INFLUENCING STRATEGY BY DESIGN

LUKE WROBLEWSKI
VIZTHINK 2008

LUKEW INTERFACE DESIGNS | YAHOO!

Luke Wroblewski

Yahoo! Inc.
- Senior Principal, Product Ideation & Design

LukeW Interface Designs
- Principal & Founder
- Product design & strategy services

Author
- Site-Seeing: A Visual Approach to Web Usability (Wiley & Sons)
- Upcoming: Best Practices for Form Design (Rosenfeld Media)
- Functioning Form: Web applications, product strategy, & interface design articles

Previously
- eBay Inc., Lead Designer
- University of Illinois, Instructor
- NCSA, Senior Designer

http://www.lukew.com

About this Workshop

- **Influencing Strategy by Design**
  - Get a seat at the table & help your organization make better decisions…
  - By thinking and acting like a designer!
- **Format:**
  - Presentation: showcase principles & examples
  - Exercise: put the principles to use
- **Experience**
  - Internal Board2Board Training at Yahoo!
  - Public course at Involution Master Academy
  - Put into practice in numerous companies

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Participants

- **What is your role in your organization?**
  - Design
  - Research
  - Engineering
  - Product Management
  - Marketing
  - Business Development
  - Etc.
- **What one question do you most wanted answered?**

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STRATEGY BY DESIGN

- DESIGN DELIVERABLES
- DESIGN METHODOLOGIES
- DESIGN CONSIDERATIONS

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DESIGN DELIVERABLES

- Experiences, interactions & understanding between people & information
- Useful, usable, and desirable

Why it matters...

- Markets mature faster: adoption, revenue, customers, competition
- Provides value beyond functionality

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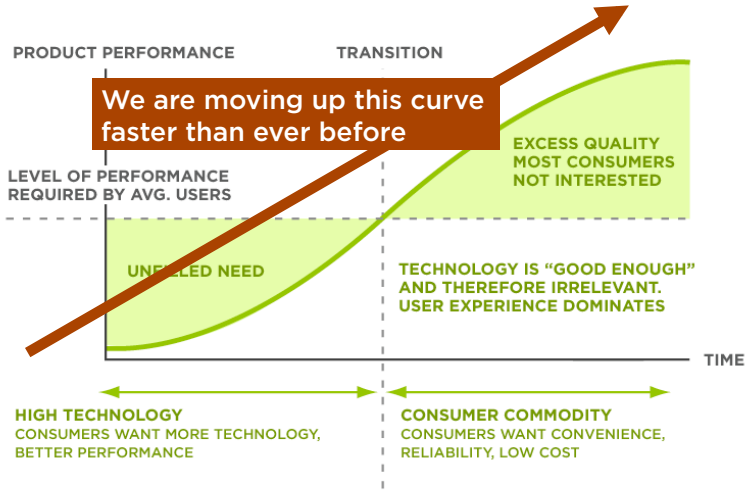
Technology Lifecycle



SOURCE: DONALD NORMAN, THE INVISIBLE COMPUTER

IPHONE, APPLE COMPUTER INC.

DESIGN BECOMES A KEY DIFFERENTIATOR SOONER

PRODUCT DESIGN, THAT IS

DESIGN METHODOLOGIES

- Problem solving methodology rooted in real world, articulates end state, and favors building to think
- Observe, Envision, Iterate

Why it matters…

- We are in a continuous state of flux
- Helps businesses adapt and stay relevant

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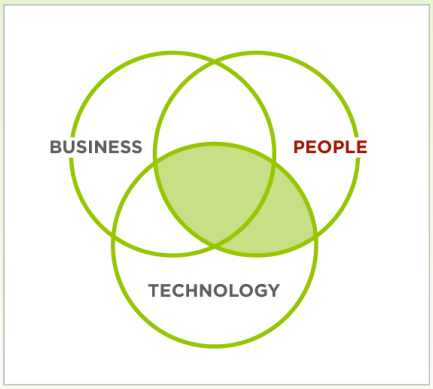

A CHANGE IN TECHNOLOGY

HAS A BIGGER IMPACT ON BUSINESS & PEOPLE

& VICE VERSA

LUKEW INTERFACE DESIGNS

HASSO PLATTNER
Institute of Design at Stanford

01 Our vision

"We believe great innovators and leaders need to be great design thinkers."

d.SCHOOL, STANFORD

DESIGN ENABLES COMPANIES TO ADAPT

DESIGN THINKING, THAT IS

DESIGN CONSIDERATIONS

- Foundations of effective communication
- Pattern recognition, story-telling, visual communication, empathy

Why they matter...

- There's increased complexity
  - Information overload
  - Interconnected product ecosystems
  - Globalization
- Design principles evoke meaning

EVERY DAY...

CNN INC.

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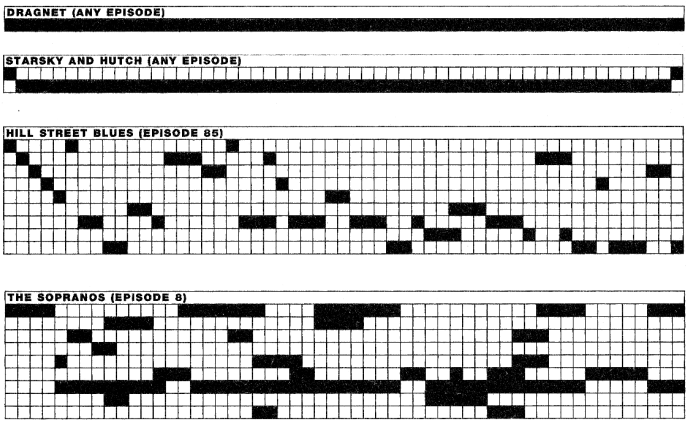
TV: Plotlines



EVERYTHING BAD IS GOOD FOR YOU, STEVEN JOHNSON

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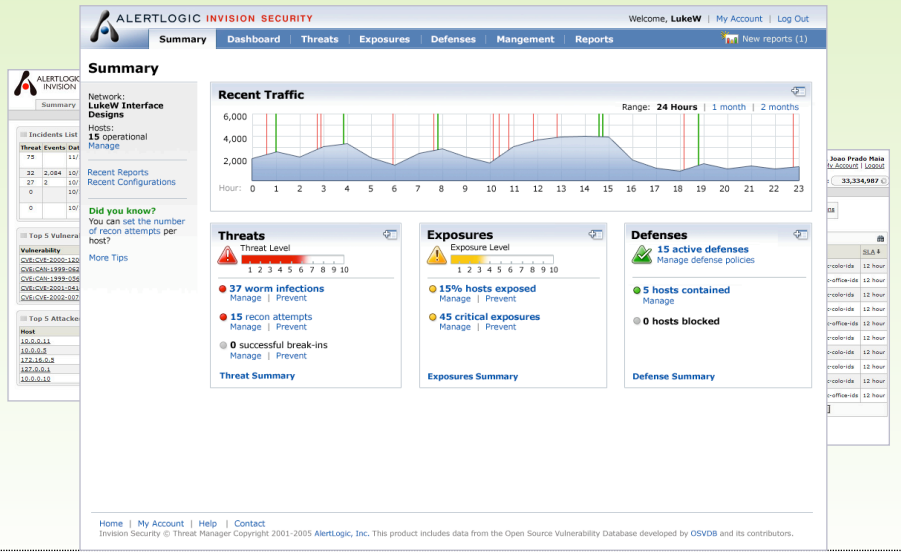

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ALERT LOGIC INC.

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WHEN THERE'S COMPLEXITY...

DESIGN ENABLES COMMUNICATION

DESIGN CONSIDERATIONS, THAT IS

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DESIGN CONSIDERATIONS

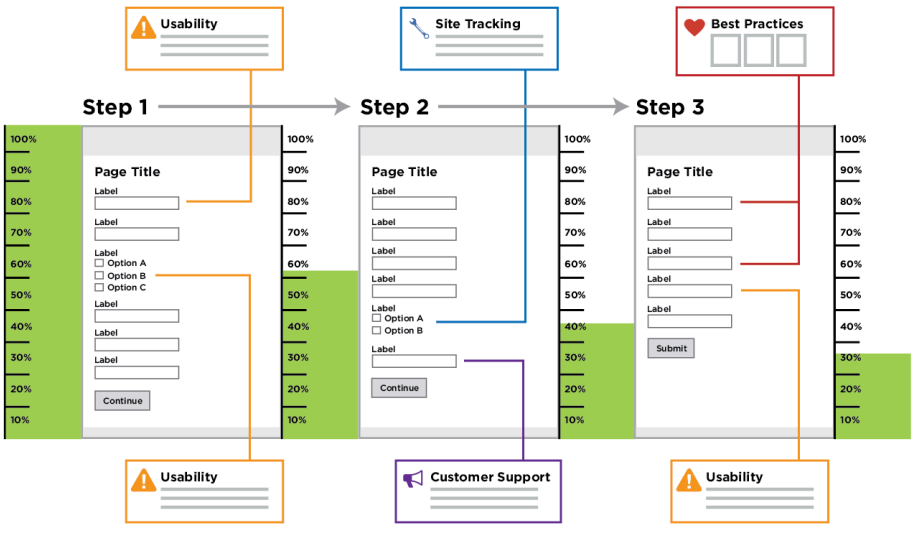
PRINCIPLES, SKILLS,
THE UNIQUE PERSPECTIVE OF DESIGN

Web Application Data Sources

- **Usability Testing**
  - Errors, issues, assists, completion rates, time spent per task, satisfaction scores
- **Customer Support**
  - Top problems, number of incidents
- **Best Practices**
  - Common solutions, unique approaches
- **Site Tracking**
  - Completion rates, entry points, exit points, elements utilized, data entered
- **Eye Tracking**
  - Number of eye fixations, length of fixations, heat maps, scan paths

1	**Site Design**										
1.1	Brand	5.1	3.9	5.8	5.4	6.4	6.0	6.4	3.9	5.4	7.5
1.2	Navigation	7.2	5.7	7.6	5.7	6.1	5.3	7.6	5.3	6.3	8.1
1.3	Usability	6.0	5.4	7.4	5.9	7.2	5.0	7.4	5.0	6.2	7.9
	TOTAL WEIGHTED SITE DESIGN	6	5.4	7.4	5.9	7.2	5	7.4	5.0	6.2	7.9
	Percent of Total Possible	67%	60%	82%	66%	80%	56%	82%	56%	68%	88%
2	**Site Functionality**										
2.1	Search	4.0	2.0	3.0	0.0	5.0	5.7	5.7	0.0	3.3	6.0
2.2	Security	5.8	4.2	4.2	4.2	4.2	4.2	5.8	4.2	4.5	8.0
2.3	Accessibility	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	8.0
	TOTAL WEIGHTED FUNCTIONALITY	4.4	2.8	3.5	1.4	4.9	5.3	5.3	1.4	3.7	6.6
	Percent of Total Possible	49%	31%	39%	15%	54%	59%	59%	15%	41%	73%
3	**Customer Value**										
3.1	Content	6.0	6.0	6.0	6.3	6.9	5.9	6.9	5.9	6.2	7.4
3.2	Product or Service Information	5.4	3.3	4.3	4.5	4.0	4.8	5.4	3.3	4.4	5.9
3.3	Customer Service & Support	4.3	4.0	4.0	5.7	4.7	3.7	5.7	3.7	4.4	6.2
3.4	Contact Information	5.3	6.8	4.5	6.5	3.2	2.3	6.8	2.3	4.8	8.5
3.5	Investor Information	7.0	8.0	8.0	7.0	8.0	6.0	8.0	6.0	7.3	8.2
	TOTAL WEIGHTED CUSTOMER VALUE	5.3	4.9	4.9	5.8	5.2	4.5	5.8	4.5	5.1	6.8
	Percent of Total Possible	59%	55%	54%	64%	58%	50%	64%	50%	57%	76%
	GRAND TOTAL OF OVERALL CRITERIA	15.69524	16.0	12.8	15.4	12.8	16.5	16.5	12.8	14.9	19.5
	Percent of Total Possible	58%	59%	47%	57%	47%	61%	61%	47%	55%	72%
	WEIGHTED SITE TOTAL	5.2	5.3	4.4	5.1	4.6	5.4	5.4	4.4	5.0	6.5
	Percent of Total Possible	58%	59%	49%	56%	52%	60%	60%	49%	56%	72%

JOEL GROSSMAN, PIVOTAL CLICK



BUSINESS OF DESIGN, EBAY INC. APRIL 2004

Design Considerations

- **Pattern recognition:**
  - Uncover the trends
- **Story-telling:**
  - Focus on the big idea
  - Stories: impactful, memorable, clear
- **Visual Communication:**
  - Visual hierarchy = prioritized narrative
  - Illuminate relationships
- **Empathy:**
  - Story presented in context
  - What customers see
- **Enables**
  - Faster consensus
  - Better decisions

LUKEW INTERFACE DESIGNS

DESIGN CONSIDERATIONS

PATTERN RECOGNITION

STORY-TELLING

VISUAL COMMUNICATION

EMPATHY

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DESIGN CONSIDERATIONS

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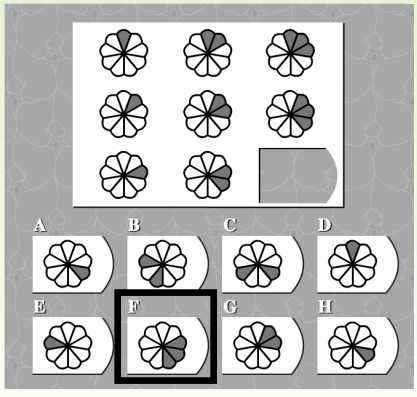
EMPATHY

Raven's Progressive Matrices

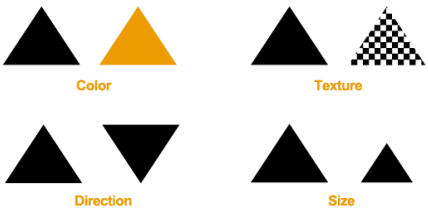
- Used to measure "fluid" or general intelligence (g)
- Do away with words and numbers
- All the information is presented in visual language
- Succeed by detecting patterns in each object, by separating the relevant information from the irrelevant



Designers utilize pattern recognition

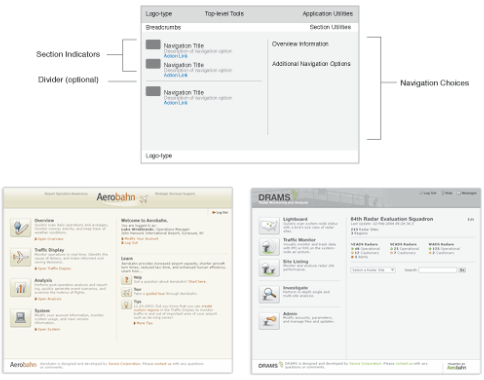
- **How we make sense of what we see**
  - Recognizing similarities & differences
  - This allows us to group information
  - And give it meaning
- **Relationships**
  - Between individual elements
  - To the whole (story)

Principles tell us how & why we group visual information

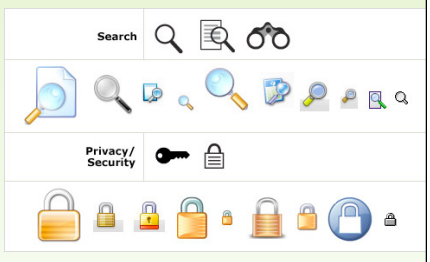


Creating relationships requires an understanding of what makes things different

Designers utilize pattern recognition

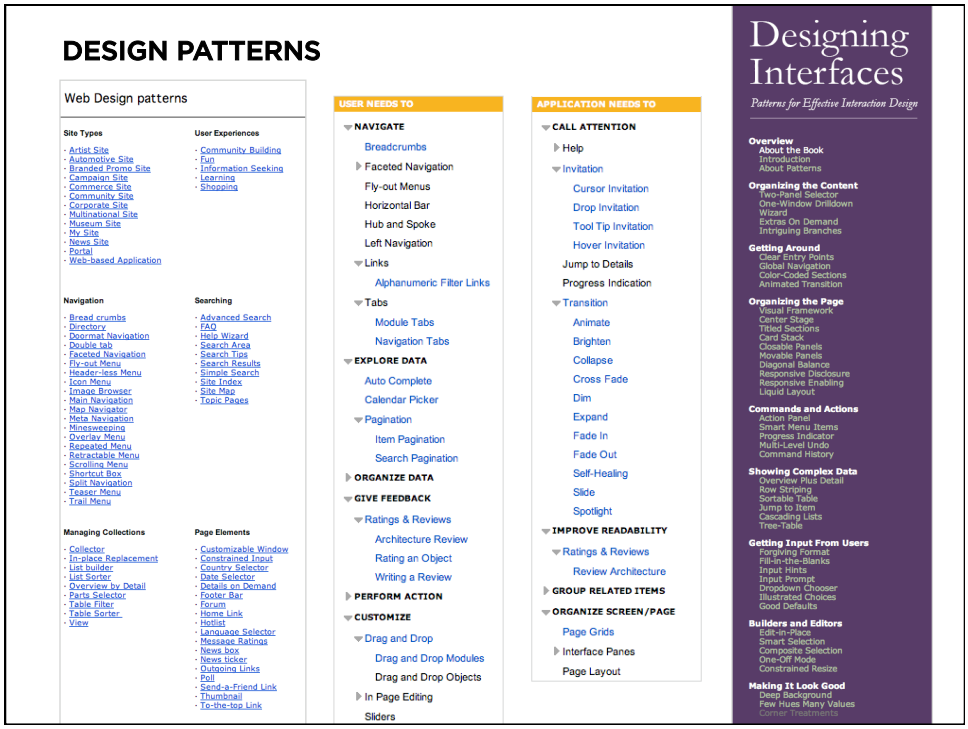


Macro-level



Micro-level

DESIGN PATTERNS



DESIGN CONSIDERATIONS

PATTERN RECOGNITION

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EMPATHY

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Market Landscape (Online Video)

- Apple/NBS/CBS/USA TV show downloads
- MovieLink/Fox movie downloads
- AOL/MTV Networks video search
- AOL/In2TV
- Sony TV downloads in Japan
- Blinkxx Smithsonian & University archives
- Yahoo! WOW House (original programming)
- HBO shows on Vodafone Live
- Video iPod: Public Domain movies, art shows, Veoh, Rush Limbaugh, PodDater
- Sony PSP: Sony Wifi TV (Japan), DVD conversion (PQVideo.com)
- Tivo: Transfer to Video iPod & PSP (TV Harmony)
- AOL In2TV (Web TV channels)
- Tioti ("global TV guide, Torrent tracking, your favourites and recommendations plus an innovative social layer to hang it off")
- wwwiTV (Live TV Webcast guides)
- PodGuide.TV (guide to Video iPod content)
- Schedule Tivo on Yahoo!
- Poddater.com (video iPod dating)
- View Video Blog content on Tivo (Rocketbloom)
- Yahoo! Living Room Video Search (Meedio)
- Mac Mini & Front Row (Apple)
- Windows Media Center
- AOL HiQ (DVD quality)

Video Market Landscape

- Increasing amounts of video content being made accessible online
- Programming Guides of video content in early stages
- Viewing experience unsatisfactory across most devices

Story Leads to Discussions

- Which area do we tackle?
- Can we own the whole spectrum?
- What kinds of partnerships do we need?
- Which competitors should we be concerned about?

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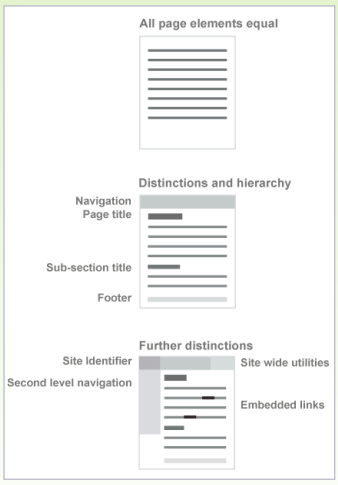
Visual Communication

- Importance of presentation
  - Front door to content & actions
- Perception is based on visual relationships
- Manipulating visual relationships creates visual hierarchy
- Visual hierarchy tells a story
- Personality draws the right audience to the story

Building a Hierarchy

- Involves use of visual relationships to add more or less visual weight to elements
- Distribution of visual weight
  - Visually dominant images get noticed most
  - Focal point, center of interest
- Distinct visual weight guides you through the narrative
  - Essential to keep it balanced



No Clear Hierarchy

Effective Hierarchy

A Simple Table

General Statistics	
Current Caseload:	10
Number of Admissions Today:	5
Number of Admissions This Month:	35
Number of Admissions Last Month:	30
Number of Discharges Today:	3
Number of Discharges This Month:	22
Number of Discharges Last Month:	34

General Statistics	
Current Caseload:	10
Number of Admissions Today:	5
Number of Admissions This Month:	35
Number of Admissions Last Month:	30
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General Statistics	
Current Caseload:	10
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Statistics	
Current Caseload:	**10**
New Admissions:	**5** today **35** this month **30** last month
Discharges:	**3** today **22** this month **34** last month

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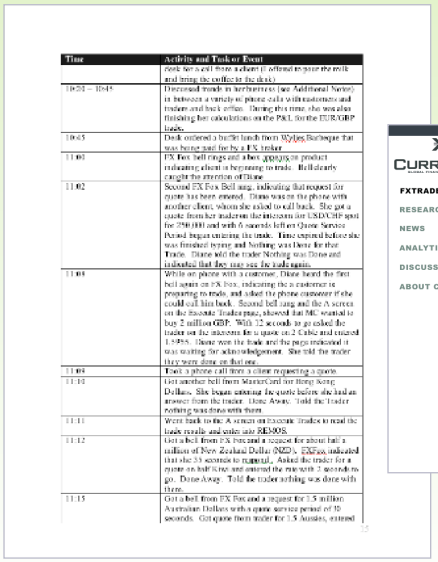
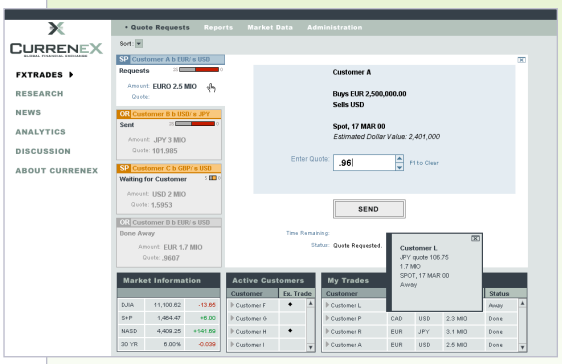
Empathy



Time	Activity and Task or Event
	[illegible]
10:20 – 10:45	Discussed trade in herbivorous (see Additional Notes) in between a variety of phone calls with customers and traders and back office. During this time, she was also finishing her calculations on the P&L for the EUR/GBP trade.
10:45	Desk ordered a buffet lunch from Wyles Barbeque that was being paid for by a FX trader.
11:00	FX Fox bell rings and about appropriate product indicating client is beginning to trade. Bell clearly caught the attention of Diane.
11:02	Second FX Fox Bell rang, indicating that request for quote has been entered. Diane was on the phone with another client, whom she asked to call back. She got a quote from her trader on the interest for USD/CHF spot for 250,000 and with 6 seconds left on Quote Service Period began entering the trade. Time expired before she was finished typing and Nothing was Done for that Trade. Diane told the trader Nothing was Done and indicated that they may see the trade again.
11:03	While on phone with a customer, Diane heard the first bell again on FX Fox, indicating the a customer is preparing to trade, and asked the phone customer if she could call him back. Second bell rang and the A screen on the Execute Trader page, showed that MC wanted to buy 2 million GBP. With 12 seconds to go asked the trader on the interest for a quote on 2 Cable and entered 1.5955. Diane won the trade and the page indicated it was waiting for acknowledgement. She told the trader they were done on that one.
11:09	Took a phone call from a client requesting a quote.
11:10	Got another bell from MasterCard for Hong Kong Dollars. She began entering the quote before she had an answer from the trader. Done Away. Told the trader nothing was done with them.
11:11	Went back to the A screen on Execute Trades to read the trade results and enter into REMOS.
11:12	Got a bell from FX Fox and a request for about half a million of New Zealand Dollar (NZD). FXFox indicated that she 35 seconds to respond. Asked the trader for a quote on half Kiwi and entered the rate with 2 seconds to go. Done Away. Told the trader nothing was done with them.
11:15	Got a bell from FX Fox and a request for 1.5 million Australian Dollars with a quote service period of 10 seconds. Got quote from trader for 1.5 Aussies, entered



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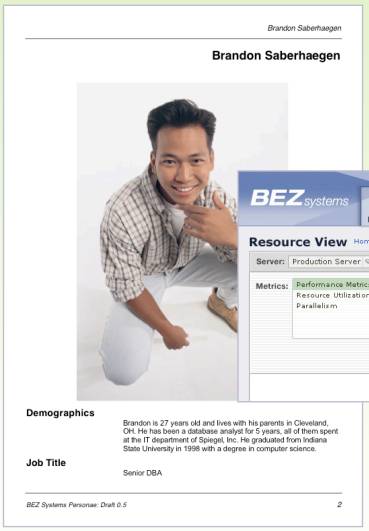
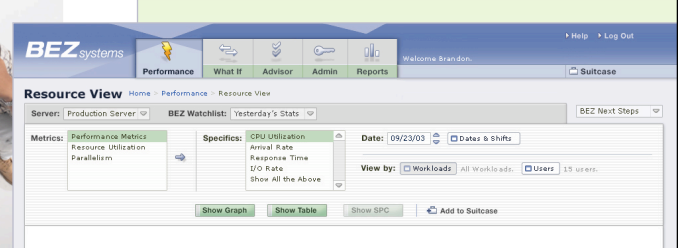
Empathy





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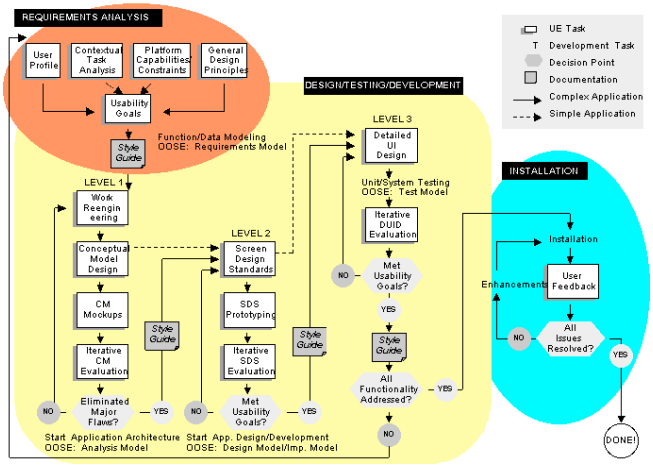
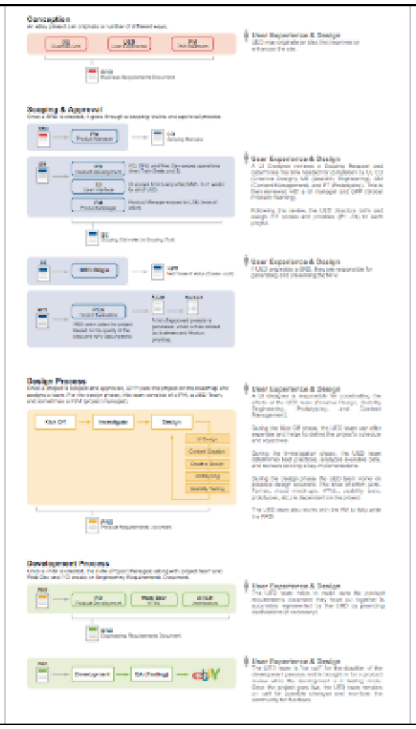

REQUIREMENTS ANALYSIS
User Profile
Contextual Task Analysis
Platform Capabilities/ Constraints
General Design Principles
Usability Goals
Style Guide
Function/Data Modeling
OOSE: Requirements Model
DESIGN/TESTING/DEVELOPMENT
LEVEL 1
Work Reengineering
Conceptual Model Design
CM Mockups
Iterative CM Evaluation
Eliminated Major Flaws?
NO
YES
Start Application Architecture
OOSE: Analysis Model
LEVEL 2
Screen Design Standards
SDS Prototyping
Iterative SDS Evaluation
Met Usability Goals?
NO
YES
Start App. Design/Development
OOSE: Design Model/Imp. Model
LEVEL 3
Detailed UI Design
Unit/System Testing
OOSE: Test Model
Iterative DUID Evaluation
Met Usability Goals?
NO
YES
All Functionality Addressed?
YES
NO
INSTALLATION
Installation
User Feedback
All Issues Resolved?
NO
YES
Enhancements
DONE!
UE Task
Development Task
Decision Point
Documentation
Complex Application
Simple Application



DESIGN CONSIDERATIONS

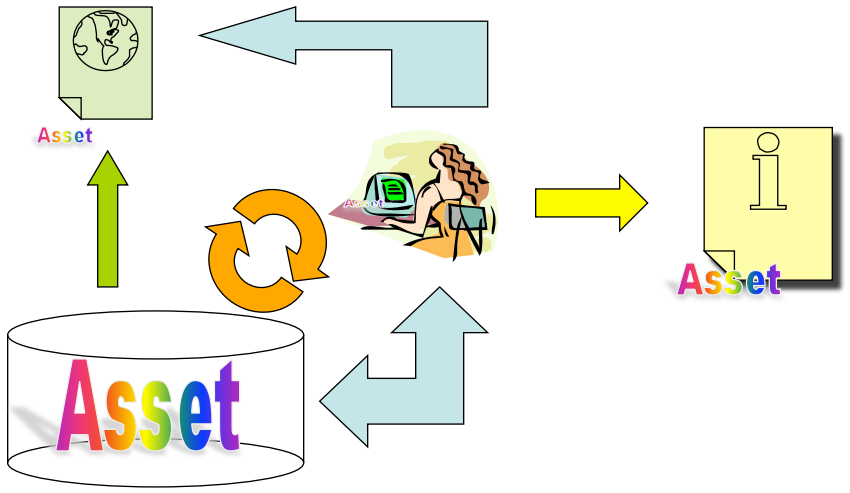
PATTERN RECOGNITION

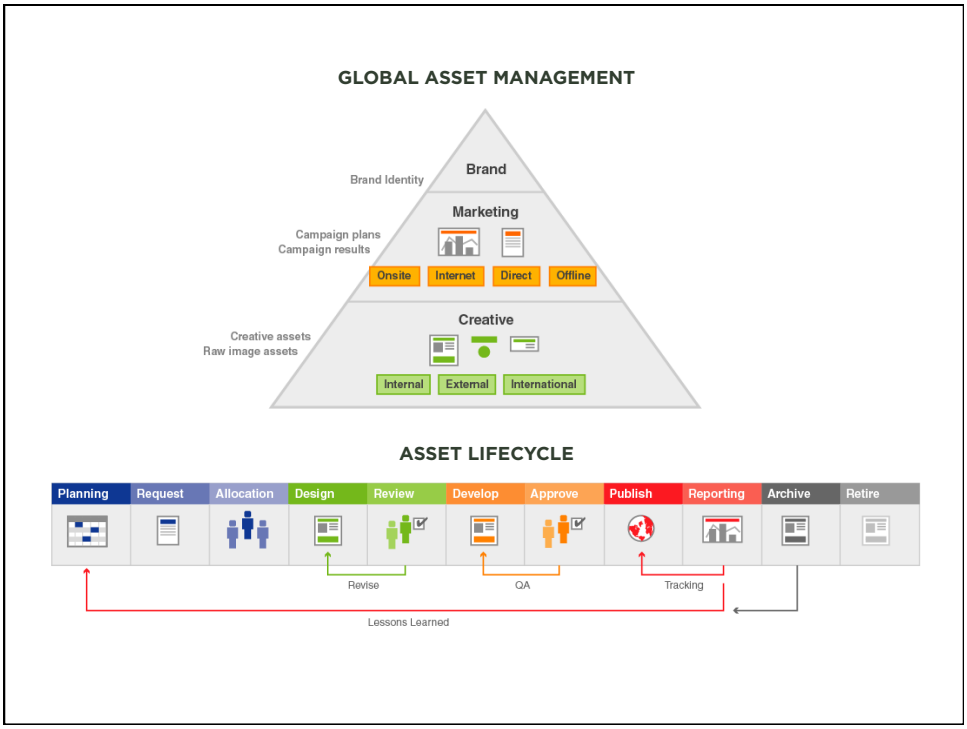
STORY-TELLING

VISUAL COMMUNICATION

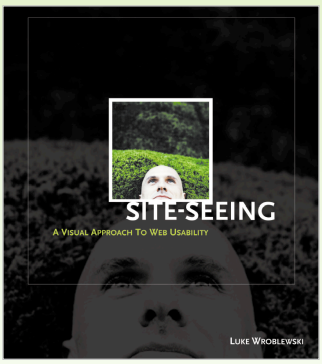
EMPATHY

"We need to invest in a multi-million dollar system."





For more information...



- Functioning Form
  - www.lukew.com/ff/
- Site-Seeing: A Visual Approach to Web Usability
  - Wiley & Sons
- Drop me a note
  - luke@lukew.com

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