

# GUIDELINES FOR EFFECTIVE & EFFICIENT DESIGN

by Mark Sutton

*Recently asked for my "Design Philosophy," this is a draft outline of some of the "guidelines" or "things" I take into consideration when undertaking a new Project. I had some creative fun with terminology in the process. Over the next few days or weeks, I'll be adding expanded descriptions I've been working on for at least the top-level bullets.*

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## 1. Clear Understanding of Requirements

- Goals & User Audience
- Time Frame(s)
- Delivery Vehicle(s) & Boundaries
- Re-statement of Requirements
- Databased Project Organization
- The Plan

## 2. Context/Concept Stratification & Approach Applicability

- Design Reconnaissance: Competitors & Community
- WWW Context
- Concept (or) Conceptual Half-lives
- Beyond the Immediate

## 3. The Right Tools & Technology Selection

- The Latest Isn't Always the "Greatest"
- The Swiss Army Knife Addiction: "Bloated" Applications
- Fast Flash Mammals and Digital Dinosaurs
- Going Nowhere?: Try Shareware and Freeware
- Searching for Answers: User Forums & e-Lists

## 4. Inneractivity: How the Brain Works

- The Zen of Empty Space: (Less is More)
- Digital Kitchen Sink Syndrome
- The Spectrum, Gravity, and other Physical Concepts
- Cognitive Weights, Dimensions, & Visual Organization
- Knowledge Hierarchy Depths: Deep Don't Do's

## 5. Interactivity: How the Brain and Body Work Together

- Inverse Relationships between Control Size & Range
- Guiding Them Softly: Eyes, Animation, and Movement
- Mouse Abuse: Saving Users from Karpel-Tunnel
- User- and Technology-Driven Design Tension

## 6. **Iterative Prototyping & Client Feedback**

- James Martin: 94% of all System's Errors in Req'ts
- Virtual Road Testing: Is it Live or Memorex?
- The Tangent Points & Spiral System Development
- Prototyping Pitfalls: Doing the Job Too Well

## 7. **What Box? Breaking Conceptual Roadblocks**

- Questioning All Assumptions
- Take a Break, Change Centers, Go Have Lunch
- Bounce Ideas Off a Team Member
- Visualization & Roleplay
- Switch Tools and Attenuation
- Targeted Internet Research, Study, & Analysis
- Watch & Study Common & Related System's Use

## 8. **Conservation of Data & Force Multiplying Utility**

- Format Preservation
- Manage It: They Will Come
- Re-purposing: Negroponte's Concept (MIT) & White House Poster Example
- Preventing a Technological Ball'n'Chain (Export & Import)

## 9. **Project Documentation: "In Vitro, Vivo, and Sil"**

- Writing the User's Manual First
- Testing Documentation: Watch the Secretary
- Never throw-away the first drafts, sketches, and notes
- Filenaming & Incremental Syntax

## 10. **No Data Left Behind: Nothing Left to Chance**

- Hurricane Isabel experience with TIME magazine
- U.S. Army Presentation Example (disk drive, cdrom, & video tape)
- Backups in Different Physical Formats
- Quality and Volume of Work Produced & Backup Frequencies
- Doing it Yourself (Can't Wait for SysAdmin in a Crisis)
- Environmental Issues