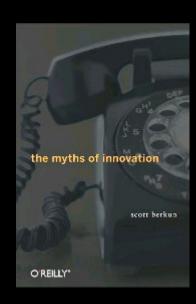


Hi. I'm Scott.

- 9 year MSFT veteran (1994-2003)
- IE 1.0 -> 5.0, Windows, MSN
- Since 2003: Author / Speaker
- Bestsellers:
 - Making things happen, (O'Reilly 2008)
 - The myths of Innovation, (O'Reilly, 2007)
- www.scottberkun.com
 - Blog, essays, podcasts, videos





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JEFF JOHNSON

WEB BLOOPER_S

60 COMMON WEB
DESIGN MISTAKES AND
HOW TO AVOID THEM

Copyrighted Material

All men are designers. All that we do, almost all the time, is design, for design is basic to all human activity. The planning and patterning of any act toward a desired, foreseeable end constitutes the design process.

Any attempt to separate design, to make it a thing-byitself, works counter to the fact that design is the primary underlying matrix of life. Design is composing an epic poem, executing a mural, painting a masterpiece, writing a concerto.

But design is also cleaning and reorganizing a desk drawer, pulling an impacted tooth, baking an apple pie, choosing sides for a backlot baseball game, and educating a child.

Victor Papernak, Design for the Real World

by the Things You Buy Are Expensive, Badly Designed, Unsafe, and Isually Don't Work! With some startling practical alternatives -like a radio that costs 9c, a \$6 refrigerator. a television set for \$8. **FenIngy and Social Change** th an Introduction by **Buckminster Fuller** Completely Illustrated

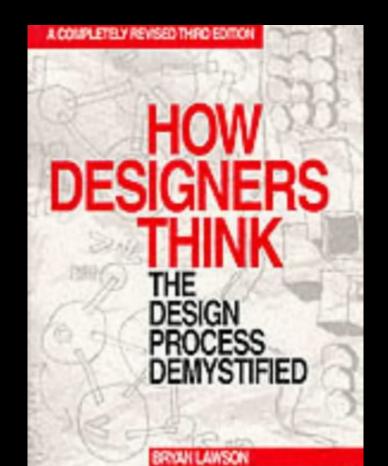
My three points

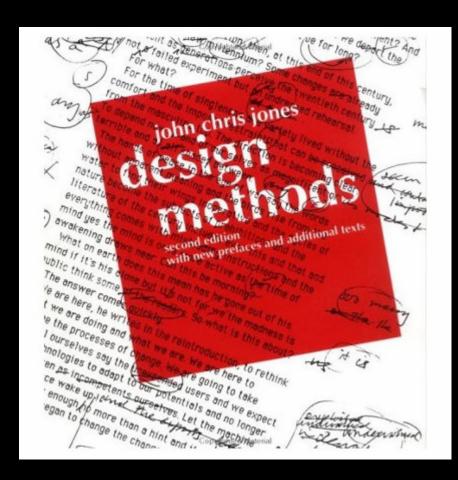
- All designers fail 95% of the time
 - Failures on drawing board + failures in real world = ?
- Why designers fail
 - Set the wrong goals, Fail to meet goals, Never had a chance
- What to do about it
 - Own your mistakes
 - Study failure and common situations
 - Study how to avoid / mitigate failures

WHOEVER **DESIGNER DEVELOPER CUSTOMER**

WHOEVER **DESIGNER** DEVELOPER **CUSTOMER**

WHOEVER **DESIGNER DEVELOPER** CUSTOMER

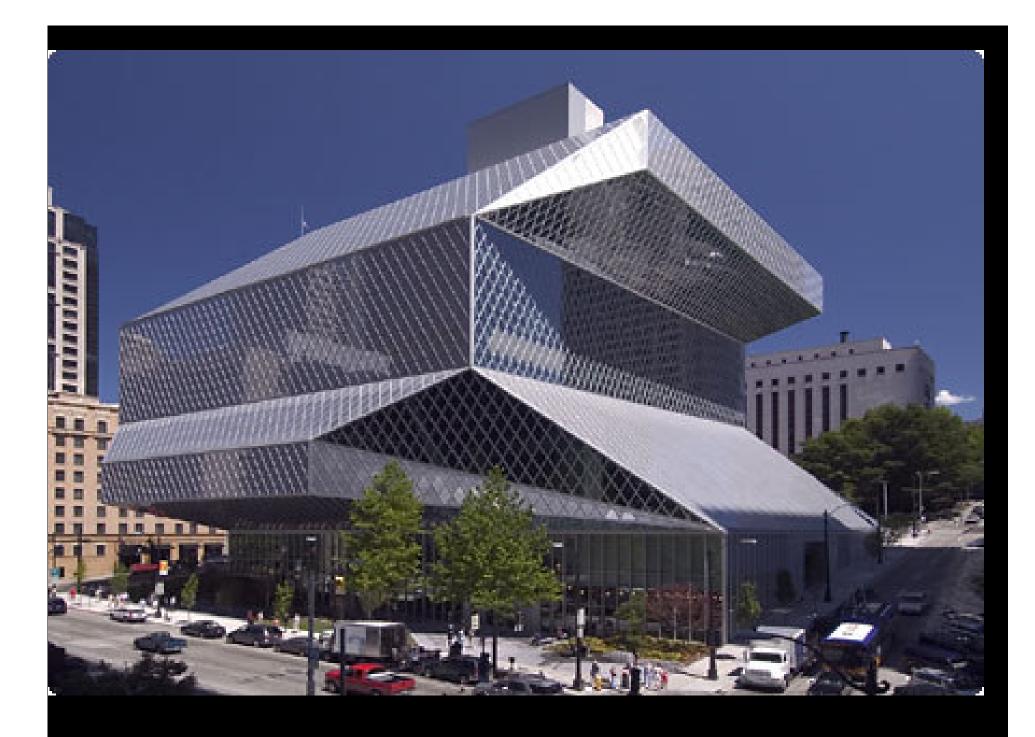




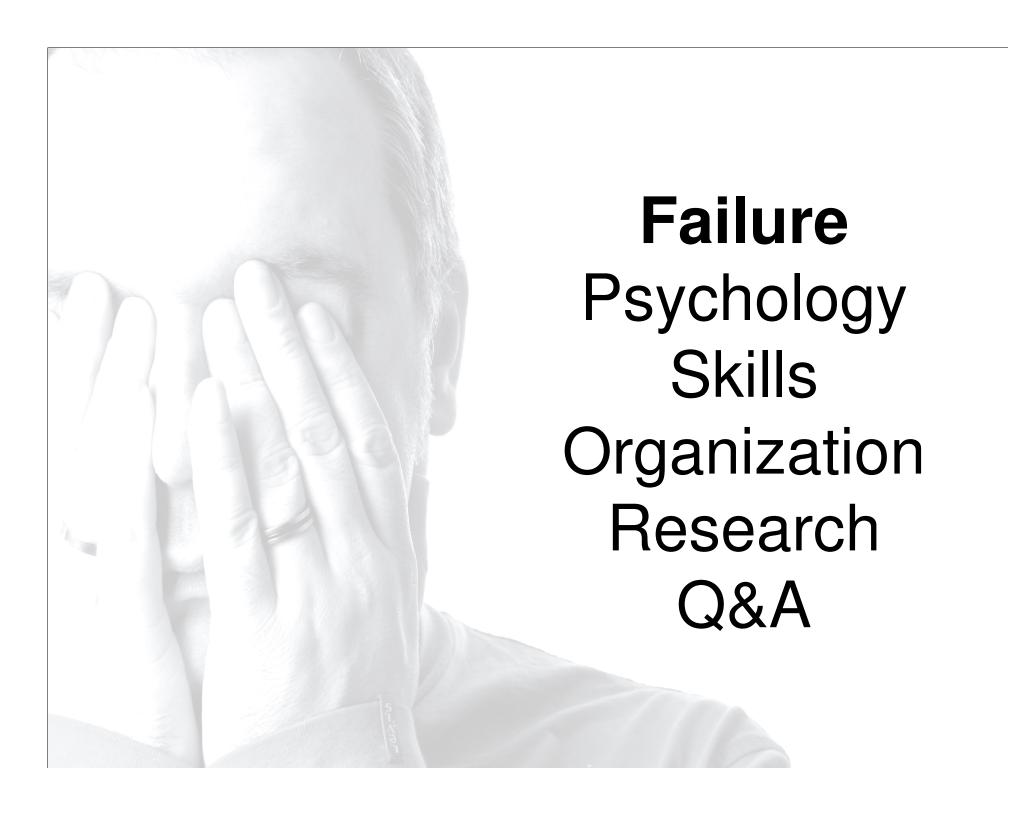
Design has no failure analysis

- Doctors: M&M (Morbidity & Mortality)
- Forensics: Autopsy
- Air Force: mission debriefing
- Manufacturing: failure analysis
- Software: Postmortem

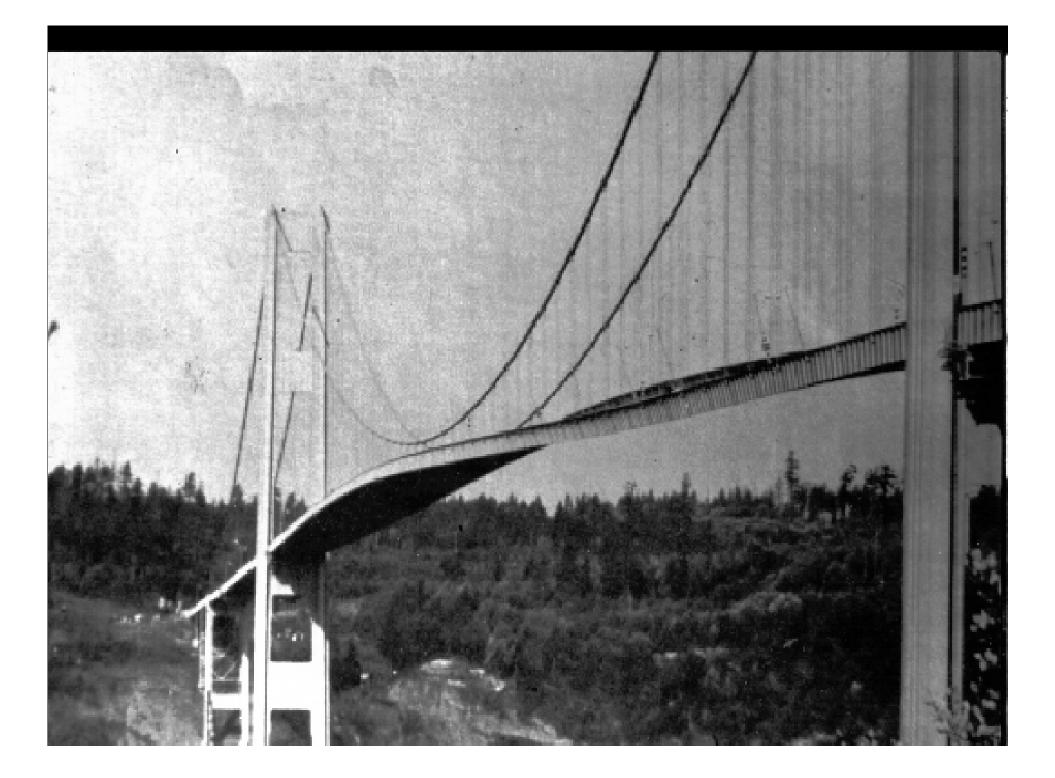
Design? Architecture?











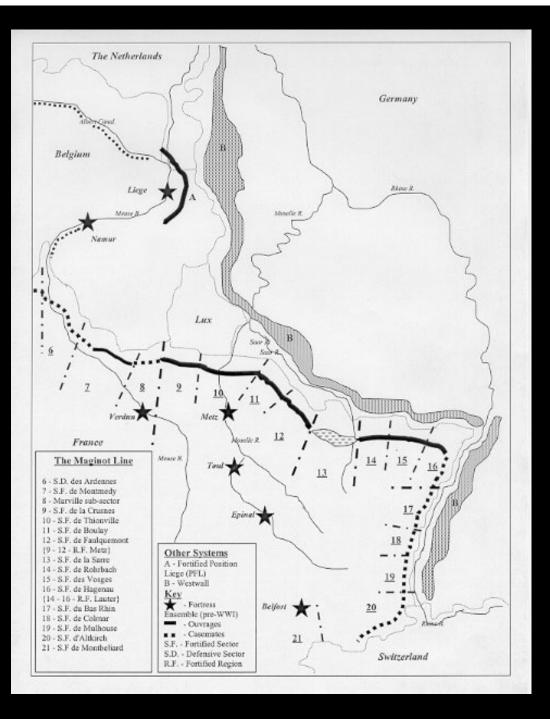




Two kinds of failure

 Fundamental – system collapse, people die, etc: Tacoma Narrows, Maginot line, Microsoft Bob. Rare and dramatic.

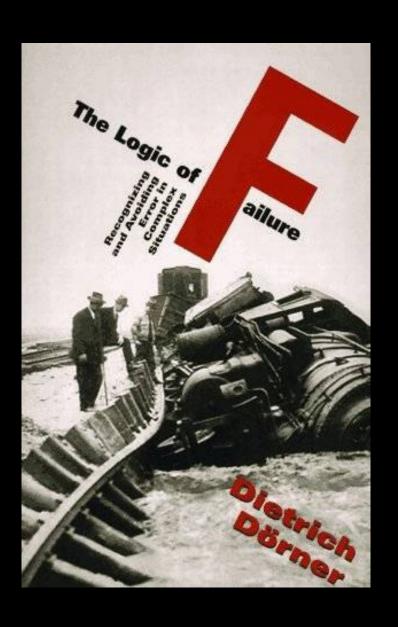
Partial / Subjective – Mixed results,
 YMMV, basic functions work but to what standard? Big Dig, Microsoft Vista.
 Common and debatable.





The stigmas of language

- Embarrassing out we are taught to avoid at all costs:
 Disaster, Failure, Mistake
- But there are many kinds of failure:
 - Beautiful
 - Interesting
 - Unavoidable
 - Necessary
 - Breakthrough
 - Stupid*
- We must Experiment to create new design knowledge
- We must reward those who find lessons in what we fear



TO ENGINEER IS HUMAN

The Role of Failure in Successful Design



With a new afterword by the author



"Serious, amusing, probing, sometimes frightening and always literate." —Los Angeles Times

HENRY PETROSKI

Author of THE EVOLUTION OF USEFUL THINGS





B Gam County

Carta

Ca

CONTRACTOR OF STREET SAID

DANSING

From the Japanese computer journal "ASCO"

を図のデータショー同じ最大のエュース は、富さイロトラスを新分ロトラスインフォ スーション・ホートワーア・システンス(2015年 発表したことである。これは実施を204で マイ、集のメーターの出版を成れていた。 ボンスの展示アースに配ければなっていた ことからも、大権を、佐賀者ともに大変で展 教育的のととは様かである。

マロリアスをひ、さのパーフアルコンピュー FEMARESANT, OFFICE OF A PANESERNA COPAT. ANNOX. FARREIG. - BOLDER-YFR コンピュークモローホルモントワーアンスト 上を確保したまたをロテクスをは、事へと… グアルタンピューテスキ1至日十(ゲーテス チャラモンと呼ばれるペーンアルコンピュー アモ・ミーサストトを乗ったオフィスを9世 MESATARSSALARS PATRICIA 100円以下シェアルコンピューナ・コンフナ PRESIDENCE CAP. MINOX MINIMALISTEATS APPRIATE ALL AR. REPOSITATIONS BEKAROUED FEEDWARDAR STRUCCESTORS LIMITEDATE *Ferd-10. HMCChonffex. Pleasentand, passivition PERCOCTAL RESIDENCE オーの430700フラスのオフョンの明れる CREBROATAL F-FD -- OF ロテクス取のアースの前で放棄メーターの人 MFRETANCHOOS STITSBUTC A 6-

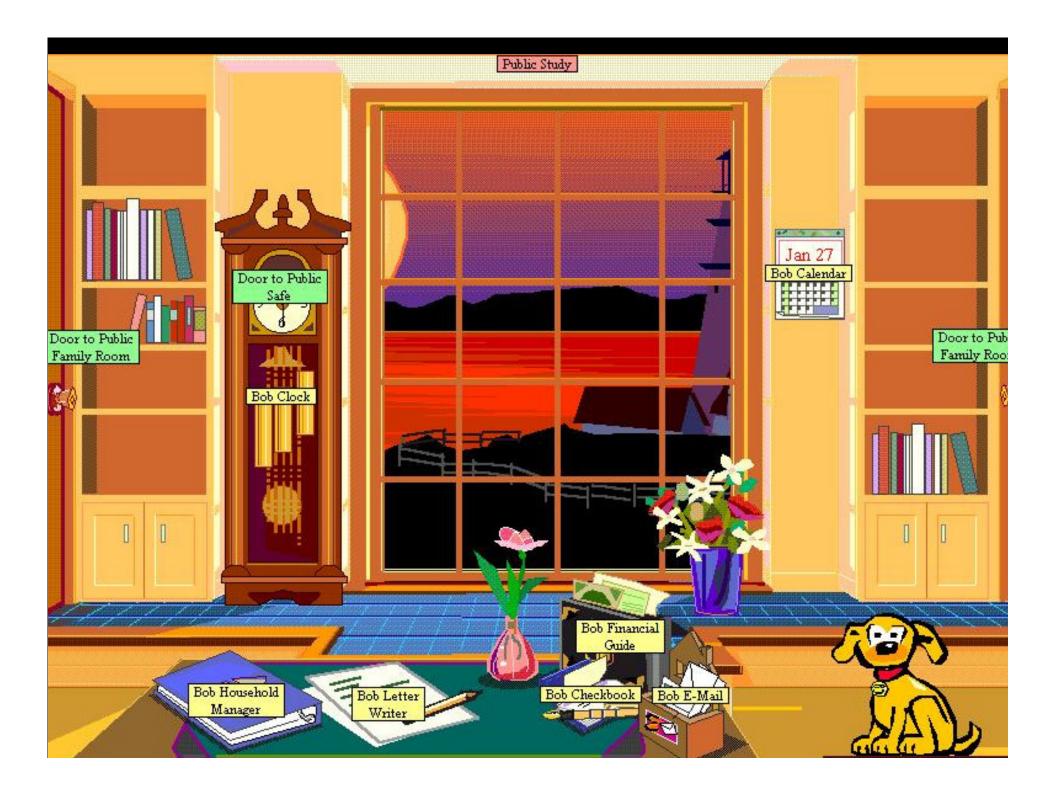
SERVICE PROPERTY COMP

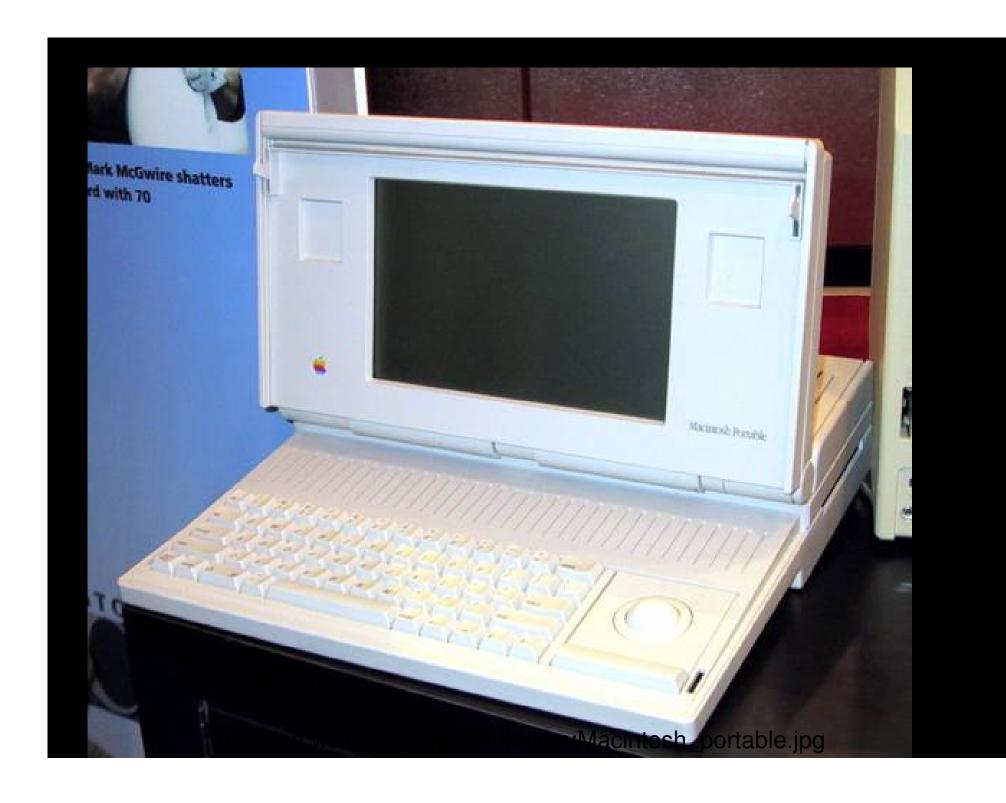
The preparation news of the Outs Show was the announcement of the Areas Information hydrocide System 20%. From the way in which not not with the Outs Show attendance but also the other makens' exhibitions were reveled to the digital books, it is fair to say that both antendees and exhibition received a presidence.

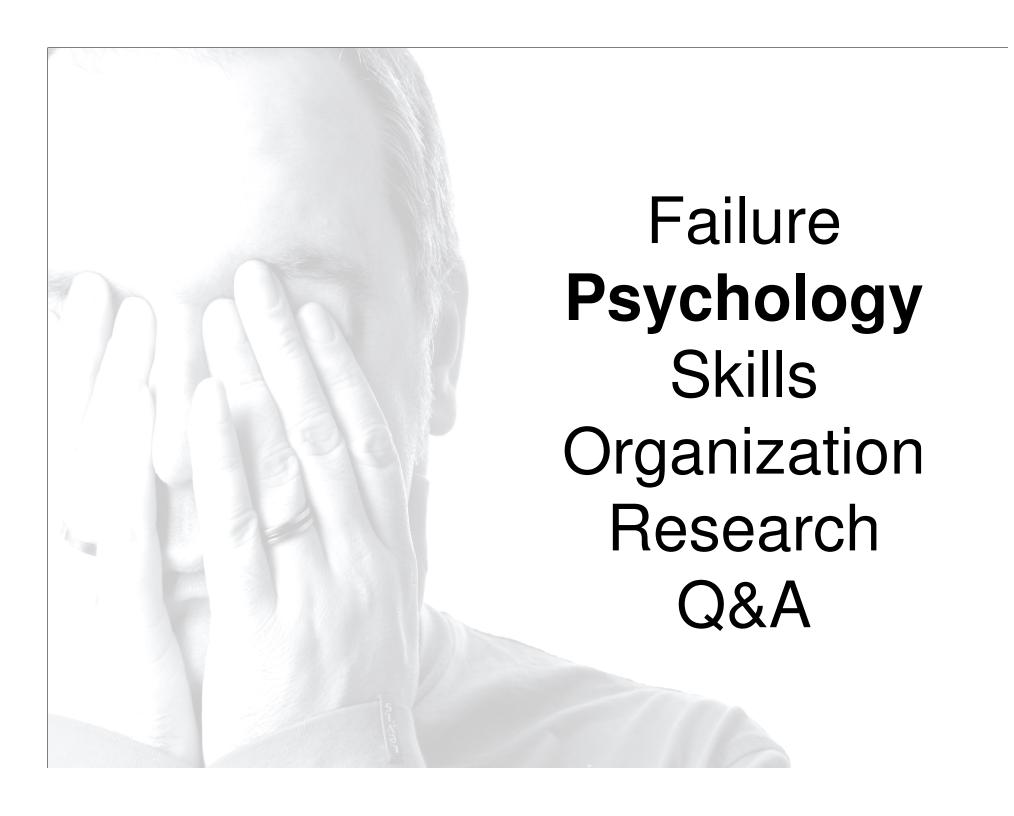
th developing this paragonal temporary. Xeros have not the farmer methods of computer wange by the roots, and developed as a punch-making agreement. Having this developed the personal computer and local network partners, zaris announced as other developed photometric vice away to be dreamed to the dream pertonal computer. De "workfittelom" on the Courset, at the May 25 NCC or Obinary.



The is the ASPACE data information System. Naturally, it goes without system, that the animous of the computer passing of the world was 1 focused on this system.









Visionary architect Louis Kahn designed soaring buildings, open to the environment and the free exchange of ideas. Peter Conrad describes his creative relationship with his patron Paul Mellon, whose patience and deep pockets enabled Kahn to design the luminous Yale Center for British Art

Kubla Khan decreed a pleasure dome; the architect Louis Kahn, more an idealist than a hedonist, designed atopias. His buildings are secular temples, shrines devoted to knowledge and to the freedom of intellectual exchange. In Southern California, he constructed a research institute for Junas Salk. that dazzlingly balances on a headland above the Pacific, open to the ocean and to the sky. In Dhaka, he planned a floating fortress whose debuting chambers and interlocking corridors protected the experimental democracy of Bangladesh. His library for Phillips Exeter Academy, a prep school in New Hampshire, is a brick cube with a core of light that even manages to instill reverence in the teenagers who use it.

Kaltn's career began and ended on the same street in New Haven, where he was hired in 1947 by the architecture department of Yale University. He had settled for a teaching. appointment because the extravagant impracticality of his projects frightened potential clients. Eventually, at the age of 50, he got the chance to design his first significant building a new art gallery for the university, whose cavemous spaces contained a stair tower that was both a miracle of engineering and a symbol of intellectual aspiration, confidently mounting towards the light. His final commission, on the other side of the same block, was the Yale Center for British Art, a gallery of a very different kind with an even more transcendental. staircase secreted in a cylinder of concrete (right). By the time it opened in 1933, Kahn had been dead for three years, after suffering a heart attack at Pennsylvania Station in New York.

Kahn and his patron Paul Mellon, whose collection of art works and hooks was to be housed in the Center came from





different worlds. The architect was the child of poor Jewish immigrants from Estonia, who initially named him Leisev-Itee Schmuilowsky. The client was the pampered son of a robber baron who owedhis fortune to lumber, steel, oil and shipbuilding. Kahn grew up in the Philadelphia ghetto; Mellon took his ease on a stud farm in rural Virginia, where he rode and hunted while his wife, a Listerine heiress, tended her elaborate gardens. Whereas Mellon had the instincts of a patrician, Kahn was a doughty democrat who refused to ride in the back seat of taxis as that implied he was somehow the driver's superior.

Yet Mellon was something of a traitor to the profiteering dynasty his father had founded. He had no interest in business. and spent his life giving Andrew Mellon's money away: philanthrophy has tax advantages in America, but when practised on this scale it turns into an almost saintly selfaborgation. Kahn in his own way was an imperious creature, a Kubla Khan empowered by an uncompromising genius. One of his students at Yale likened him to 'a philosopher king on the edge of society': marginalised but still regal, elevated by the gift of vision. Mellon, to his credit, recognised this, even though as I was told by Professor Jules Prown, the art historian who brought them together - he probably viewed Kahn as 'a Junny little man'. When the three of them met for breakfast after Mellon had visited the Salk Institute. Rahn babbled mystically about symbolic thresholds while scribbling sketches for the gallery and library on some flimsy paper napkins. After they left the restaurant, Mellon, the inveterate collector, suffered a twinge of regret. I forgot to pick up the napkins, he said. Mellon,' Prown explained, 'always hired the best advice, whether it was about his horses or his private plane or his art collection. He was very much a gentleman. He became in secure when he felt that Kahn was heading off in a screwy direction or preaching about light and silence, though he always expressed his discomfort very indirectly. But he judged by results, and he was proud of what Kahn built for him."

At the Salk Institute and in Bangladesh, Kahn constructed modern versions of the Acropolis or the castellated hilltop towns of the Italian Renaissance; setting out to replandowntown Philadelphia, he designed (but never built) lofty geometrical skyscrapers and a cliff-like barricade of semicircular parking garages. However, in deference to Mellon, he agreed to work on a smaller, snugger scale and even took it in good part when inflation forced him to rethink his original plan, eliminating a third of the space. The art in Mellon's collection was domestic in character, ancestral portraits, conversation pieces, landscapes that favour calm and quiet to noisy sublimity, anecdotal urban scenes. Mellon's favourite British painters did not turn out altarpieces for cathedrals or swaggering epic tableaux to be hung in town halls. They painted for private homes, and Kahn - not himself an especially domesticated character, who often slept on the floor of his office and died in a public washroom - honoured. this intimate sociability. He worked in modules of twenty square feet," said Prown as we walked around, 'For him, that was the size of the average room in which human beings are comfortable. He wanted to get away from the big open modern loft, which was the kind of space you find in his University Art Gallery just across the street."

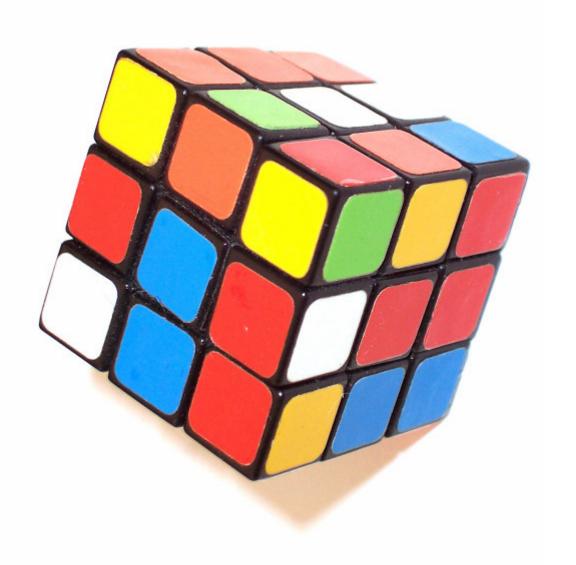
The buildings of the Yale campus behind the Center for British Art fussily mimic the architecture of Oxford and Cambridge, with decorative turrets and absurd escutcheous Kahn of course avoids such pastiches with its concrete pillars and its cladding of stainless steel, the Center is defiantly modern, employing materials that have been engineered into malleability-'molten stone' (how he described concrete), metal that flexes and bends. Yet inside this shell, Kahn subtly invokes the atmosphere of Britain, the fanciful homeland of

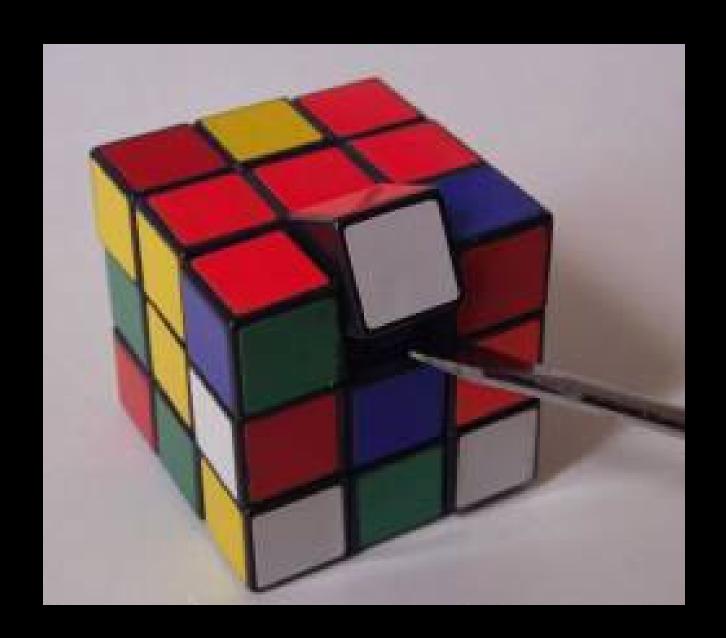
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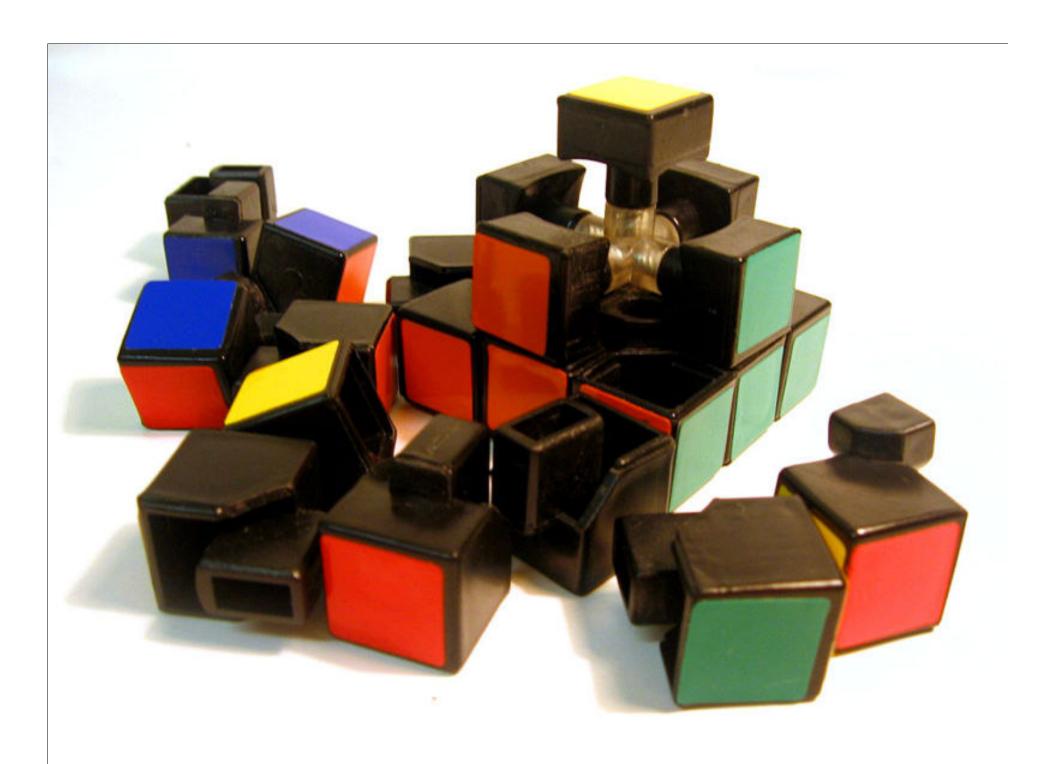
RAS ANTHORESON

I put the video together for a magazine design workshop I run in Denmark... actually as an example of things not going well but more importantly to dismiss the myth with the students that there is some sort of magical formula for editorial design, and that sometimes, on a bad day, you just move stuff around a page until it feels ok, whilst drinking too much coffee and cursing the client every time they change something.

-Matt Wiley, http://www.studio8design.co.uk





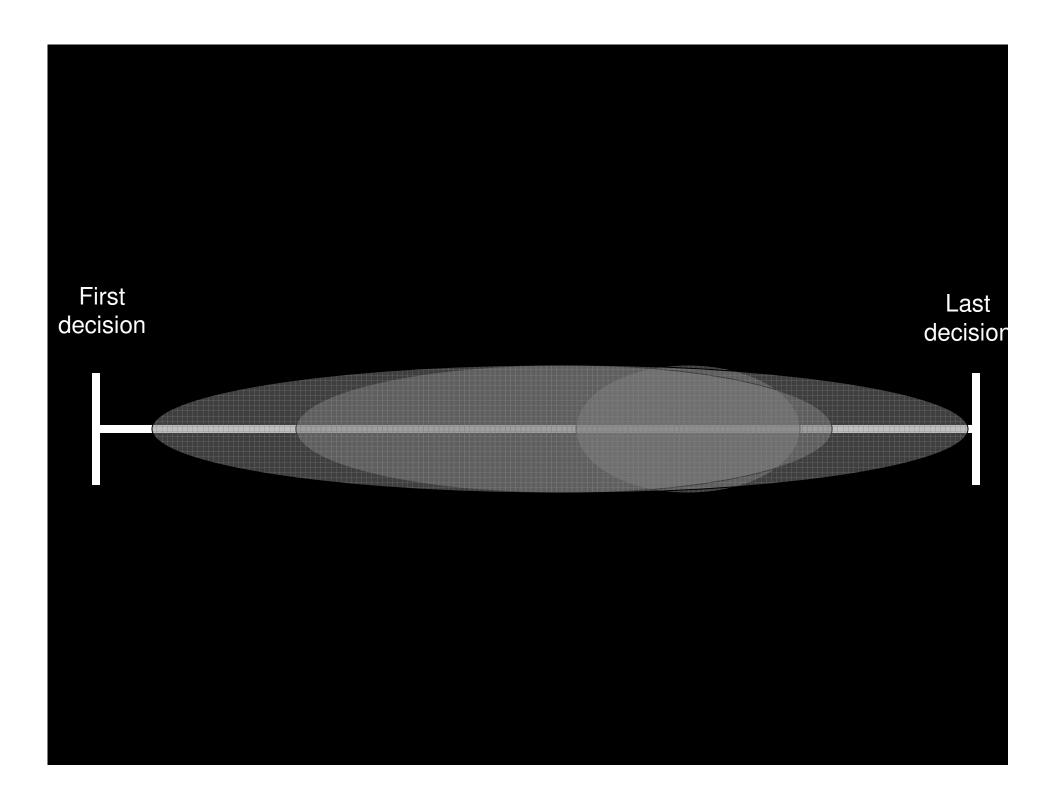


Questions of Psychology

- What am I responsible for?
- What are my problem solving tools?
- How do I know when I'm stuck?
- What are my tools for getting unstuck?
- Who can I talk to about this without embarrassment?
- How can I see the problem from the best perspective?
- What fulfils me about my work?

Psychological Issues

- Unwilling to take political risks
- Not enough research before design
- Takes limited responsibility for final outcome
- Lack of Conviction
- Desire to be safe / not stand out
- Big ego expects others to worship
- Not receptive to good feedback
- Ignorant of their own skill limitations
- Unwilling to make firm commitments



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On NBC's 'My Own Worst Enemy,' Christian Slater's real foe is the plot* * * * *

BY DAVID HINCKLEY

Monday, October 13th 2008, 4:00 AM

"My Own Worst Enemy," an action drama showcasing Christian Slater, spends almost all of tonight's premiere episode trying to convince the viewer things aren't as confusing as they seem.

Sorry, NBC. They are.

"My Own Worst Enemy" is



Adam Taylor/ NBC Universal, Inc.

Not enough influence

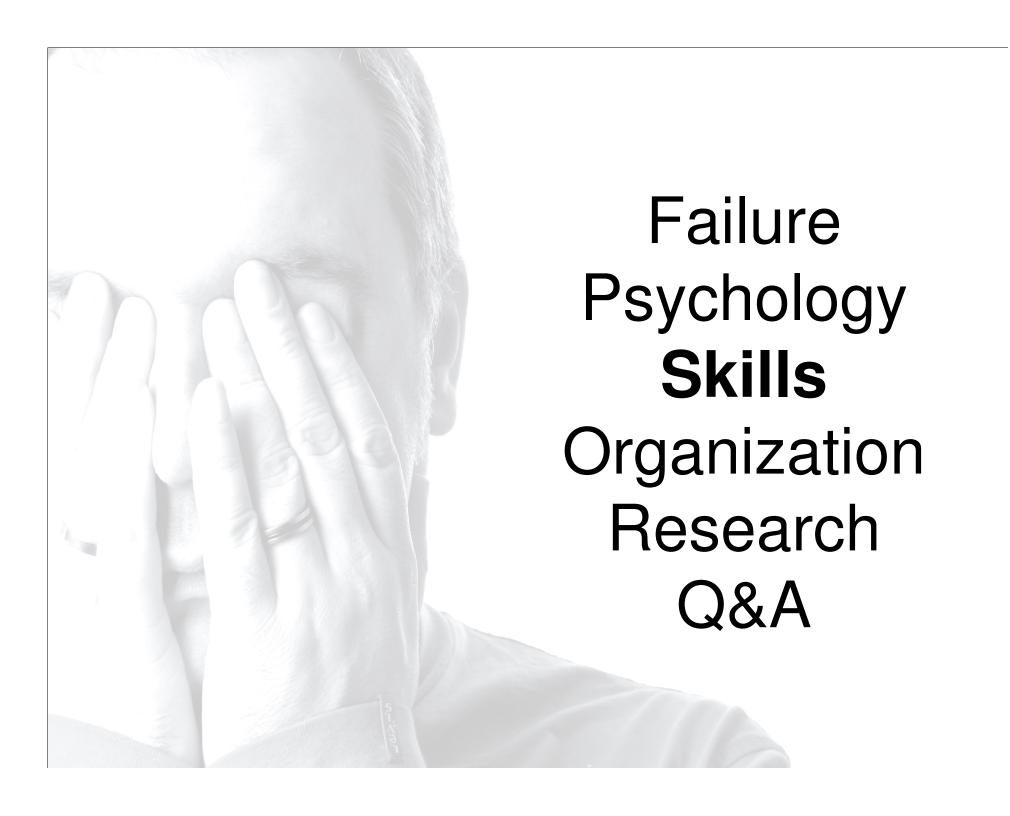
- Psychology: how hard will you work to get more influence?
- Who has the power to determine your influence? (Your boss, VP, Project manager, etc.)
- Have you talked to them?
- In their language? In terms of their goals?
- Who do you have the best reputation with? Can they be your advocate/ally to managers?
- Recognize: everyone wants more power. You are not alone.
- If you can't design a path towards the influence you want: accept it or leave.



Design traps

- Category trap making assumptions without realizing.
- Puzzle trap problem solving for its own sake.
- Numbers trap believing what's measured is all there is.
- Drawing trap Love of the sketch / prototype instead of what the drawing represents.

Ref: How designers think, Bryan Lawson, pg.227-240



Questions of Skill

- What am I responsible for?
- What skills do I need to fulfill each responsibility?
- How do I evaluate my proficiency at each skill?
- Who does X well and how can I learn?
- Do other design fields have better techniques for this than my own?
- What are my weakest skills and how do I own them? (Do I deny them or help them improve?).
- Who will give me honest feedback about my work and work habits?

Skill Issues

- Poor collaboration skills
- Poor understanding of domain
- Poor understanding of technology
- Poor communication skills
- Poor persuasion / pitching skills
- Weak interaction design skills
- Lack of awareness of user-research methods
- Unaware of business strategy
- Poor schedule estimation skills
- Difficulty bonding with non-design team members
- Design complexities: missed requirement, blown assumption, failed case, blown prioritization

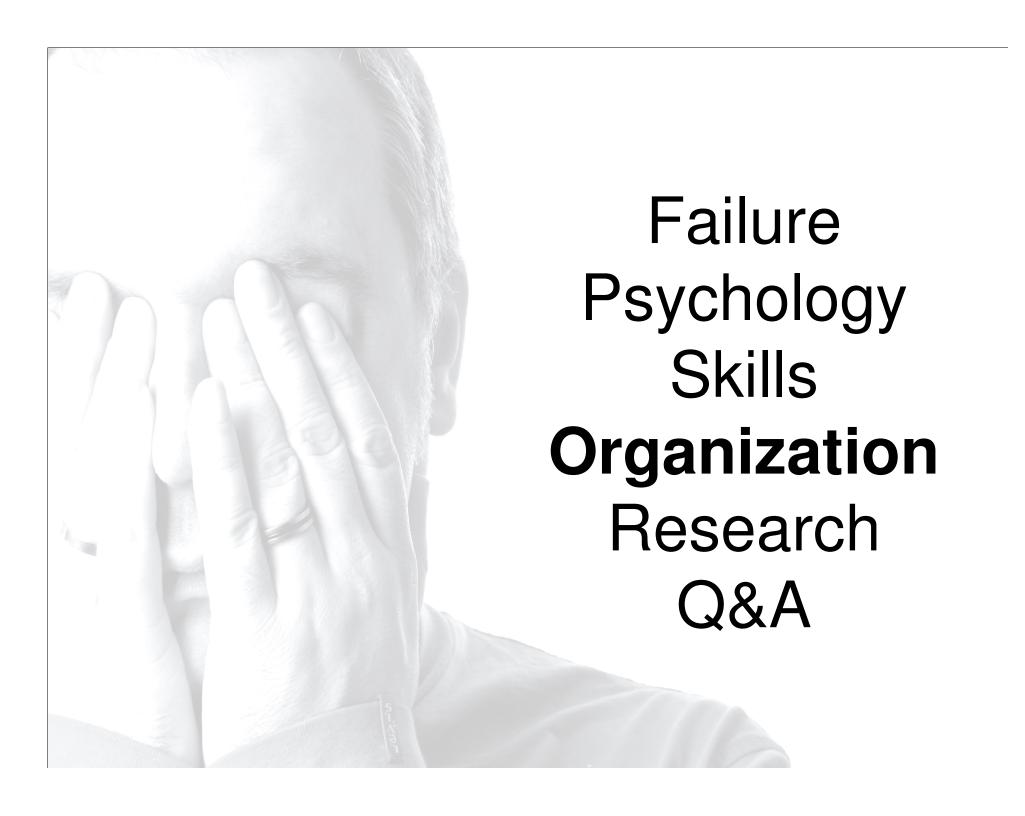
What does the project need?	What skills do I have?	How will we close the gap?

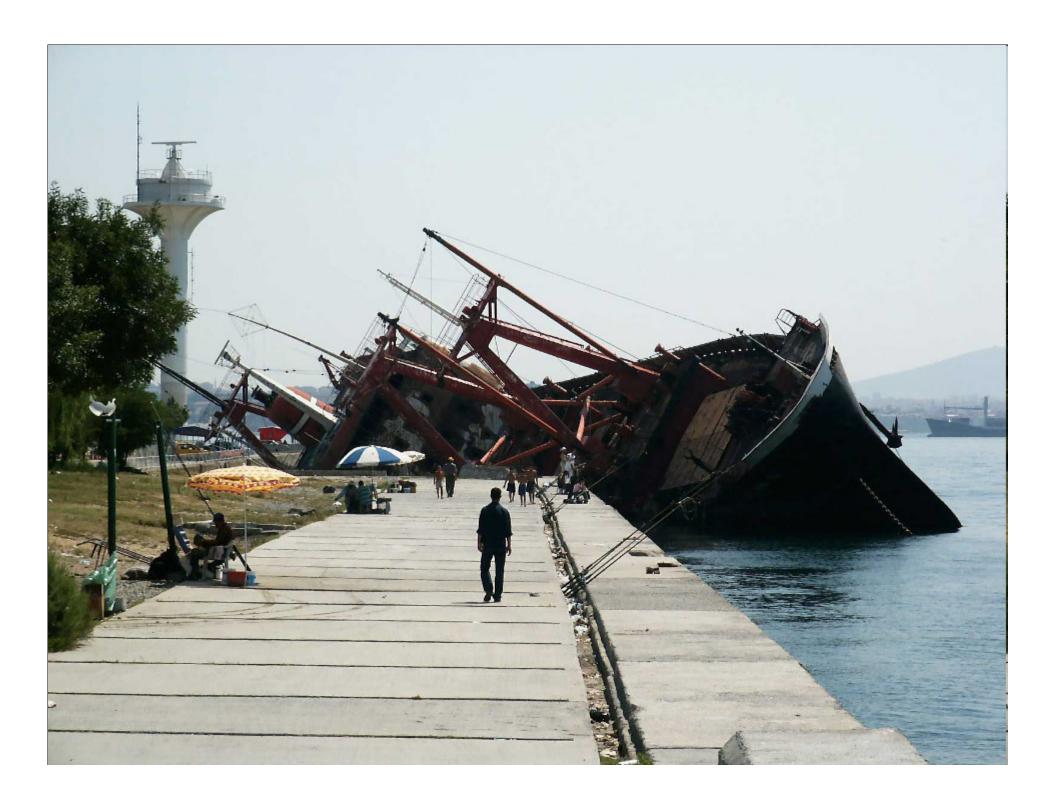
How to pitch ideas

- Persuasion is a skill: It can be learned
- It explains that idiot who always gets more budget than you do
- Half of persuasion: willingness to pitch again and again
- Every creative faces 10 to 1 rejection ratio:
 - Frank Lloyd Wright, Rem Koolhaas, Hemmingway...
 - Artists, painters, programmers, writers, you name it
- Learn something in every pitch
 - "What could I have done differently that might have helped me convince you?"

How to pitch ideas

- Sometimes you have to pitch the same person, multiple times, with different arguments
 - Business, Customer, Technology, By-Association
- 3 parts: Enthusiasm, clarity, knowing your audience
- Best tip ever apply design process to the pitch:
 - Get video camera
 - Pitch your idea on video
 - Watch & critique, alone & with co-workers
 - Revise pitch
 - Repeat
- Google "pitch an idea"





Question of O

- What power do I need vs. what I have?
- How will I make up the difference?
- Who has the power I need and how do I get it from them?
- How can I work around the system? (Maignot)
- How can I translate what I want into terms of what my boss wants?
- How much responsibility do I take?

Organizational issues

- Too much chaos for good design to happen
- It's never made safe to fail or experiment
- Managers are completely incompetent
- Wrong people given power to make design decisions
- No real power (staff/budget) granted to designers
- Insistence on using latest technology despite UX impact
- Managers insist on conservative design (make it blue)
- Organizational pressure to use first solution, not a good solution
- Only lip service is paid to "user centered" or "usability"

DESIGN AS

FRAMING



Design redefines the challenges facing the organization.

Framing sets the agenda, outlines the boundaries and axes of interest, and moves design from executing strategy to shaping strategy. Disruptive innovation lives here.

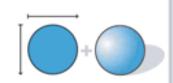
PROBLEM SOLVING



Design finds new opportunities by solving existing problems.

Design process generates alternatives within a problem space. Design also narrows down those options to a specific solution.

FUNCTION AND FORM



Design makes things work better.

This is the classic practice of design - but it's still commonly limited to incremental improvements through iteration over existing solutions.

STYLE



Design is the gateway to be hip and cool.

Design is stylish, but too often is percieved and practiced as a cosmetic afterthought.

NO CONSCIOUS DESIGN



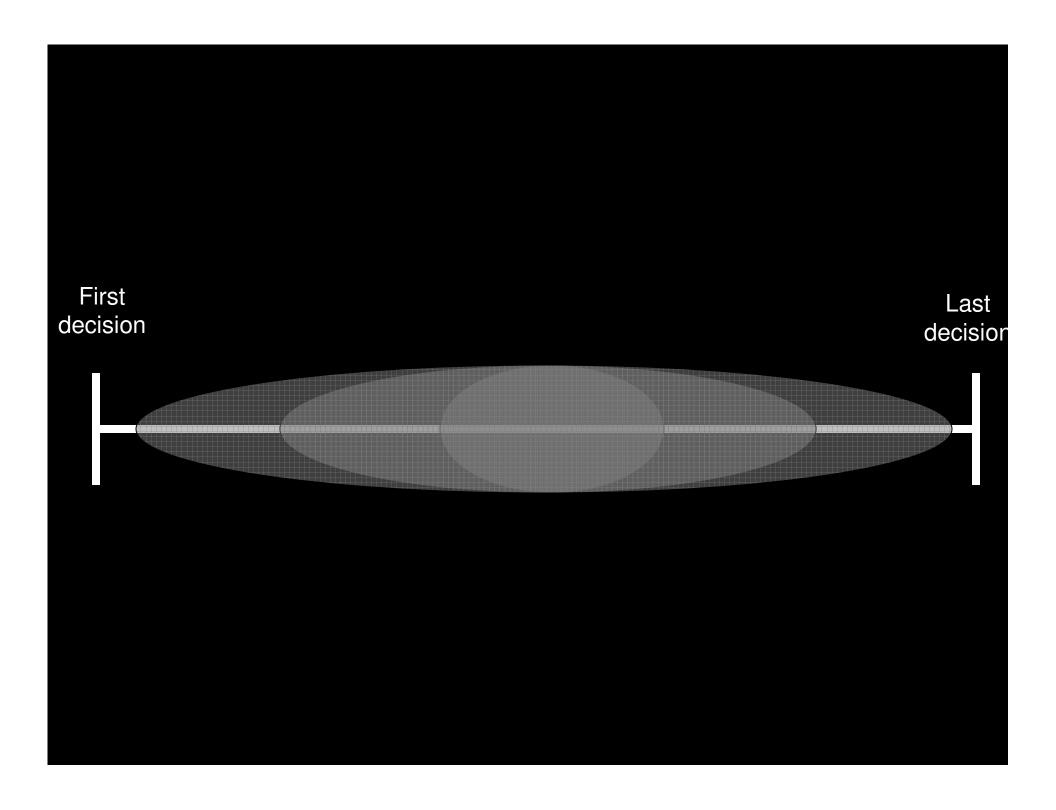
Design value isn't recognized.

This attitude fosters design by default however things come out is fine, because there are more important issues to deal with.

BUSINESS+DESIGN

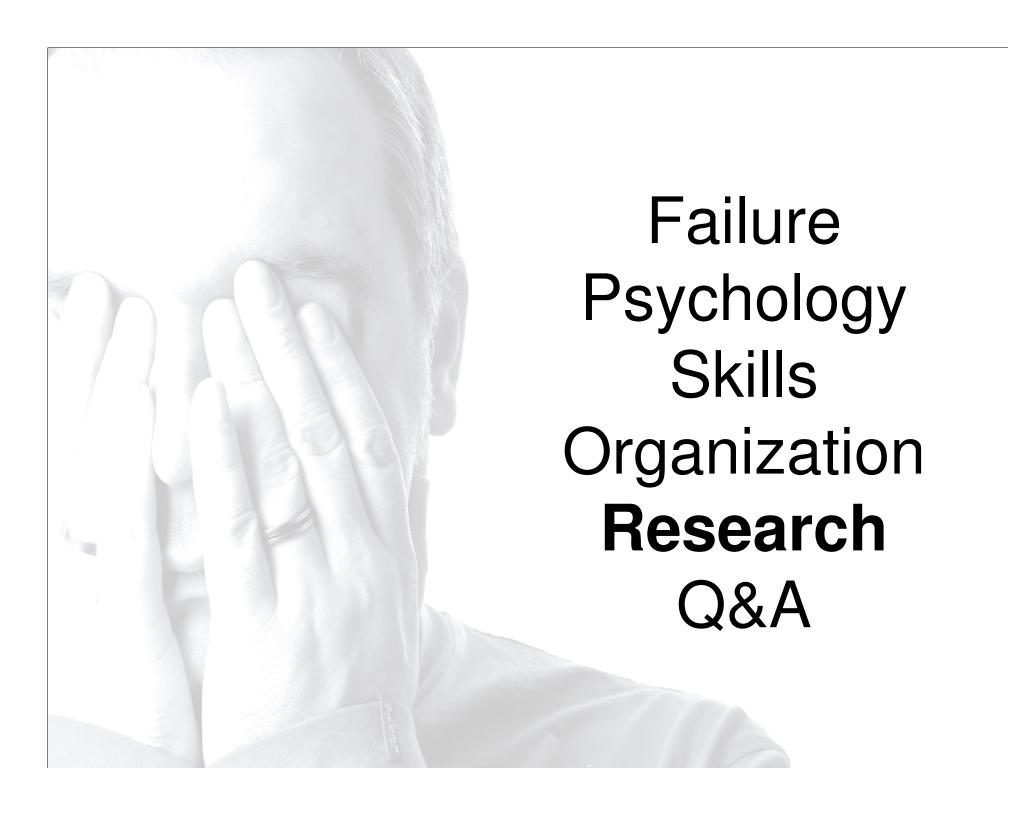
© 2005, Jess McMullin

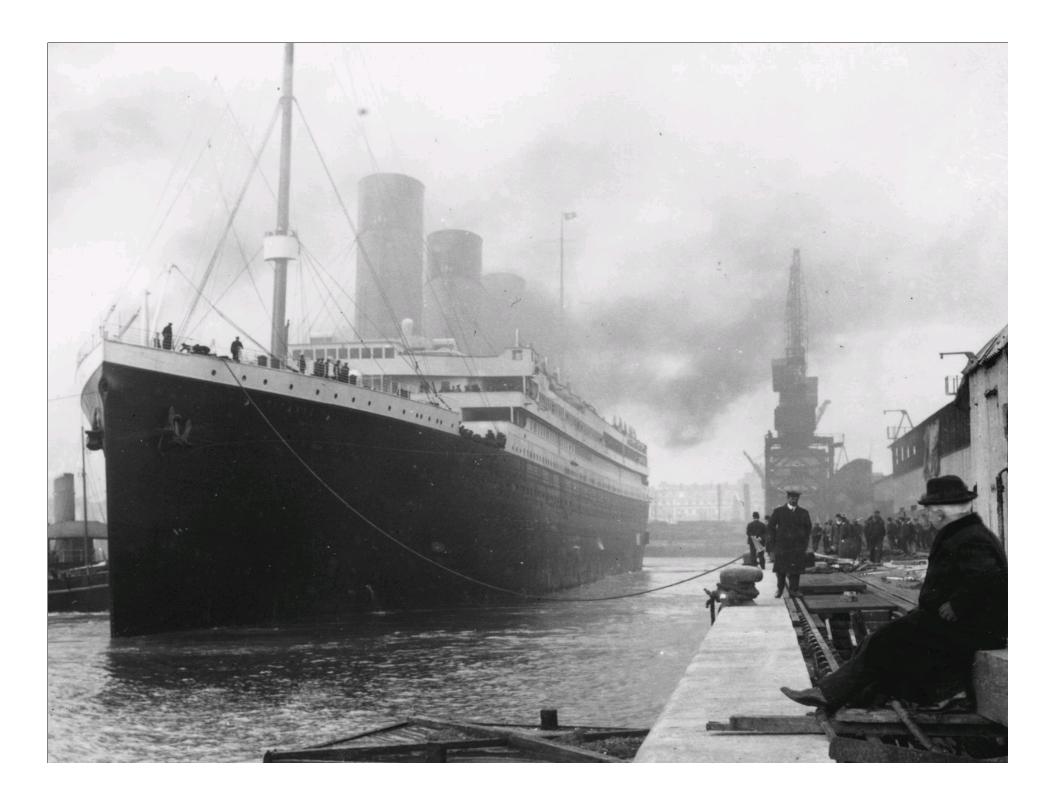
www.bplusd.org



Force tradeoffs from day 1

- Is <thing you want> explicitly stated in goals?
- If not, do not expect it to happen
- If yes, ask:
 - Will the schedule be slipped to make this goal?
 - What engineering resources will be dedicated 100% to user experience tasks? (at discretion of UX team)
 - How will we prioritize UI bugs against others?
 - What assurance do I have this goal will be defended by non-UX management?







The Approach

- Goal: provoke conversation, provide baseline
- Survey of 300: Approx breakdown
 - 35.2% designers
 - 16.5% Project managers
 - 13% Programmer / Tester
 - 8% usability
 - 6% Group managers
 - 3% Marketing
 - 18.3% Other
- 49% manage or lead a team
- Sources: IXda mailing list, pmclinic list, my blog

Disclaimers

- Not intended for rigorous quantitative analysis – purely qualitative
- Some issues overlap, by design
- Some questions are leading, by design
- This presentation edits issue descriptions to fit on screen

Top Psychological Issues

Do not seek enough data before designing 3.86

Not receptive to critical feedback 3.68

Do not realize their own skill limitations 3.4

Expect others to cater to their whims 3.38

Lack of willingness to fight for a position 3.09

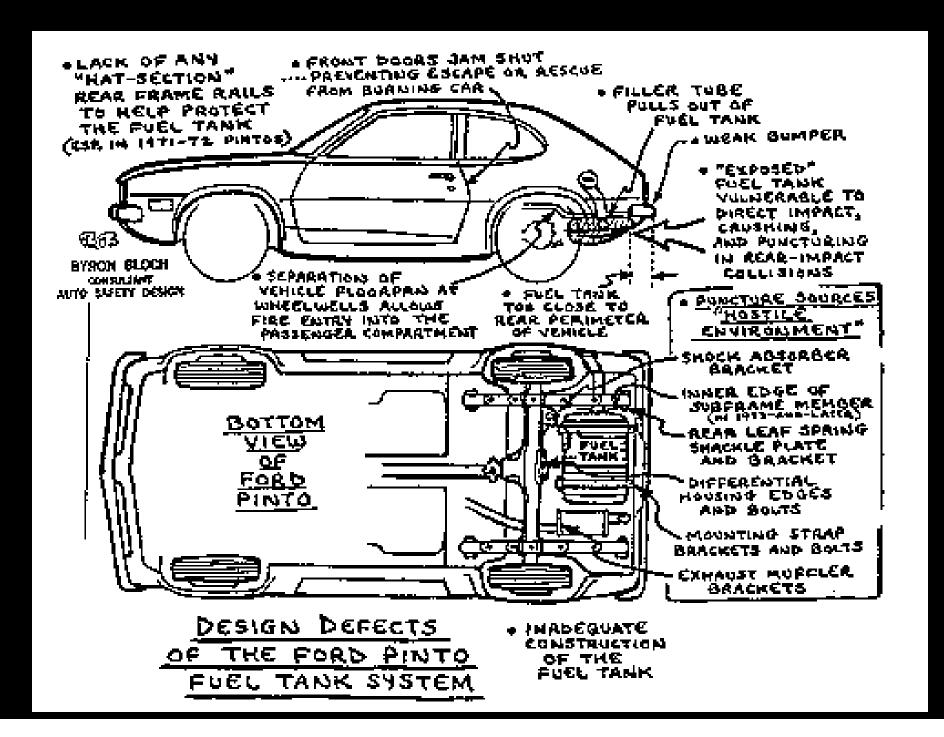
Top Skill Issues

Lack of awareness of the business fundamentals	3.64
Poor persuasion / idea pitching skills	3.53
Over-reliance on one kind of design style	3.52
Poor understanding of domain	3.5
Poor communication / collaboration skills	3.47
Poor schedule estimation skills	3.37
Unaware of informal user-research methods	3.22
Weak bonds with non-design team members	3.16
Weak interaction design skills	3.15

Top Organizational Issues

Non-designers making design decisions	4.17
Untrained managers making design decisions	4.12
No time is provided for long term thinking	3.78
Only lip-service is paid to "User centered design"	3.64
Dilution of design by letting everyone have their say	3.62
It's never made safe to fail or experiment	3.61
Pressure to use first solution, not a good solution	3.43
Design team is understaffed	3.33

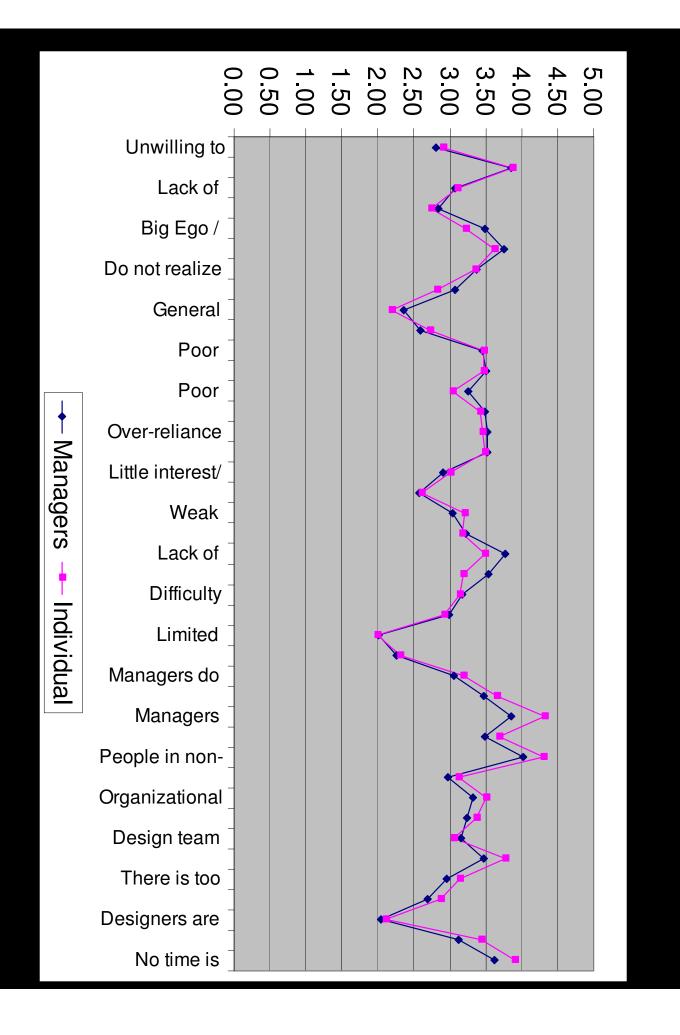


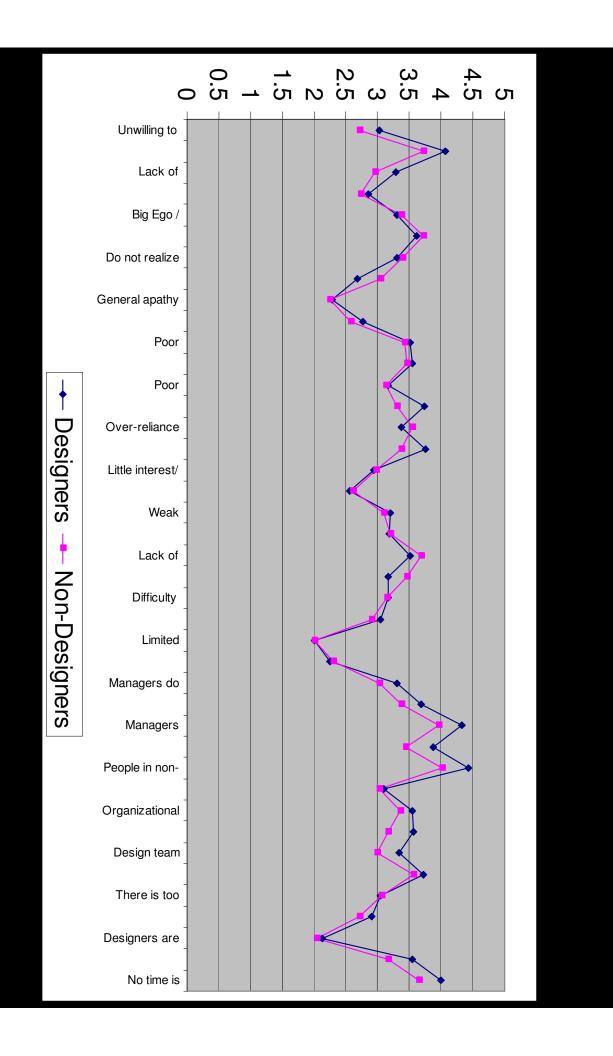


Top 10 overall issues

Non-designers making design decisions	4.17
Untrained managers making design decisions	4.12
Designers do not seek enough data before starting	3.86
No time is provided for long term thinking	3.78
Designers not receptive to critical feedback	3.68
Designers ignorance of business fundamentals	3.64
Only lip-service is paid to "User centered design"	3.64
Everyone on team has their say on design issues	3.62
It's never made safe to fail or experiment	3.61
Designers have Poor persuasion / idea pitching skills	3.53



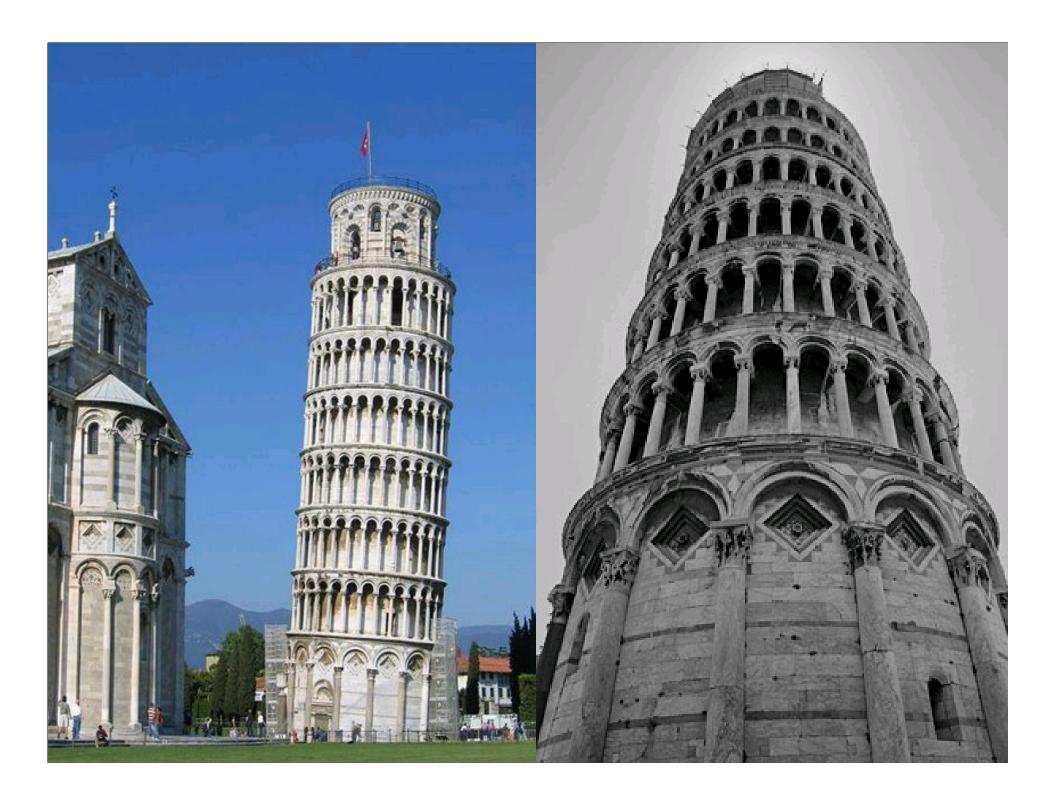




In my oversimplified view, the keys are: passion, dedication to the idea, willingness to see it through technical implementation, and the skills to share & convince people of your vision.

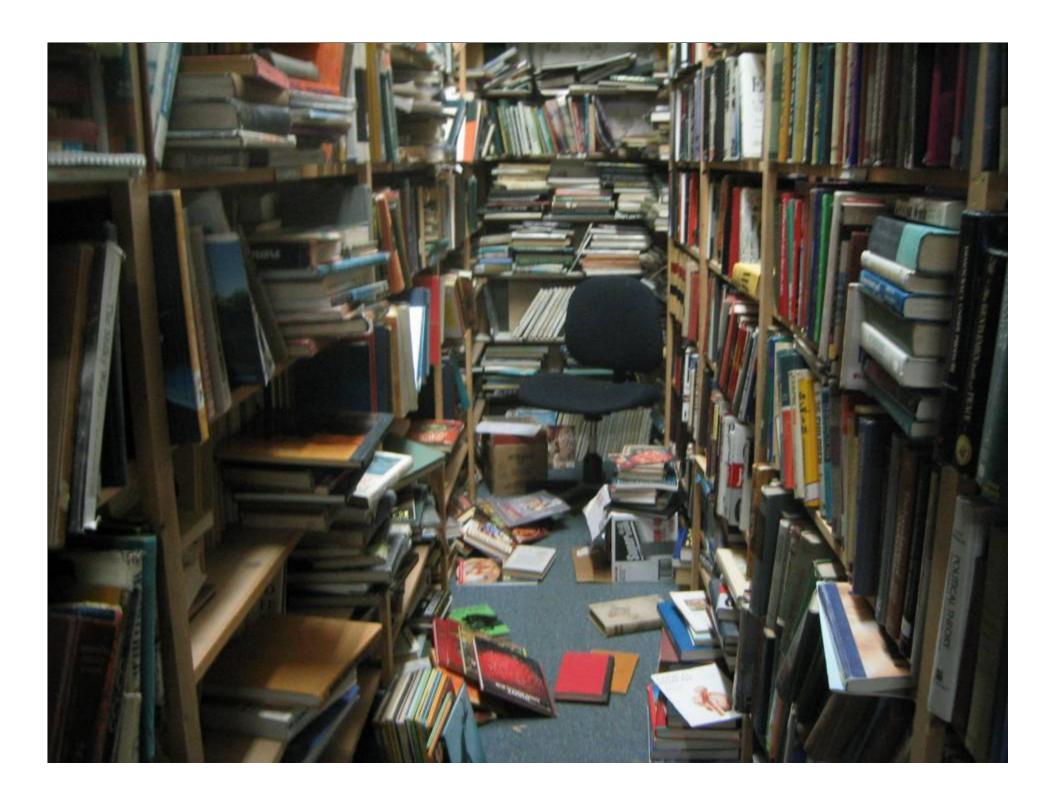
If there are a handful of problems, a good team can compensate, [But] once you have issues at too many levels in a team, then yes, the designer is destined to fail.

- Project Manager



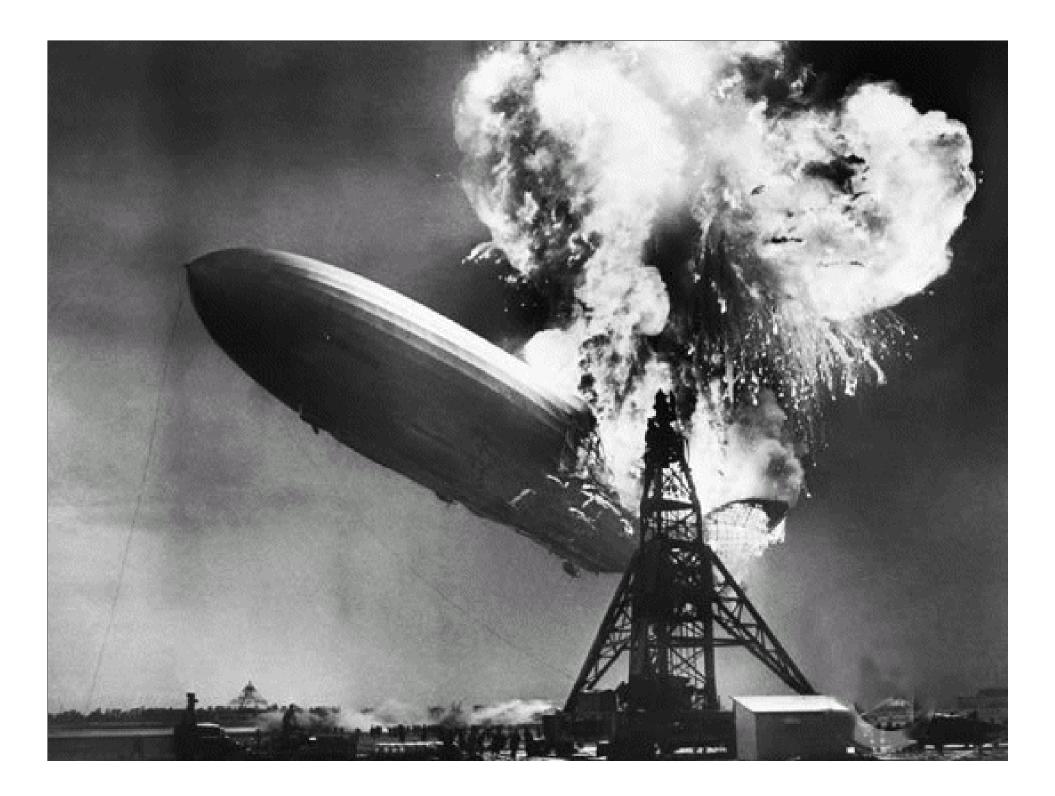
Exploration vs. maintenance: if it takes the majority of staff time to keep up with on-going (read: relentless) maintenance, who will do the big (read: fun/inspiring) design projects? "Optimal staffing" especially in economically lean times, generally translates to the fun stuff going to an outside agency, who will indeed have great ideas and get lots of praise.

The design/dev staff, however, gets to sit on the sidelines (rather righteously) sulking and go about fixing broken links and designing another email banner. Staffing models need a core element that tends to the care and feeding of the design staff's creative needs or they'll reap the heaps of burned out clock punchers. Design is a muscle - you can't pop up off of the maintenance couch and perform brilliantly in the triathlon.



"In many organizations, design is not seen as a critical thinking skill, it is thought of as a process for execution once the hard decisions are made."

- Designer



Survey: Next Steps

- Comparison to other disciplines:
 - PM, Engineering, Management
 - "How do PMs fail?", etc
- Tactics per situation
 - How to avoid each situation
 - How to recover
- Proper data analysis and correlation
- Any volunteers?



Conclusions

- Design is a failure prone activity
- We learn more from failures than successes
- One frame: psychology, skill, organization
- Top issues: Persuasion skills, Defending ownership, Design by Managers, Not enough data
- Managers & Individuals share views
- Designers & Non-Designers share views

My three points

- All designers fail 95% of the time
 - Failures on drawing board + failures in real world = ?
- Why designers fail
 - Set the wrong goals, Fail to meet goals, Never had a chance
- What to do about it
 - Own your mistakes
 - Study failure and common situations
 - Study how to avoid / mitigate failures

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Why designers fail: and what to do about it

Slides & survey data will be posted next week at:

www.scottberkun.com/blog and the IxDA mailing list

Failure Psychology Skills Organization Research Q&A