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Web Usability: What it is and Why You Need it
The Business Link - Nov.20, 2003

Who am I?

Agenda

- What is usability?
- How do you do it?
- What are the benefits?



Usability - the simple definition

“...usability really just means making sure that something works well; that a person of average (or even below average) ability and experience can use the thing for it’s intended purpose without getting hopelessly frustrated.”

-Steve Krug, author “Don’t Make Me Think!”

The IT heretic says:

IT projects aren't about technology!

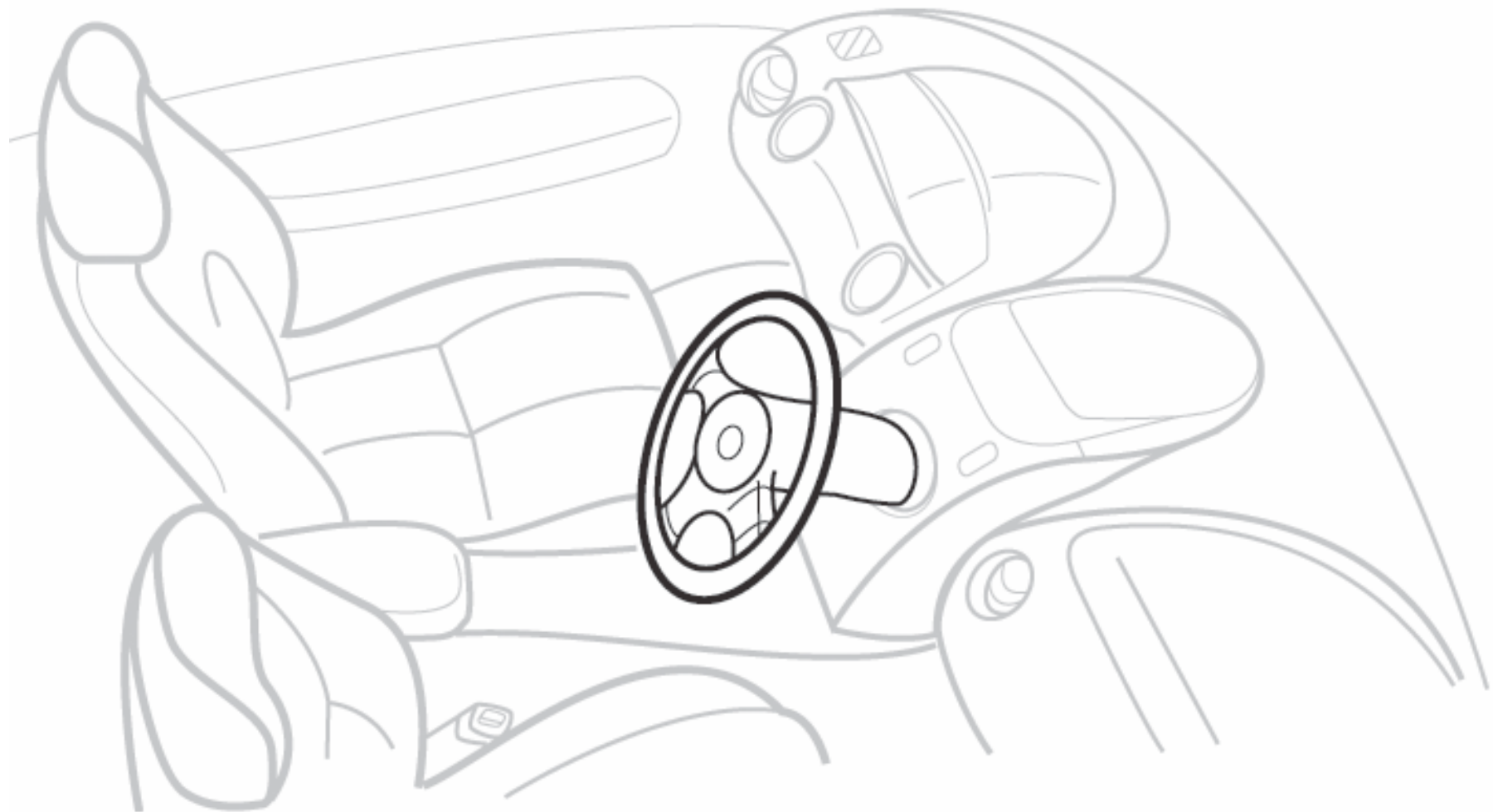
- IT projects are about enabling people to perform tasks.

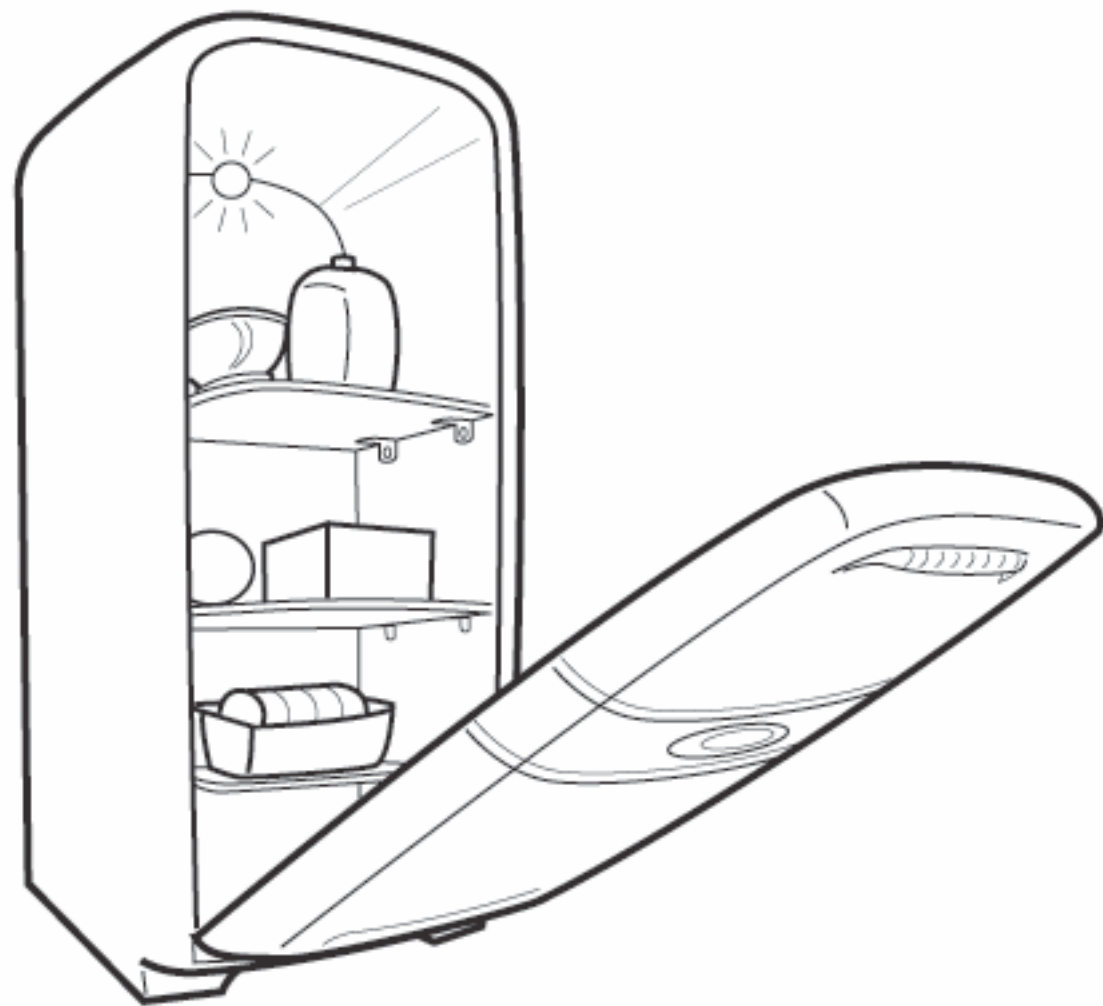
Recipe for Disaster

If your project seems to be all about...

- Implementing software
- Writing code
- Meeting technical requirements

...it's likely to fail at the user-level.





Usability - the technical definition

The ISO defines usability as:

“...the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use.”

Requirements Analysis

specified users: Who will use the system?

specified goals: What tasks do they need to complete?

specified context: Where will they use the system?

Success Criteria - User Experience

effectiveness: Can they complete the task?

efficiency: Can they do it in a reasonable time?

satisfaction: Are they happy, or do they feel like crying?



How do you **DO** that?

Many user-centred design processes are ready and waiting for you to adopt.

- Usability Central
- “The Usability Engineering Lifecycle” (Deborah Mayhew)
- ISO 13407 “Human centred design process for interactive systems”



BUT...

3 Commandments of Usability

1. Know your users & include them in the process
2. The process must be iterative
3. Evaluate each iteration

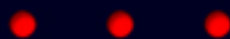
Weapons for the Fight

1. Prototypes
2. UserTesting
3. Heuristic Evaluation

Prototypes

- Storyboards
- Mockups

Do simple prototypes as early as possible.



Branding Strip				
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Doe, Jane Sally	FORMS	REPORTS	BATCH FILE SUBMISSION	VIEW / EDIT TRANSACTIONS MEMBER SERVICES
Employer Profile	<p>What's New</p> <p>Persto vereor ideo cogo in abluo, immitto lucidus facilisi illum fere acsi augue, occuro.</p> <p>Molior, accumsan delenit in melior si qui praesent. Luctus ad valetudo imputo hendrerit quae suscipit.</p> <p>Events</p> <p>Persto vereor ideo cogo in abluo, immitto lucidus facilisi illum fere acsi augue, occuro.</p> <p>Details ></p> <hr/> <p>Persto vereor ideo cogo in abluo, immitto lucidus facilisi illum fere acsi augue, occuro.</p> <p>Details ></p>		<p>Saved Forms</p> <p>Molior, accumsan delenit in melior si qui praesent. Luctus ad valetudo imputo</p> <p>Details ></p> <p>Saved Reports</p> <p>Molior, accumsan delenit in melior si qui praesent. Luctus</p> <p>Details ></p> <p>Submissions</p> <p>Molior, accumsan delenit in melior si qui praesent. Luctus ad valetudo imputo</p> <p>Details ></p>	
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Prototypes

- Provide a common language that everyone understands
 - Projects typically employ a variety of people from a variety of disciplines
 - These people think and communicate in different ways
 - Good communication and a common understanding are critical

Prototypes

- Can be tested with users
 - Put your best understanding into a prototype and test it
 - Throw away your narratives and draw a picture!



User Testing

- Don't confuse user testing with focus groups.
- User testing is one-on-one.
- User tests allow you to observe the behavior of people as they interact with a system



User Testing

1. The primary goal is to improve the usability of a product
2. The participants represent real users
3. The participants do real tasks
4. You observe and record what participants do and say
5. You diagnose the problems participants encounter and recommend changes to fix them

4 Steps to Planning a User Test

1. Define the goals and concerns that are driving the test
 - Key tasks (mission critical)
 - Representative tasks (similar to others)
 - Areas of concern (suspected problems)



Planning a User Test

2. Determine the Profile for the Participants

- The participants must be like the people who will actually use the product
- Determine relevant characteristics for user group
- List subgroups



Planning a User Test

3. Select Tasks to Test - Create Task Scenarios

- Good task scenarios:
 - Short
 - In the user's words, not the product's
 - Unambiguous
 - Give participants enough information to do the task



Planning a User Test

4. Decide How to Measure Usability

a) Performance Measures

- Time to finish task
- Number of errors
- Observations of frustration or satisfaction

b) Subjective Measures

- Perceptions
- Opinions



Heuristic Evaluation

- Expert evaluation designed as a cheap alternative to User Testing

“Heuristic evaluation involves having a small set of evaluators (1-5) examine the interface and judge it’s compliance with recognized usability principles (the heuristics).”

10 Basic Heuristics

1. Visibility of system status
2. Match between system and the real world
3. User control and freedom
4. Consistency and standards
5. Error prevention
6. Recognition rather than recall
7. Flexibility and efficiency of use
8. Aesthetic and minimalist design
9. Help users recognize, diagnose, and recover from errors
10. Help and documentation



Heuristic Evaluation

- Heuristics require interpretation
- More evaluators, up to about 5, will yield better information
- Remember, in the real world 1 is better than none!



Recap

- Usability is a relatively simple concept
- We need to focus some attention on the users
- Tools – Prototypes, User Tests, Heuristic Evaluation



Why Should You Do This?

- 1998 Study: 42% of web users find what they're looking for – a **58% failure rate**.
- According to Forrester research **40% of web users don't return** to sites where they've had a negative experience
- 50–70% of IT projects fail to deliver expected results.

Why Should You Do This?

- According to a Standish Group study 4 of the top 10 reasons IT projects fail are directly related to poor user design.

#1. Incomplete Requirements – 13.1%

#2. Lack of user involvement – 12.4%

#4. Unrealistic expectations – 9.9%

#6. Changing requirements – 8.7%

TOTAL = 44.1%



Reason #1 to invest in usability

- You can't afford not to
- There is a goal at the heart of your project that relates to enabling users to perform tasks
- Your project will be judged against that goal

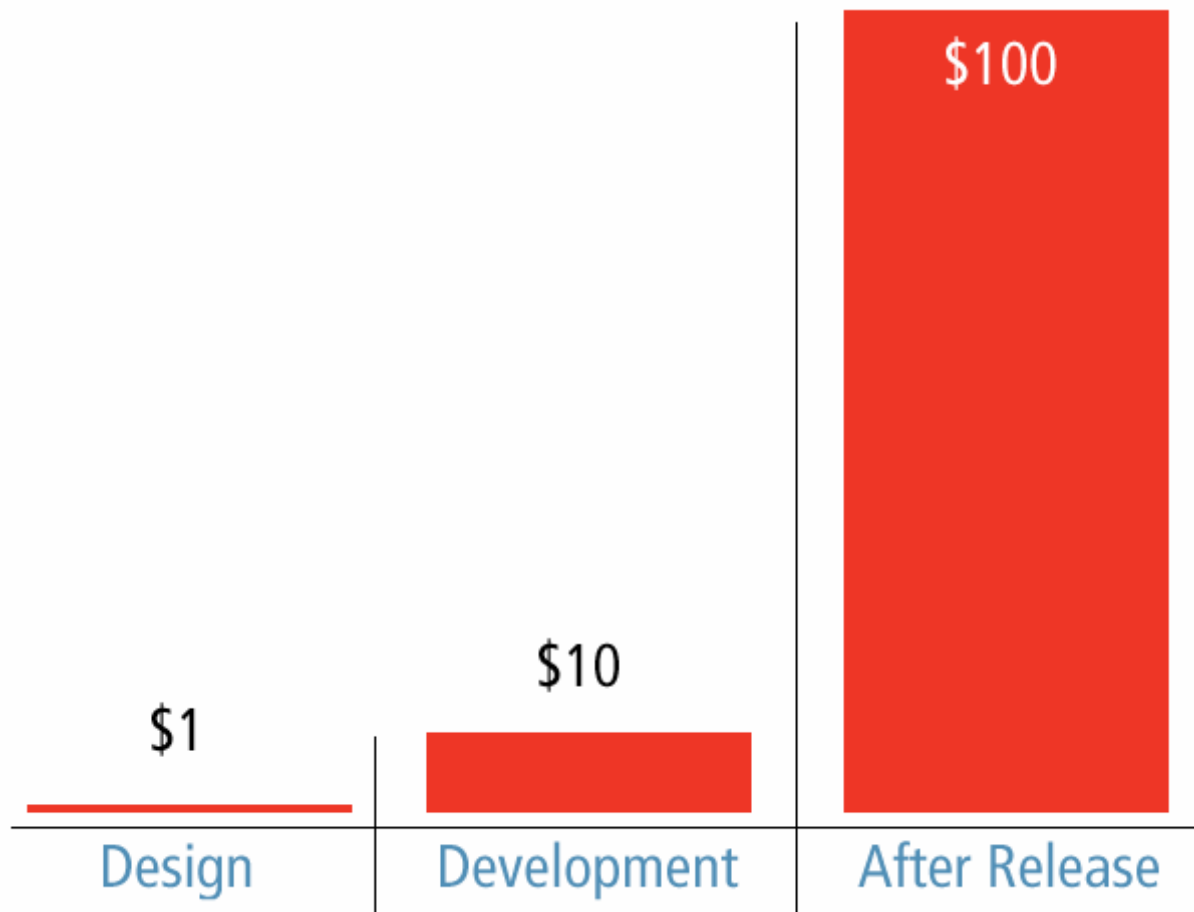


Reason #2 to invest in usability

- Results
- The average improvement in web sites redesigned with a user-focus (according to a 2003 study by Nielsen Norman Group):
 - Sales (Conversion rate) – 100%
 - Traffic (visitor count) – 150%
 - User performance (productivity) – 161%
 - Use of specific (target) features – 202%

Reason #3 to invest in usability

- Saving time and money



The Shameless Plug

- Need more help with this?
- **Redengine Inc.**
- www.redengine.com
- 1-877-837-5087