you need it and at the right scale

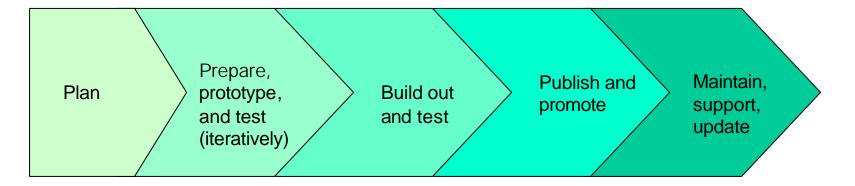
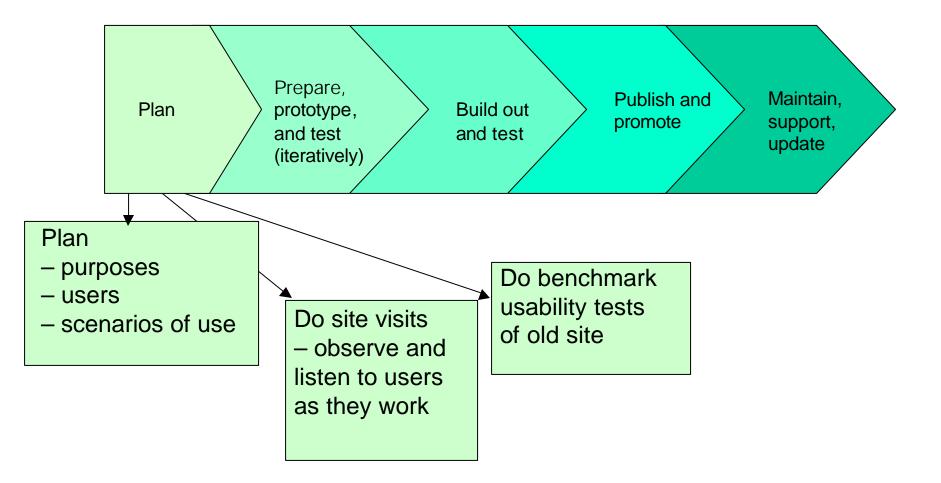
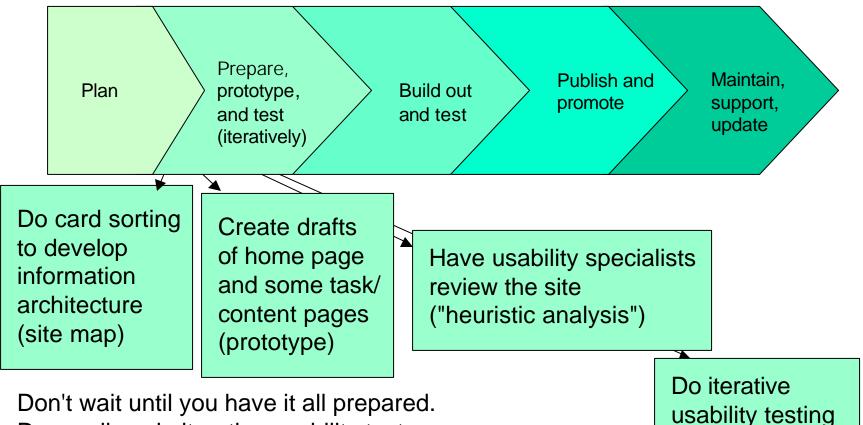
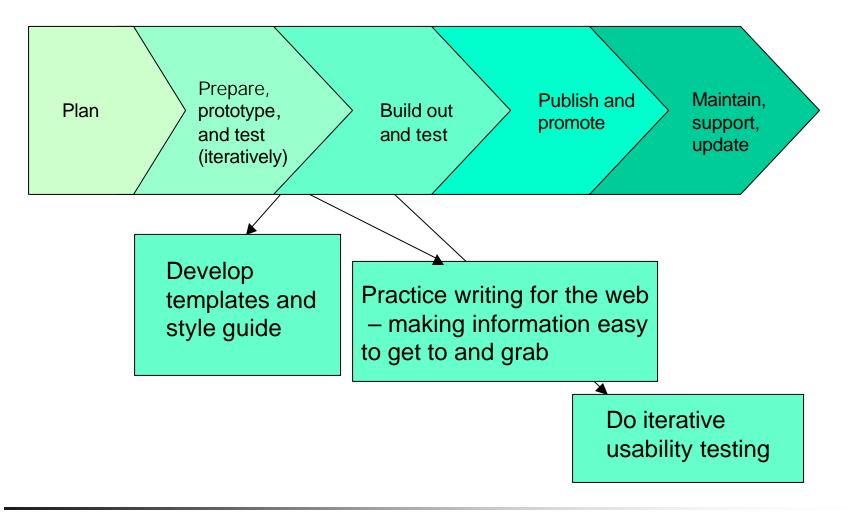


Figure adapted from the Washington state Department of Labor & Industries





Do small-scale iterative usability tests as you prepare.



All these techniques are scalable



- You can still do user-centered design.
- You can still do user research.
- Select the techniques that get you the information you need.
- Scale the techniques to match your resources.

Some data is much better than no data.

Remember: The cost of NOT doing UCD is much greater!

