OLA
Involving users in a web-re-design

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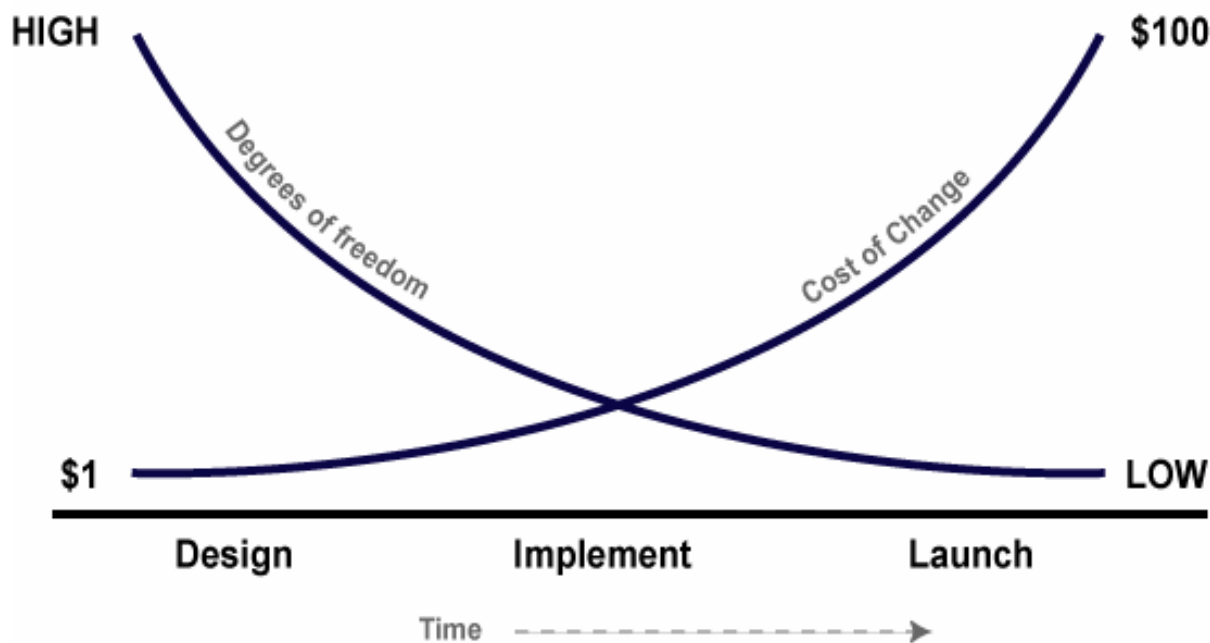
User Centered Design Process
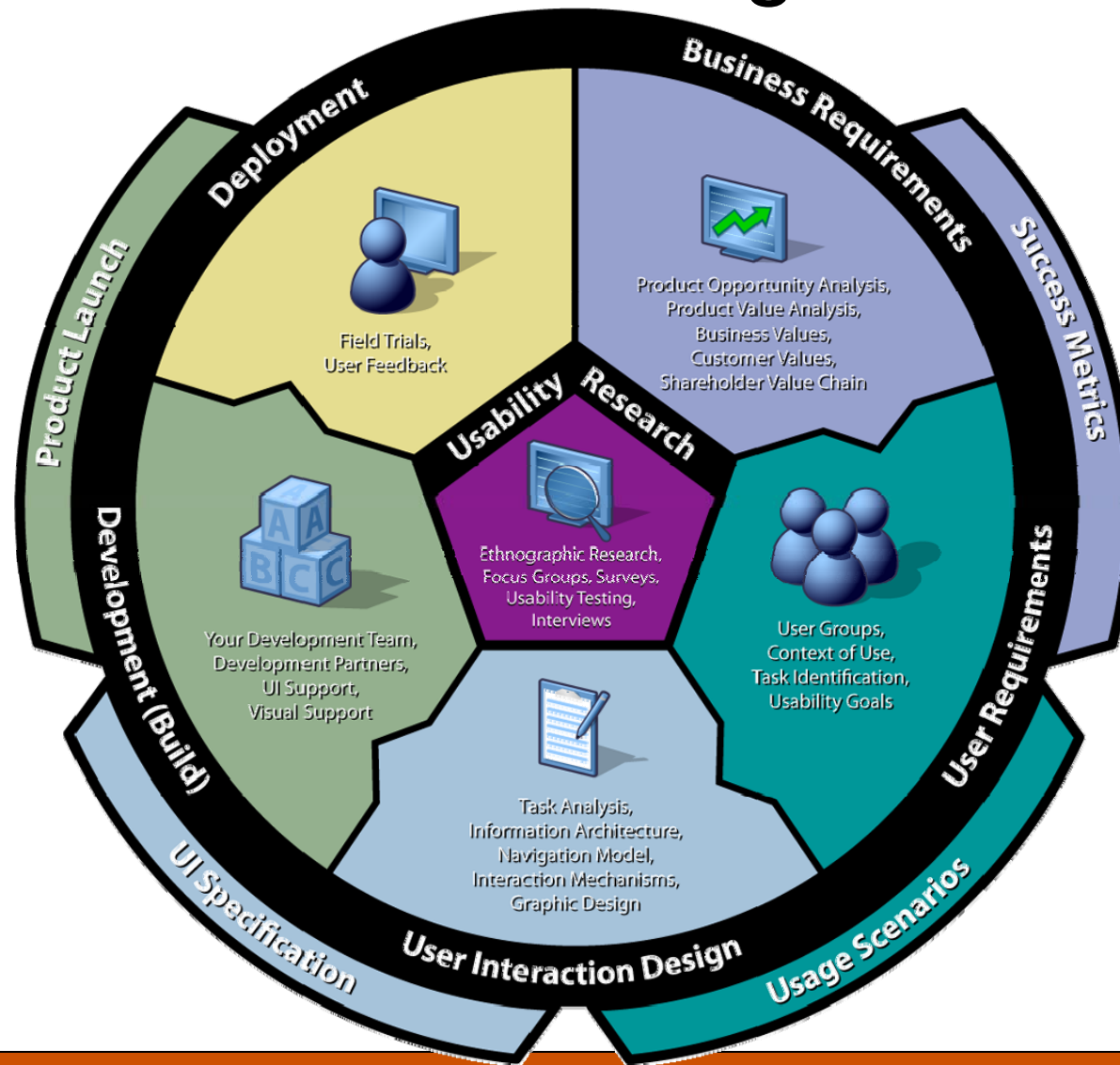
Benefit of solving usability issues early in the design process

- **For**
  - $1 dollar spent to fix a design issue in early design
  - $10 would be needed to fix the same design issue during development
  - $100 or even more to fix the design issue after product release.

based on R. Pressman (2000), *Software Engineering: A Practitioner's Approach*. and Ehrlich and Rohn, *Cost-Justification of Usability Engineering: A Vendor's Perspective*, In Bias & Mayhew (1994) Cost-Justifying Usability.

Business Requirements
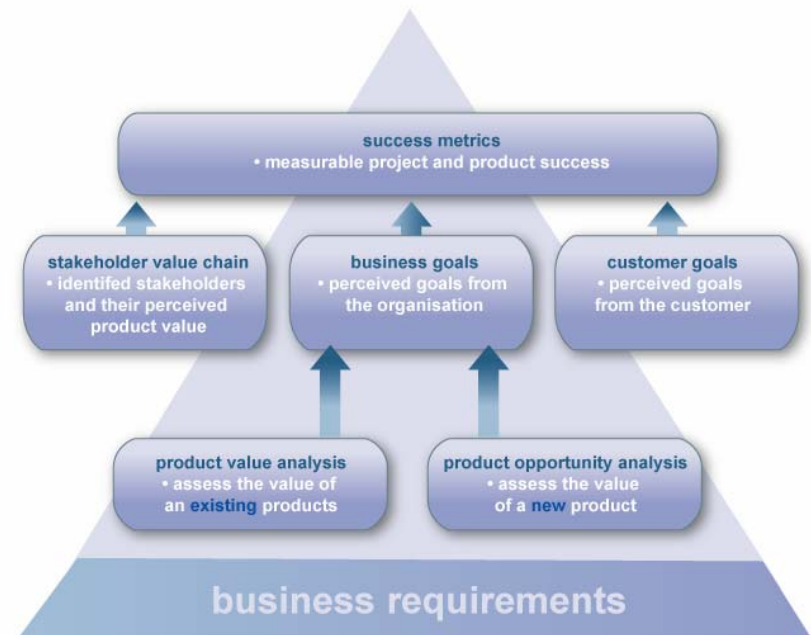
- **Organization values**
  - What are the goals of the organization?
  - What value does the product deliver?
  - What will it take to be successful?

- **Customer values**
  - What does the user expect and need from the product?
  - What do users value most?

- **Stakeholder Value Chain**
  - Who has a direct stake in this project and what are their goals?
 - Do we have conflicting goals?

Outcome: Success Metrics
- Clear, measurable results

This is the realm of market research, customer satisfaction and competitive analysis

User Requirements

- **User Groups**
  - Description of users and their characteristics
- **Task Analysis**
  - Tasks involved in use of product
  - Any processes associated with use of product
- **Context of Use**
  - Environment & constraints which affect use
- **Usability goals**
  - Expectations for user performance
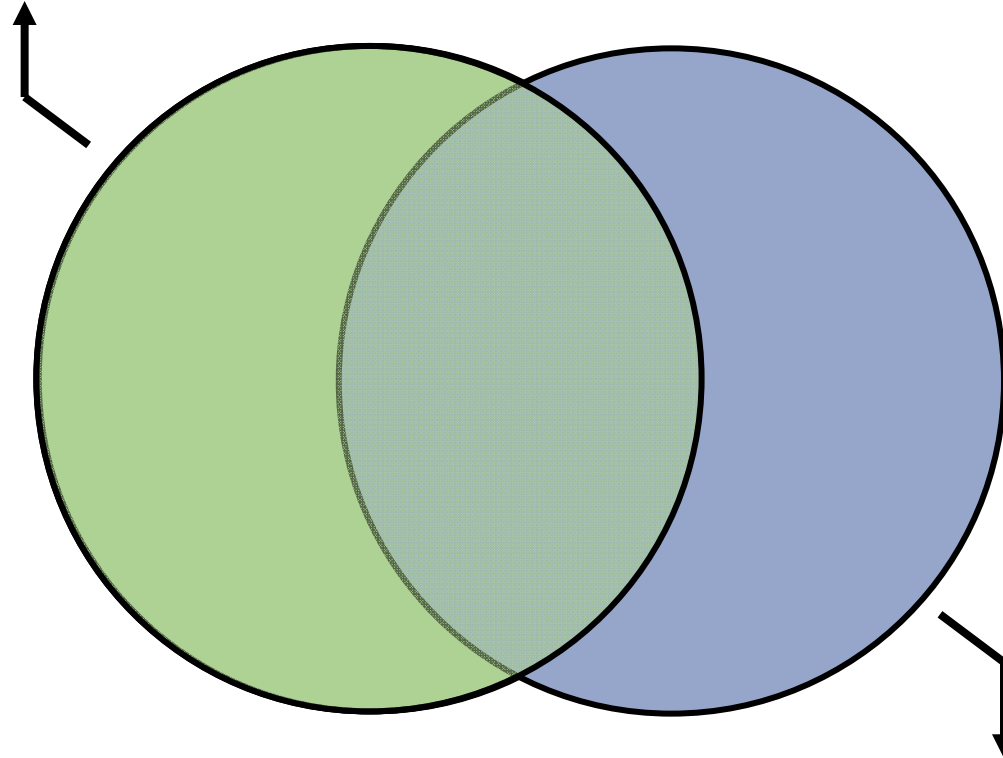 - Measure of success in product use
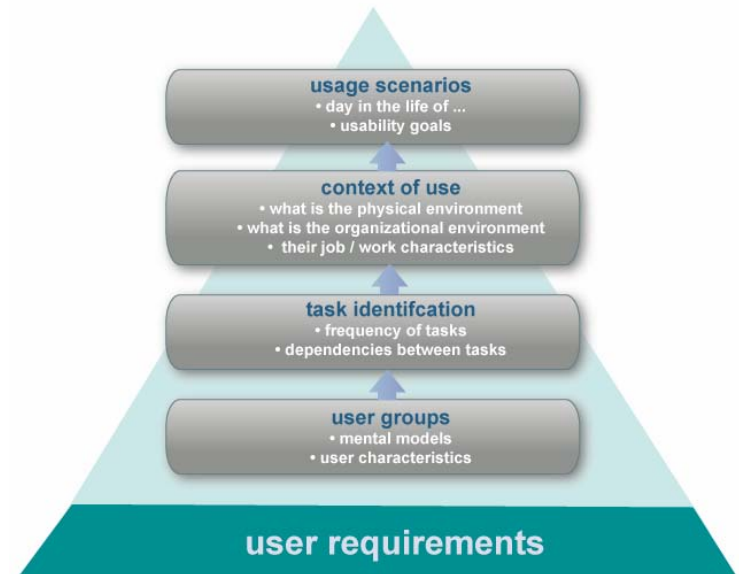
Outcome: Usage Scenarios

- Description of how users typically use product

Ensuring Key Requirements are Met

User Requirements

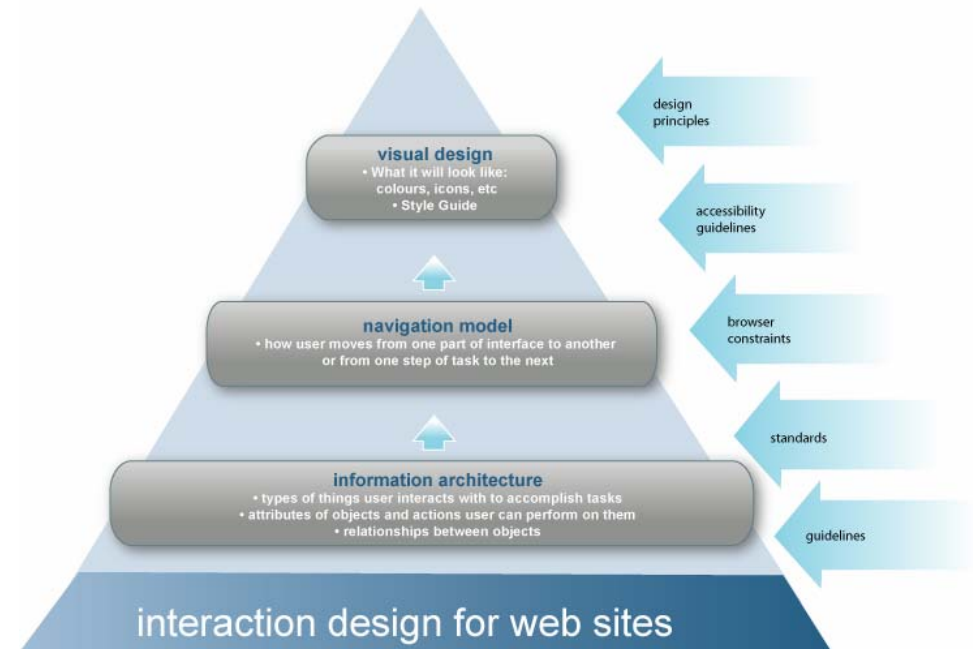**Business Requirements**

Determine the Real Requirements

- **… which may not be simply what users tell you**
- **User requirements focus on what users need…**
  - "I wanted to be notified when my requested information is available"
- **…not necessarily on what users say they want**
  - "I want to see a red flashing icon when I log in"
- **You need to synthesize the information you get into meaningful insights**
  - Back up your insights with data

'If you do exactly what the customer asked for, but the results do not meet the customer's real needs, you will probably be blamed anyway.'

Rumbaugh

m a c a d a m i a n

User Interface Design

- **Design Concepts and Prototyping**
  - Information Architecture and User Interface / Web design
  - Information Design vs. Interaction Design
- **Detailed Design Prototype**
  - Product-specific design
  - May include UI specifications document
- **Standards & guidelines**
  - Common rules for designing product interfaces based on:
    - Industry guidelines and conventions (e.g., Windows, Mac, Java, Palm)
    - Product or company standards – web/gui guidelines
- **Design principles**
  - Best practices in web design, usability design
- **Technical constraints**
  - Browser, platform, screen, input devices

Usability Research Overview

When to Use Research Methods

Stage	Research Methods	Output
Business & User Requirements		
•User Groups •Tasks •Context of Use	•Surveys •Interviews •Focus Groups •Observations	•User profiles/personas •Workflow/ task list •Context constraints •Usage Scenarios
Design		
•Paper prototype •Screen-based •Interactive •Field/ final	•Usability walkthrough •Heuristic evaluation •Usability testing	•Identification of common usage problems and recommended solutions

Relative effort of UCD stages

UCD phase	Description	Effort
Business Requirements	**Identify business and customer values, do stakeholder value chain analysis, create success metrics**	**10%**
User Requirements	**Research user groups, context of use, do task analysis, set usability goals, create usage scenario's**	**20%**
Design	**Create concept prototype, Create detailed design prototype, specify final design, support during implementation, build**	**50%**
Usability test and evaluation	**Usability testing in design phase, do final usability testing with finished product**	**20%**

Five Things to Remember from Today

- Customer Values, Business Goals need to be well specified for good design; the User Interface can't save a web site by itself

- Almost every application/web site has some direct or indirect usability goals tied to Business Success

- Know your users, know their tasks

- User Interface Design is about information design, interaction design and visual design

- Usability Testing is key to validate the application/website and make sure you deliver to the business goals and user goals through the application/website