

Scrappy Design Thinking

HANDOUTS

Workshop Facilitator Kimberly Wiefling, M.S.

Image Ref: http://www.thesolitarywriter.com/2012/11/just-2-hours-to-get-creative-innovative.html

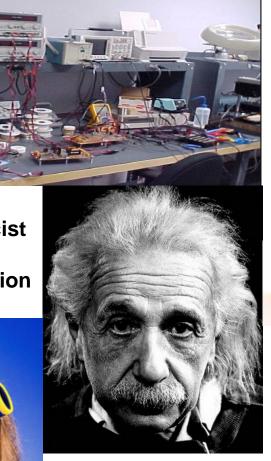
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Kimberly Wiefling



Physicist by Education





kimberly@wiefling.com +1 650 867 0847 https://kimberlywiefling.com/

7 Eng. Jobs in 10 Years



Silicon Valley Startups





KIMBERLY WIEFLIN



(Hewlett Packard)









SU









Panasonic

cādence

INFORMATICA

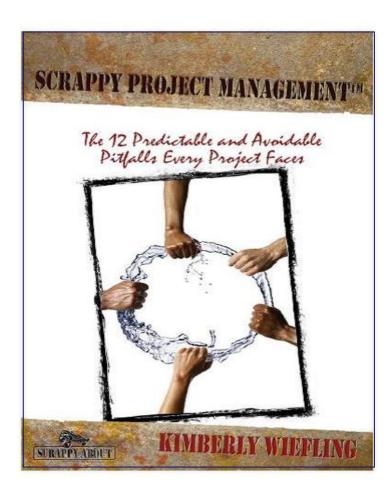
vmware[®]



CISCO YAMAHA

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Scrappy Project Management 土壇場プロジェクト 成功の方程式 回避可能な12の落とし穴

キンバリー・ウィーフリング Kimberly Wiefling 田中健彦・訳



日経BP社 定価(本体1600円+税)

How Does Change Feel?



Caterpillar





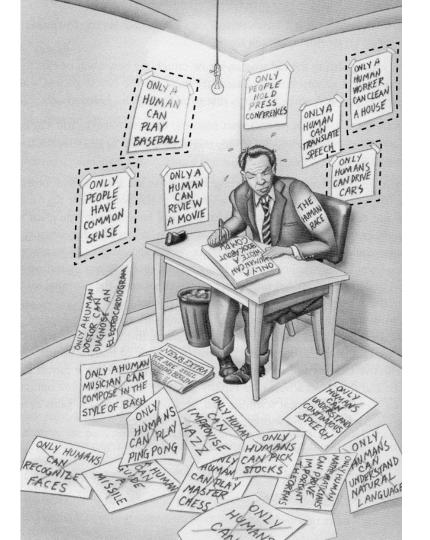
PERT Chart

Disruption

Why Companies Don't Change

Overcoming the Innovator's Dilemma

Kimberly Wiefling



•Founded in 1889 and bankrupt in 2010.



Ref: https://www.woodakipfionmenitisg.com/ Use with Attribution OK.

Guess who invented the digital camera?



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But, wait! There's more!



Printing from your phone is closer than you think



2 YEARS OF INK!

Kodak ad in SFO: "Some pictures are worth



How Did Fuji Overcome the Crisis and Thrive?

The critical element in Fujifilm's success is diversification. In 2010, the film market dropped to less than 10% compared to 2000. But Fujifilm, which once made 60% of its sales with film, diversified successfully and managed to grow its revenue by 57% over this ten years period while Kodak sales felt by 48%.

2000	2010
\$14 billion	\$7.2 billion (- 48%)
¥1.4 trillion	¥2.2 trillions (+57%)
	\$14 billion

Source: Kodak and Fujifilm Annual Reports.

Kodak & FujiFilm

Trends in total world demand for color film and changes in revenue composition ■ Index is based on 100 for FY2001/3



... as the president of Fujifilm remembers: "a peak always conceals a treacherous valley."

Source: Fujifilm Integrated Report 2017

How many years did it take for AT&T to adopt voicemail recordings after their invention in 1900?



A device circa 1970, when it was still strange for people to talk to machines.

Origins

HOW A TELEPHONE MONOPOLY AND A FEAR OF WIRETAPPING HUNG UP THE ANSWERING MACHINE FOR DECADES By April White

N THE SPRING of 1900, twenty-four years after Alexander Graham Bell introduced the telephone, a Danish inventor named Valdemar Poulsen unveiled the "telegraphone" at the Exposition Universelle in Paris. It was an engineering marvel—Poulsen recorded sound on a wire using nothing but a magnet, similar to the principle that underlies computer hard drives—and it was a minor social miracle,

an antidote to Bell's constantly ringing telephone. The telegraphone was the world's first answering machine.

"It is easy to see that such an apparatus would be a great convenience, especially for a man of business," opined the London Daily News. "The experts present professed astonishment at what it can do," the New York World announced following tests in the United States.

Not everyone was overjoyed. AT&T, which held a monopoly on the U.S. phone system and forbid the use of third-party technology, suppressed the innovation for more than half a century, according to research by Mark Clark, a historian of technology. "If at any time there was a reasonable probability that such a device was connected at one end or the other . . . it would greatly restrict the use of the telephone," an AT&T executive wrote in 1930.

A big concern was that the device would be used not just to answer calls but to record conversations. The American Telegraphone Company, which had attempted unsuccessfully to market the machine, claimed that AT&T feared the device's ability to record calls. It would deter "illegitimate uses of the telephone in corrupt business schemes and in social duplicity"—thus depriving the phone company of up to a third of its business.

Meanwhile, AT&T scientists were building their own version of the answering machine. For six months in 1934, callers to Bell Laboratories were greeted by a recorded message and prompted to leave their own. But it would be another 17 years before AT&T offered the technology to its customers. \blacklozenge

How many years did it take for AT&T to adopt voicemail recordings after their invention in 1900?

50!



A device circa 1970, when it was still strange for people to talk to machines.

Origins

HOW A TELEPHONE MONOPOLY AND A FEAR OF WIRETAPPING HUNG UP THE ANSWERING MACHINE FOR DECADES **By April White**

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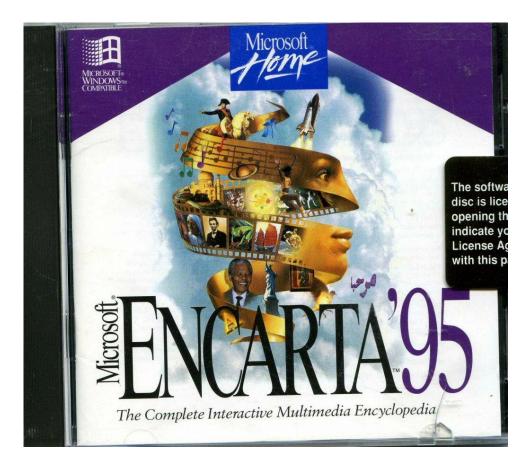
Meanwhile, ATST scientists were building their own version of the answering machine. For six months in 1934, callers to Bell Laboratories were greeted bu a recorded message and prompted to leave their own. But it would be another 17 years before AT&T offered the technology to its customers. •

Guess who invented the Graphical User Interface (GUI)?



Ref: http://www.righto.com/2016/06/y-combinators-xerox-alto-

Problem-solving



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Design Thinking

WikipediA

The Free Encyclopedia

English

5 817 000+ articles

日本語 1141 000+ 記事

Русский 1 532 000+ статей

Italiano

1 511 000+ voci



Español

1 508 000+ artículos

Deutsch

2 278 000+ Artikel

Français

2 086 000+ articles

中文 1 047 000+ 條目

Português

1 018 000+ artigos

Polski

1 322 000+ haseł

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Evolution of the Mobile Phone



Inc.

Image Ref: https://www.technotification.com/2015/01/10-years-of-mobile-technology.html



first successful hybrid or electric car?







Why didn't music recording companies invent iTunes?





ÉiTunes

Why didn't Tower Records . . . ?



Ref: http://www.brooklynvegan.com/watch-the-trail-3/

Why didn't Motorola invent digital phones?





Why didn't Nokia invent personal digital assistants?





24

Nokia 50% market share in 2007 & ~ZERO in 2013.



Sources IDC; Nokia; Gartner © Statista 2018 Additional Information: Worldwide; Gartner; IDC; Nokia

Blackberry Rim

Top of the world in 2007 and 1 year later bankrupt.





Why didn't Palm invent the Smart Phone?





Why didn't taxi companies invent Uber or Lyft?







Why didn't Marriot or Hilton create AirBnB?









Why didn't Blockbuster Video . . . ?



Ref: https://www.digitaltrends.com/home-theater/blockbusted-blockbuster-shutter-remaining-stores-kill-movie-mail-program/





NetFlix?



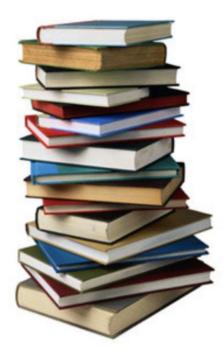
NetFlix disrupted themselves, streaming videos even while they were still shipping movies with



Why didn't Borders Books...?



Ref: http://www.pennlive.com/midstate/index.ssf/2011/07/borders_books_to_close_its_rem.html



amazon.com[®]



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Why own music CDs when there is Pandora or Spotify?



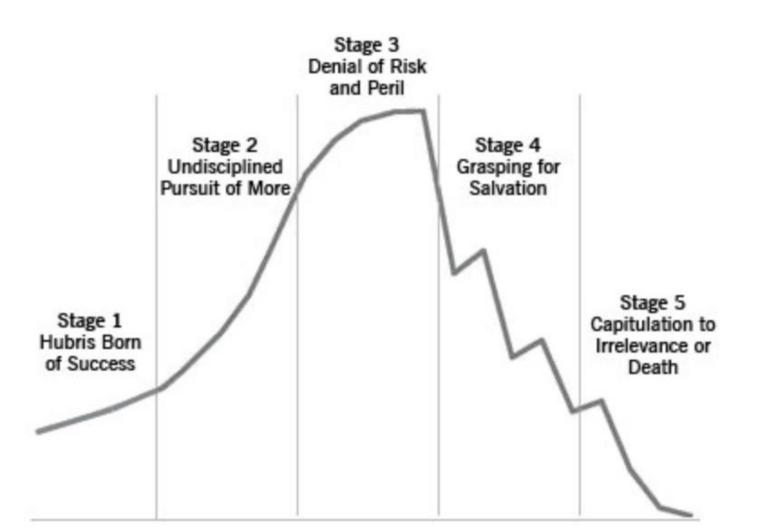


HOW THE MIGHTY FALL

AND WHY SOME COMPANIES NEVER GIVE IN

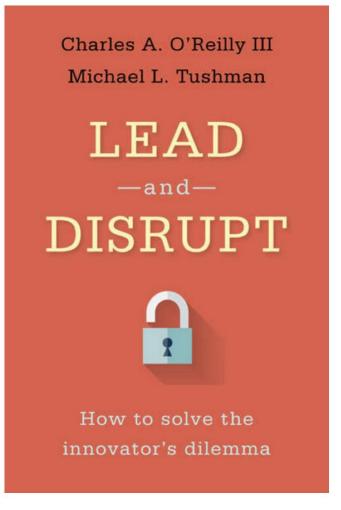
JIM COLLINS

BESTSELLING AUTHOR OF GOOD TO GREAT

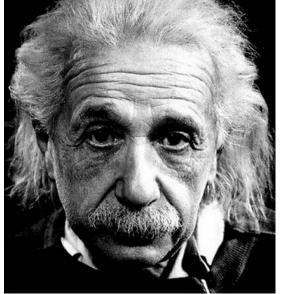


LEAD & DISRUPT!

. . . how to improve their existing businesses through efficiency, control, and incremental change, while also seizing new markets where flexibility, autonomy, and experimentation rule the dav



Impossibilities



"If at first the idea is not absurd, then there is no hope for it." - Albert Einstein

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Goals

Fear

Guilt

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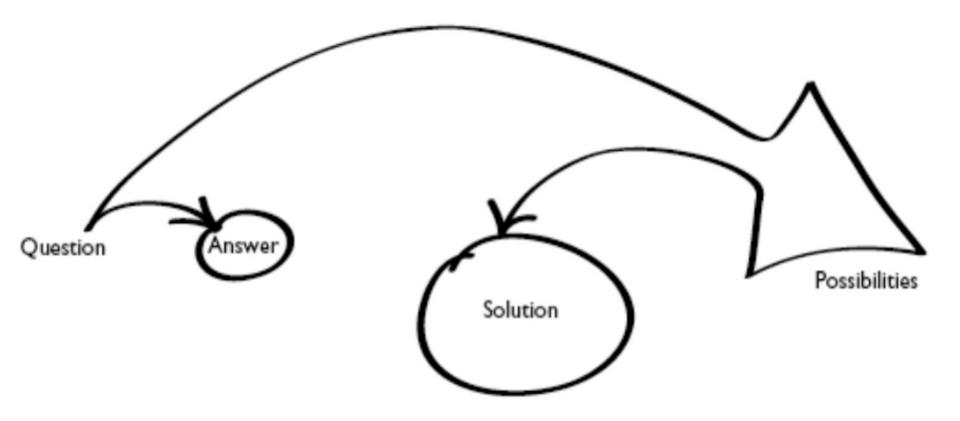
Friends

You

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a Faster Horse



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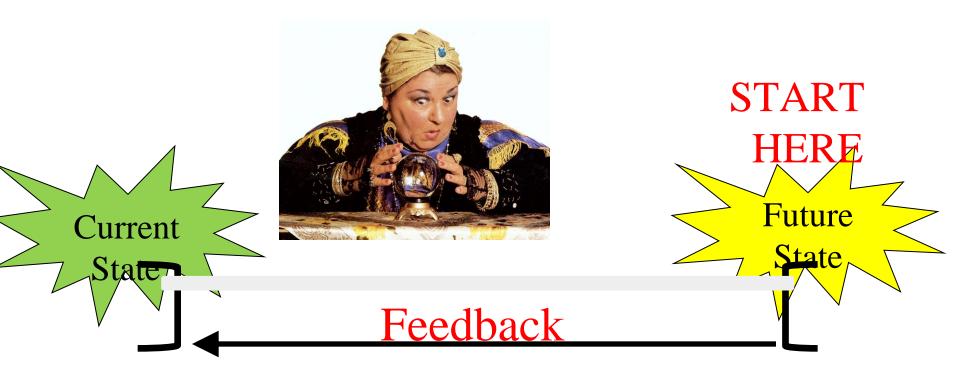


Problem-solving 🛛 Design Thinking





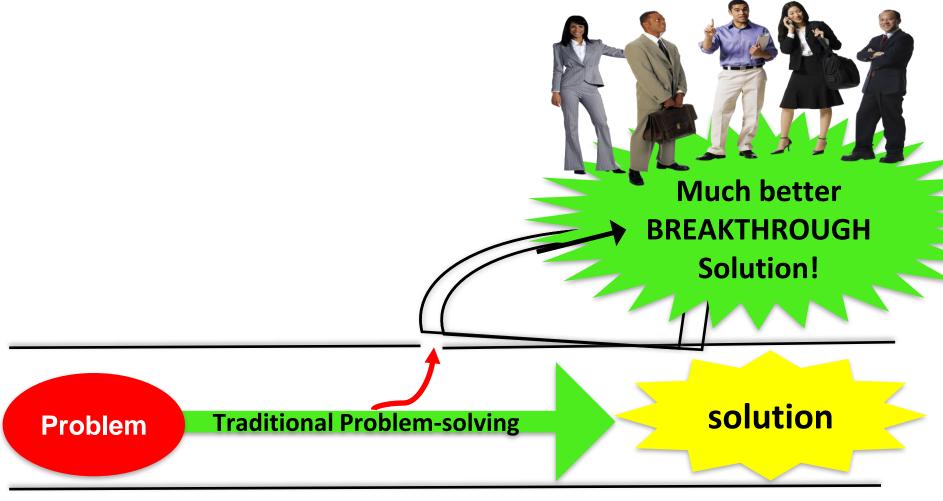
Thinking from the Future



Design Thinking vs. Problem-solving

Kimberly Wiefling

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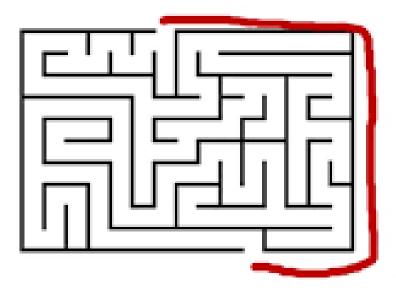


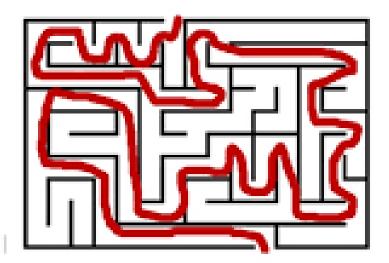
Ref: De Bono's "Lateral Thinking".

Lateral Thinking

Lateral Thinking

Analytical Thinking



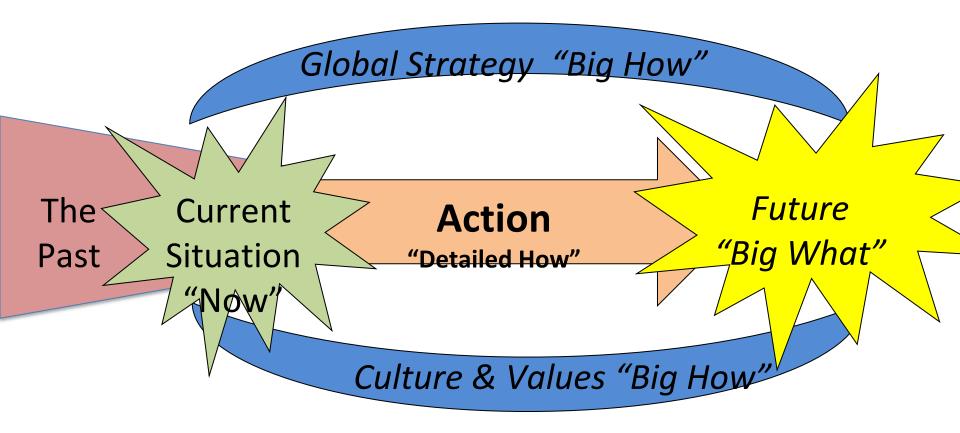


Start in the Future

Present _____

Future WHO & WHAT

Strategy & Culture "Guardrails"



This Gap Analysis Pulls Us Towards the Future





Ref: Images www.learner.org



IMPOSSIBILITIES that HAPPENED



A rocket will never be able to leave the Earth's atmosphere." — New York Times, 1936



"There will never be a bigger plane built." – - A Boeing engineer, after the first flight of the 247, a twin engine plane that holds ten people

10

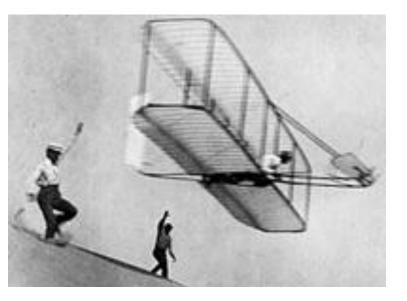


"The wireless music box has no imaginable commercial value. Who would pay for a message sent to no one in particular?" – -Associates of David Sarnoff responding to the latter's call for investment in the radio in 1921

11



Powered Human Flight



- Controlled, powered flight had seemed impossible until Orville Wright took off on the 17th December 1903.
- The key to the Wright Brother's success was that their engineering had gone beyond the trial and error methods of their contemporaries. Having only very limited resources they

Apollo Space Program, first man on the moon



- May 1961: President John F. Kennedy's Speech implores congress to fund a project to safely put a man on the moon before "the end of the decade".
- July 1969: Goal was achieved as Apollo 11 commander Neil Armstrong stepped off the

Ref: A. Shtub et al, Project Management: Engineering, Technology and Implementation, Prentice Hall, Inc.,

Egyptians build The Great Pyramid



- The Great Pyramid is constructed with approx.
 2,300,000 limestone and granite blocks, weighing between 2.5 and 50 tons each
- No corner of The Great Pyramid base is more than one-half inch higher or lower than the others. With the pyramid's base covering more than thirteen acres, this nearperfect leveling far exceeds even the finest architectural standards of the present day.

standards of the present day. Ref: A. Shtub et al, Project Management: Engineering, Technology and Implementation, Prentice Hall, Inc., 1994.

Liberty Ships



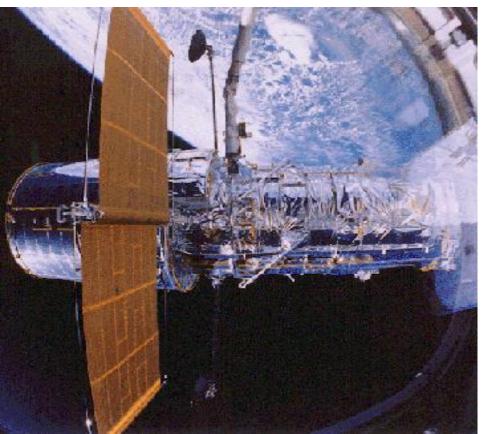
- Liberty ship was designed for "Emergency" construction in World War II.
- 2,751 Liberty ships were launched, beginning in 1941, and built to a standardized, mass produced design.
- 250,000 parts were prefabricated throughout the country in 250-ton sections and welded together in about 70 days.

Boeing 777 Jumbo Jet



- June '95: Boeing announces development of the 777. Later that month, Boeing's board authorizes production.
- October '97: First flight of 777. Made history in May '98 when it was awarded certification simultaneously from the US FAA and European JAA. Service

Hubble Telescope Repair



- A flaw in Hubble's main mirror reduced its ability to focus. The mirror was too flat near the edge by 1/50th the width of a human hair.
- Seven astronauts needed to service Hubble practiced for a year-and-a-half. They spent hundreds of hours practicing the uses of

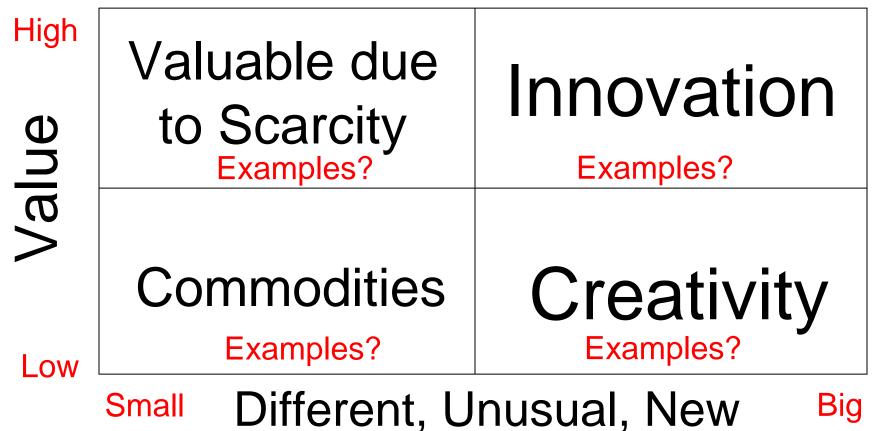
Relationship Between Creativity & Innovation? Relationship Between Creativity and Innovation



CREATIVITY

Apply to Create Value

Creativity and Innovation



Types of Innovation

New product New service New business model **Process** improvement Faster **Higher** quality More cost efficient Safer New market

Introduction to Design Thinking

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Design Thinkers and Emotional Intelligence

EQ Business

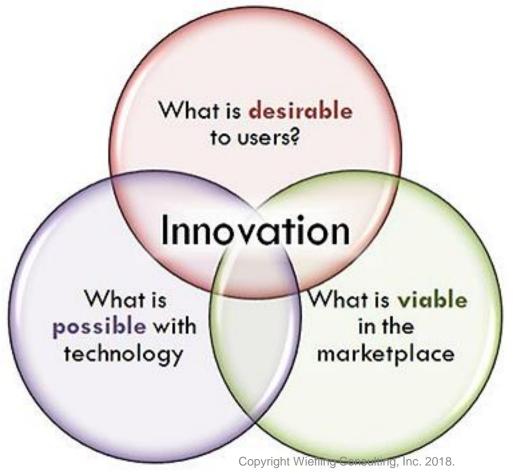


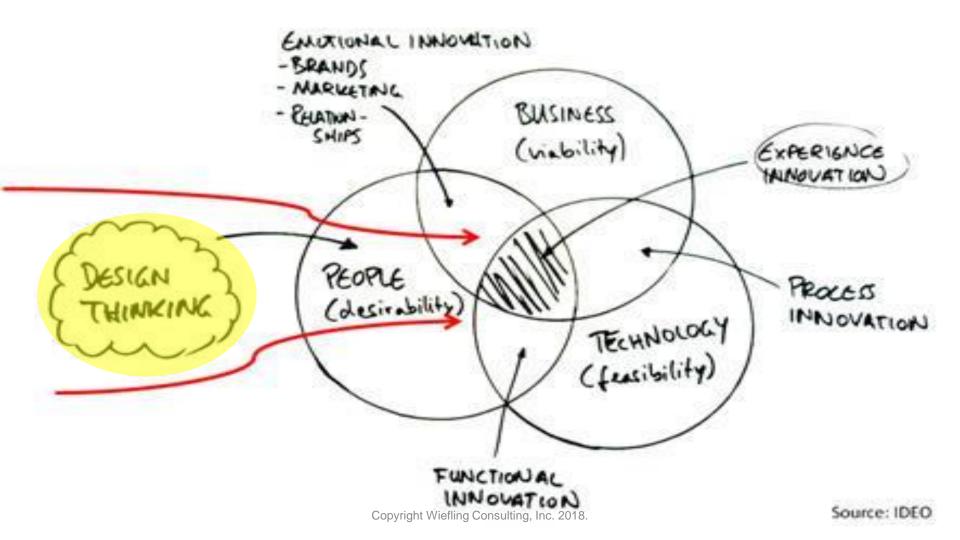
The Harvard **Business Review has** just published a really fascinating article by Tim Brown CEO of IDEO on Design Thinking. Brown describes the personality of a Design Thinker, and it is a very coherent joining of creativity and emotional intelligence. Here are Brown's characteristics to look for:



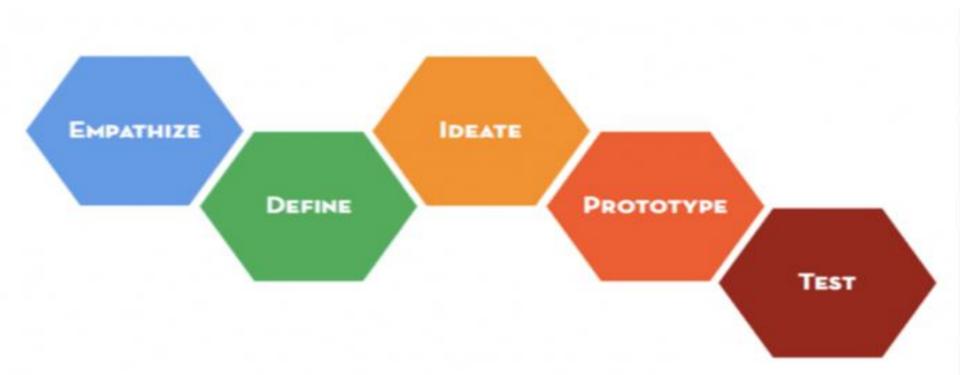
Full article: http://www.ideo.com/images/uploads/thoughts/IDEO_HBR_Design_Thinking.pdf

Human-centered Definition of Innovation





Classic Definition of Design Thinking

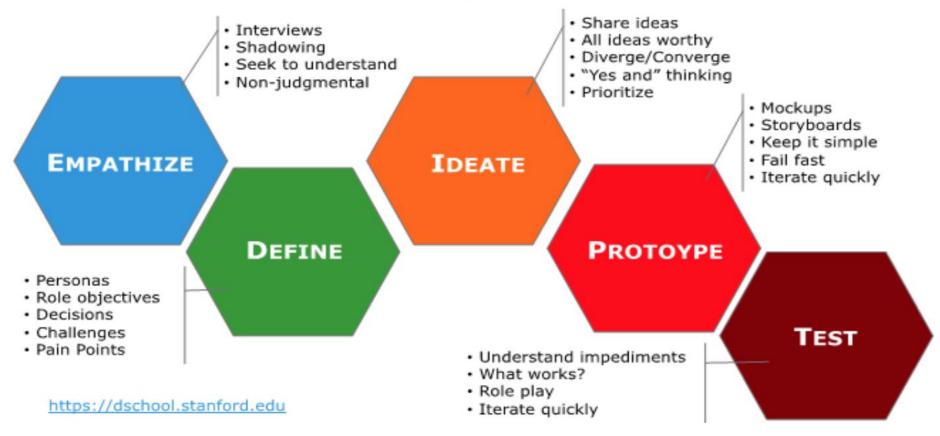


Ref: http://dschool.stanford.edu/dgift/

Classic Definition of Design Thinking



Stanford d.school Design Thinking Process



https://infocus.emc.com/william schmarz

- Empathize with people
- Define a challenge
- Ideate possibilities
- Prototype solutions
- Test and incorporate feedback

(Repeat!)

Personality of a Design Thinker O . . . I . . . CEE!

- Optimism
- Integrative Thinking
- Collaboration
- Empathy
- Experimentalism

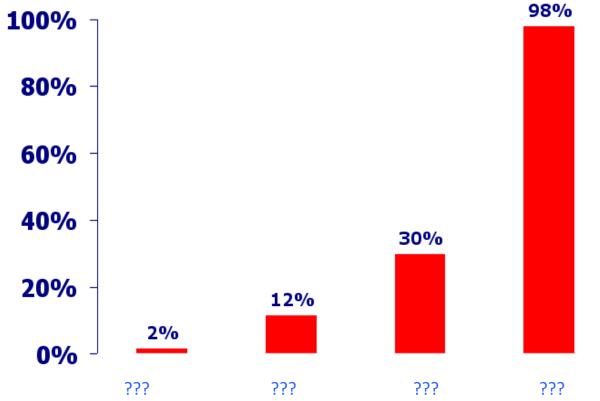
NASA's Creativity quiz

1600 kids took the quiz at ages 5, 10, 15 . . .





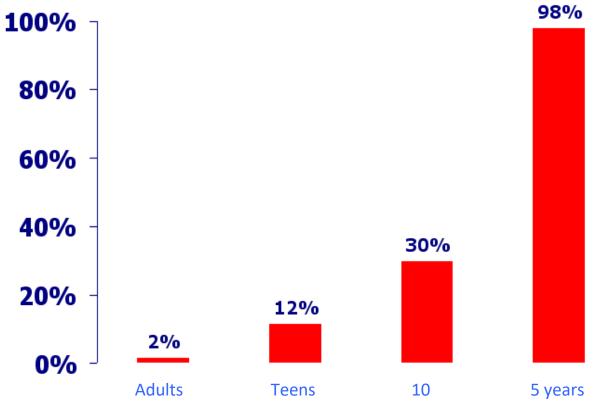
Guess the Results: Creativity vs. Age



Ref: Breakpoint and Beyond: Mastering the Future Today (Paperback) by George Land (Author), Beth Jarman (Author), George Land (Author), Beth Jarman (Author)



RESULTS: Creativity vs. Age



Take Necessary Risks

Learn from Mistakes

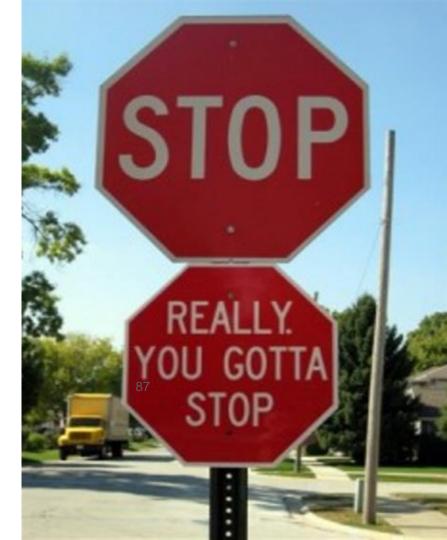
Fail Forward

Scrappy Design Thinking Overview A brief overview of how to achieve what SEEMS "impossible", but is merely difficult.

AND . . . why not JUST START DOING STUFF??!!

S.T.O.P. Stop Think Organize Plan ... and THEN ... GO!

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"Recipe" for Results

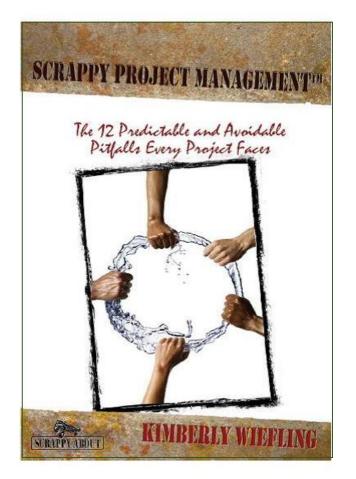




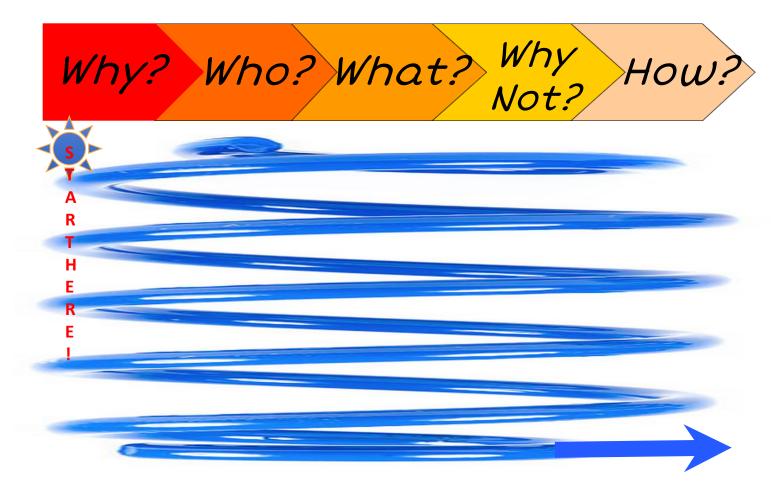


キンバリー・ウィーフリング Kimberly Wiefling 田中健彦·訳





AGILE – It's a spiral, not a waterfall



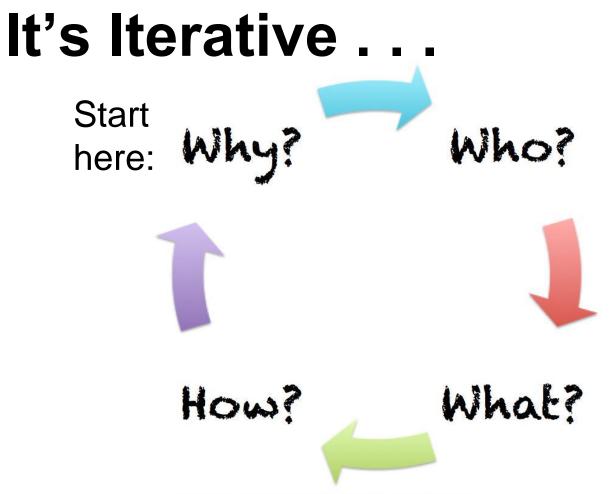
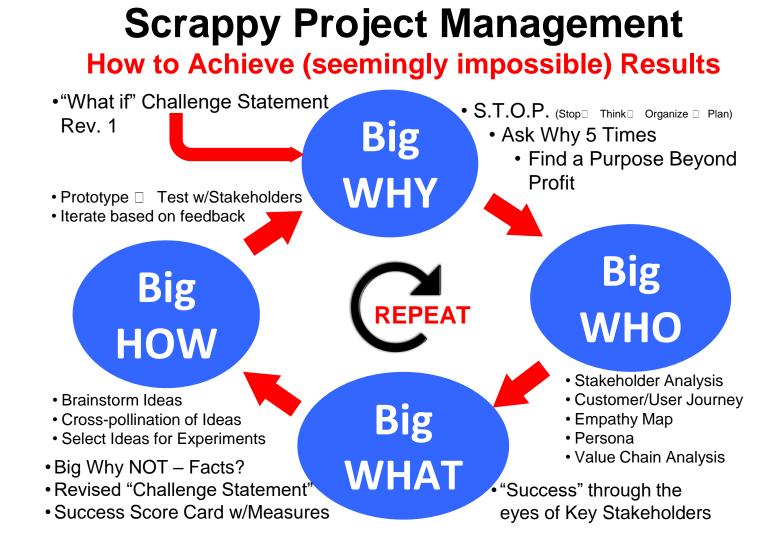
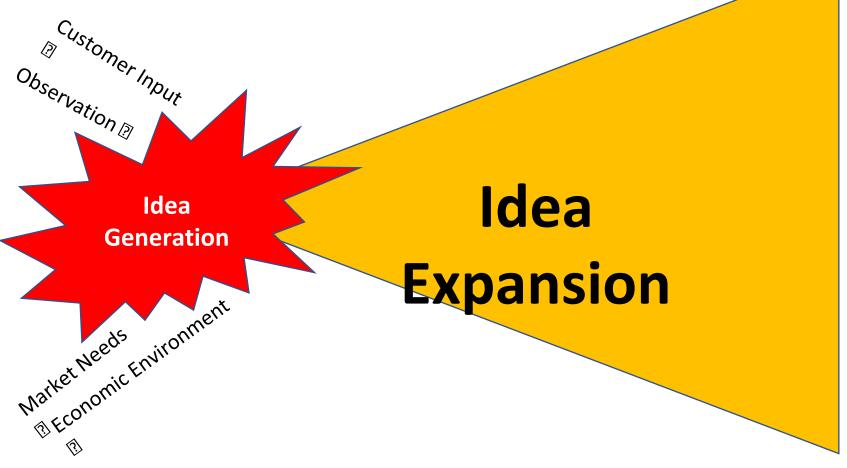
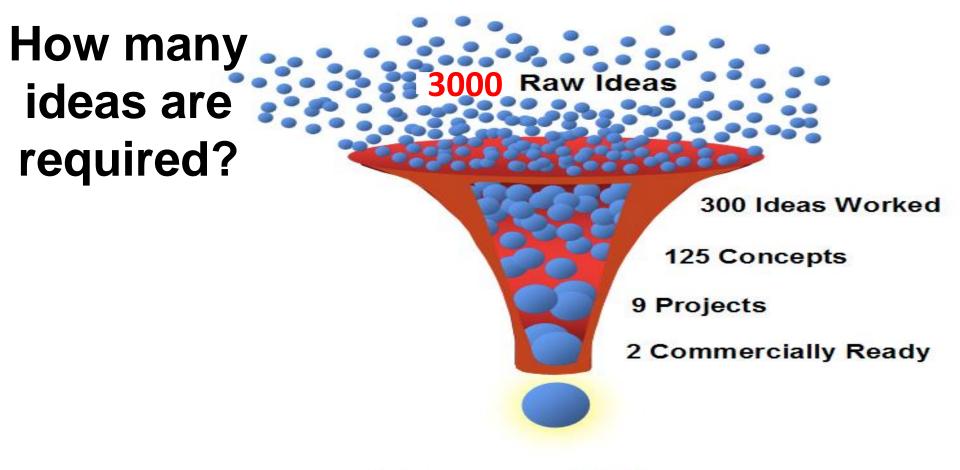


Image Ref: Kimberly Wiefling, Wiefling Consulting, Inc.



Divergent Thinking

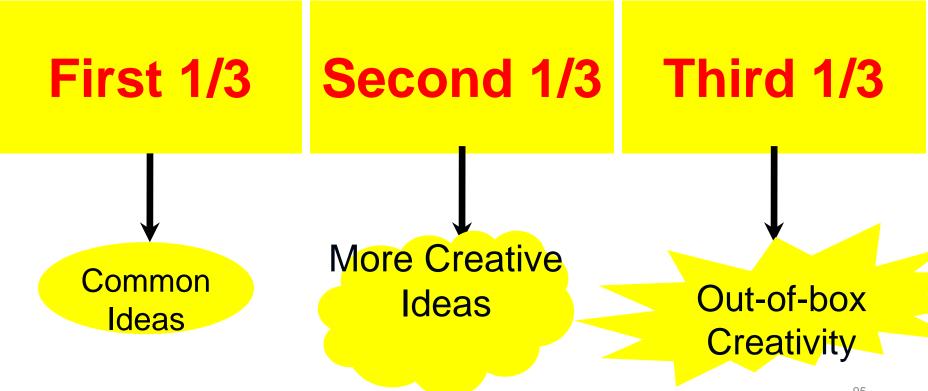


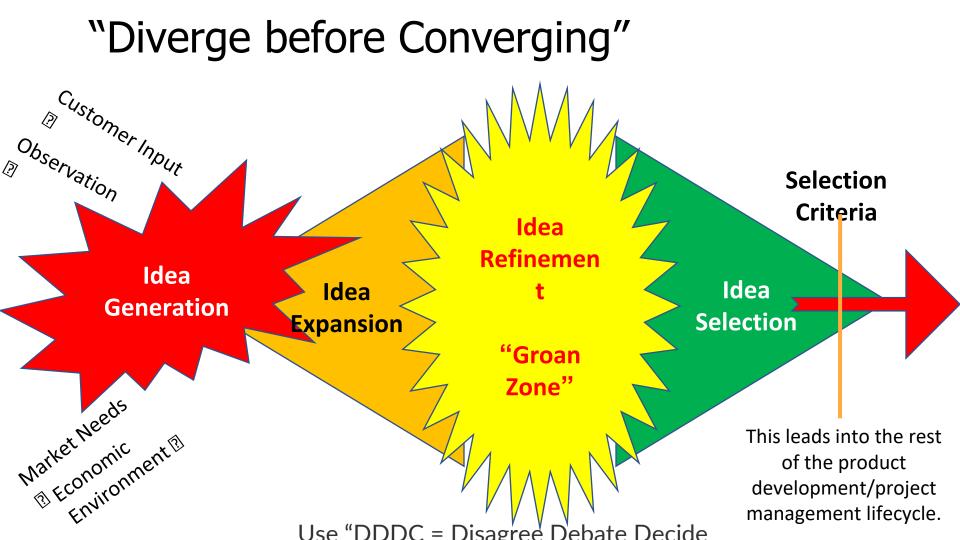


1 Commercial Success

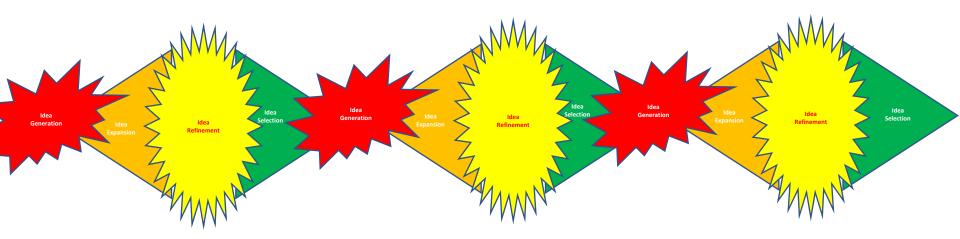
Copyright Wiefling Consulting, Inc. 2015. Ideas to Projects





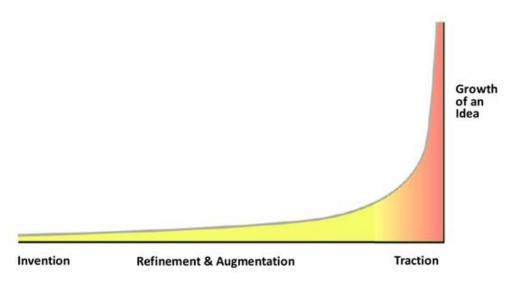


Innovation Along the Lifecycle



- Use tools from your creativity toolbox:
 - during the initial idea generation phase.
 - to innovate all along the value chain.
 - to get "unstuck" when you get stuck.

The Long Nose of Innovation



"the bulk of innovation behind the latest "wow" moment (multi-touch on the iPhone, for example) is also low-amplitude and takes place over a long period—but well before the "new" idea has become generally known, much less reached the tipping point." – Bill Buxton Ref: http://www.billbuxton.com/





Cut it in half?

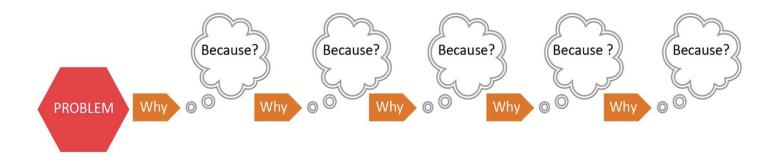
Neither person wants half a pumpkin?







BIG WHY



"Big Why"

This is the ultimate reason for existence, what is sometimes called "Core Purpose":

- an inspiring and motivating "Reason for Being" that transcends a profit motive.
- a deep, philosophical purpose for the existence of the organization.

Ref: Jim Collins and Jerry Porras, HBR, Building Your Company's Vision





"Big Why" Examples

"Core Purpose Is a Company's Reason for Being." - Jim Collins and Jerry Porras, HBR, Building Your Company's Vision

3M: To solve unsolved problems innovatively

Cargill: To improve the standard of living around the world

Fannie Mae: To strengthen the social fabric by continually democratizing home ownership

Hewlett-Packard: To make technical contributions for the advancement and welfare of humanity

Lost Arrow Corporation: To be a role model and a tool for social change

Pacific Theatres: To provide a place for people to flourish and to enhance the community

Mary Kay Cosmetics: To give unlimited opportunity to women

McKinsey & Company: To help leading corporations and governments be more successful

Merck: To preserve and improve human life

Nike: To experience the emotion of competition, winning, and crushing competitors

Sony: To experience the joy of advancing and applying technology for the benefit of the public

Telecare Corporation: To help people with mental impairments realize their full potential

Wal-Mart: To give ordinary folk the chance to buy the same things as rich people

Walt Disney: To make people happy



Priority Car Parts

Rank the #1, #2 and #3 Priorities

Transmission	Engine	Ignition	Cooling System	Driver's Seat
Brakes	Gas Pedal	Steering Wheel	Heater	Air Conditioner
Passenger's Seat	Wheels and Tires	Lights	GPS System	Rearview Mirror

WHY? WHO? Purpose of Car = Inexpensive place to live Me!



Recipe for Getting Results

Overall Goal Statement:

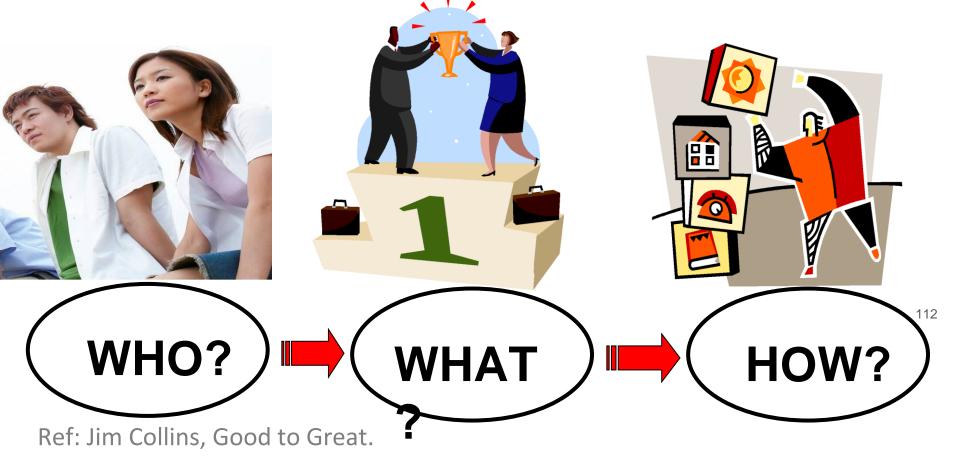
"A recipe doesn't make cookies, but it's a good start!"

Why? Who? What? Why Not? How?

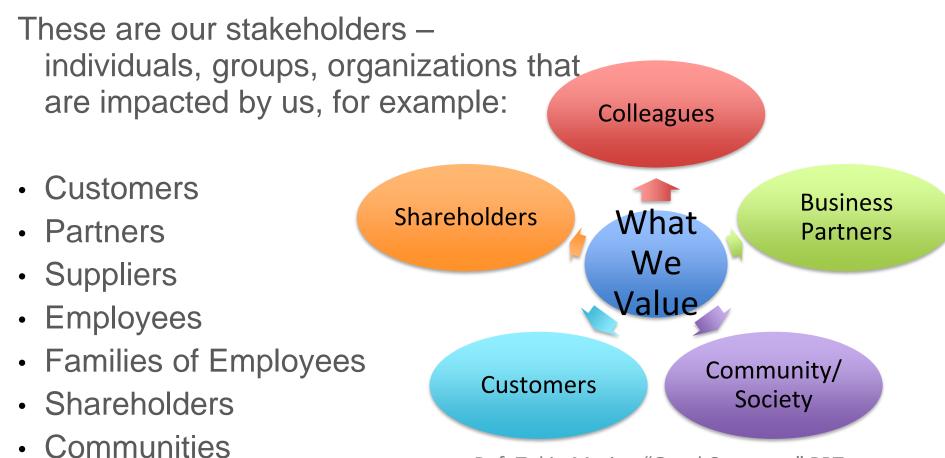
Start with "Why?"Ask "Why?"5 Times . . . Focus on "Who?"

- Ask "Who will judge success?"
- Who cares? Help? Hinder? Impacted?

"Good to Great" Recommendation

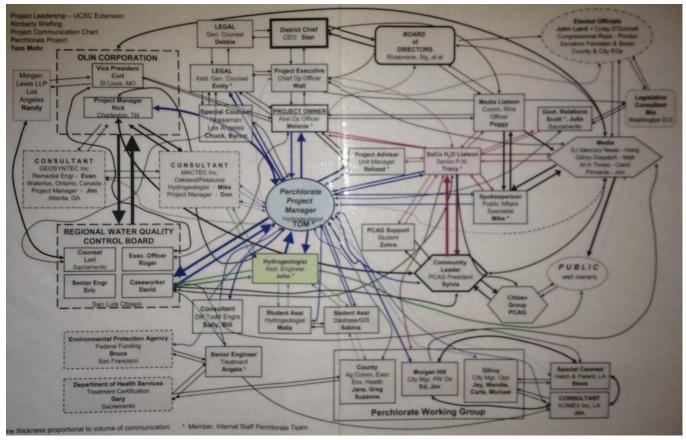


"Big Who"

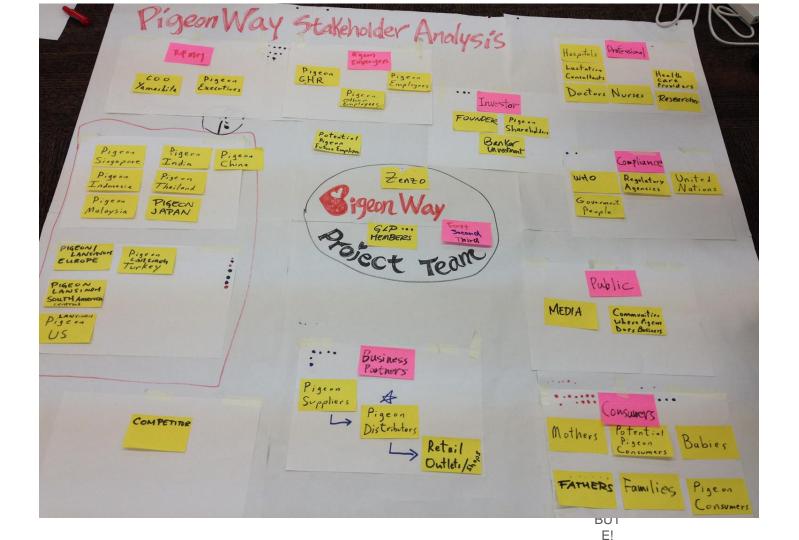


Ref: Tokio Marine "Good Company" PPT.

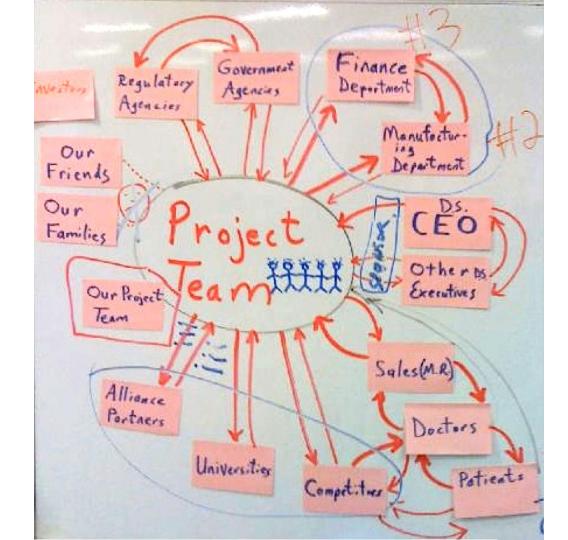
Reality is More Complex



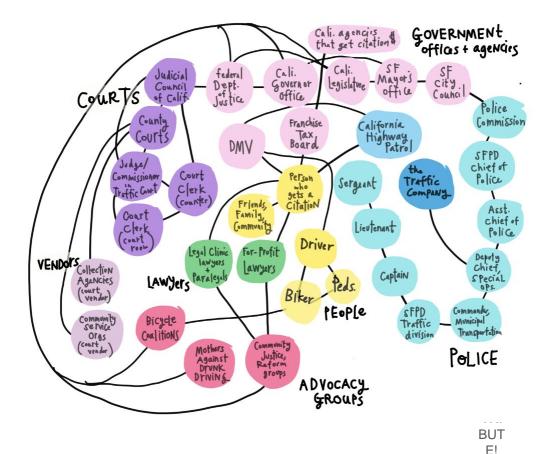
Ref: Project Leadership & Communication, Tom Mohr. Used with permission.



Prioritize I PUOSTOKS BOARD Employees Reg ME LU Contracts "Cud. Sappart " "Communication for the sented."" Dait Need to Ant For sented." integration " MKTG. ustoners " TIMMERMAN -ore Customer Pa N "Geat Pralut" JOE G customers "Olgentel SALES "Delighter" Ethant SALES "Bost Produt "- Benefits Ref Focused Ogenine Sales VPp in - Arofers in Tem -ROI Efficient. Knowledgebb . Eugeneon Samp Par Account Manager PHIL B IMPLEMENT. tield Engineers JEREMY. T. SUPPORT Engeneering Deployment yoka Engineering. head System Engineering Team.



Stakeholder Map for the Traffic Citation System



. . the second se What MEASURE metric ... Marinate on this ... STAKEHOLDERS then To 04 Stakeholder will success say min 1253 QA & Regulatory (Mark J.) no gaps -> no gaps 00 Findings -> no findings Successful. submissions > Submission -) speed for a spending I'm not adding any Perclopment support extra work b > manufacture the company Everything is 25 Polarion Data loput easy & streamlined Scharity Project * Output surrey +/2 Team W XOVELS rustration Prese 17. In Puts fast trace > efficiency Musiching conditioners uses It worke! Exports outputs Development t It's buy free! Tex Engineers Dr Fast maintenance of Pobrion

Design Thinking is "Humancentered" Design

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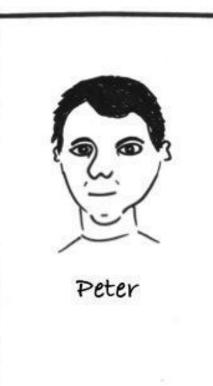
Design Thinking Persona

Kimberly Wiefling

Persona

USER PERSONA MASAYOSHI. mangat at an age where health pit Businessman starting to become important / -Single E! to drawings Kim Older people around him are developing bring to life health problems - starting to make ay personal connection Wief idea of Strong online presence - large netwolithg, of health friends = multief research ling background! & Knowledge of health issues - fragmented / not well-supported Con looked for V/Youdom books contractiction PROBLEM ARE design point EEDS/WISHES -no comprehensive knowledge a more authentic experience Gill understanding - satisfied with current Vertuation bayeline assessment. 13 por. problematic Style + recommendations for . health - allows him to plan his own course BUT E!

Sample Personna



Works as product manager for a midsízed company.

Is 35 years old, holds a marketing degree.

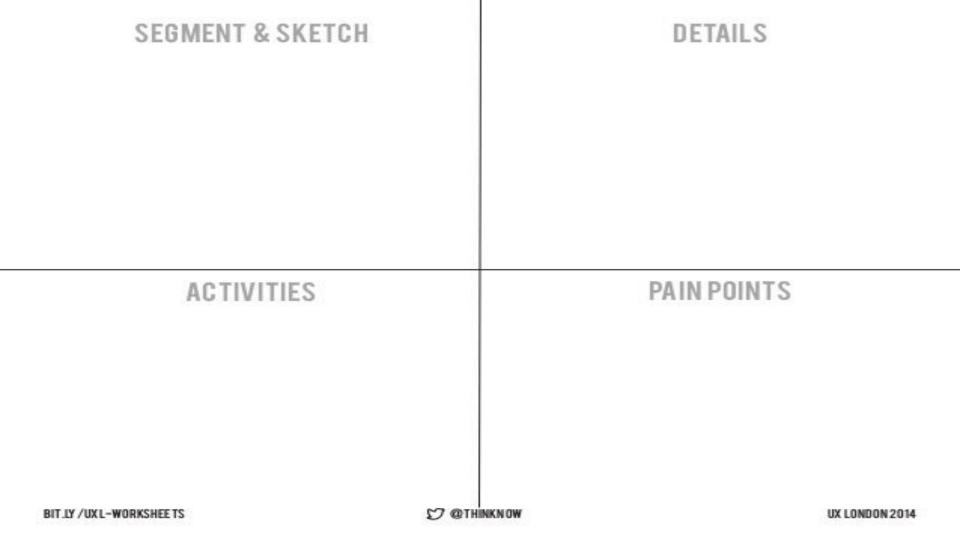
Has got experience working as a product owner on software products with agile teams.

Has had some Scrum training. Has managed mature products successfully. Now faces the challenge of creating a brand-new product.

Wants to leverage his agile knowledge but needs advice on creating innovative product using agile techniques.

STAKEHOLDER PERSONA WORKSHEET TEMPLATE

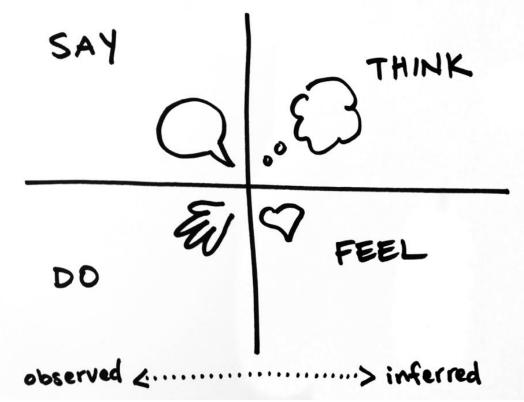
		GOALS AND MOTIVATIONS	CHALLENGES AND OBSTACLES
	PERSONA PHOTO		
QUOTATION			
NAME			
AGE			
		SALES OBJECTIONS	SOURCES OF INFORMATION
GENDER			BOOKS
LOCATION			BLOGS
OCCUPATION			CONFERENCES
OCCUPATION JOB TITLE			CONFERENCES
JOB TITLE			EXPERTS



Design Thinking Empathy Map

Kimberly Wiefling

Use Stakeholder Interviews & Personas to Develop Empathy



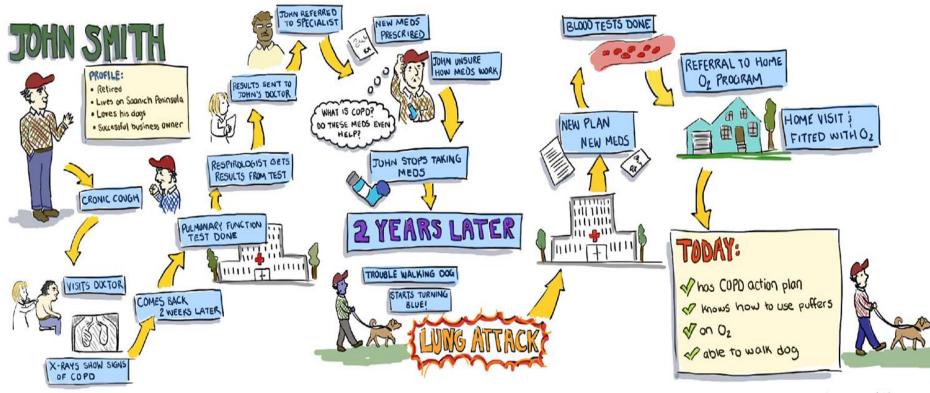
Empathy Map AFTER your PROJECT is COMPLETED & WILDLY SUCCESSFUL



"Customer Journey Map"



Image Ref: http://www.burokoos.com/en/tools/customer-journey-mapping/



www.drawingoutideas.ca

Image Ref: http://www.healthbusinessconsult.com/co-creation-in-health-care/

CUSTOMER JOURNEY MAP

CELLPHONE PURCHASING EXPERIENCE

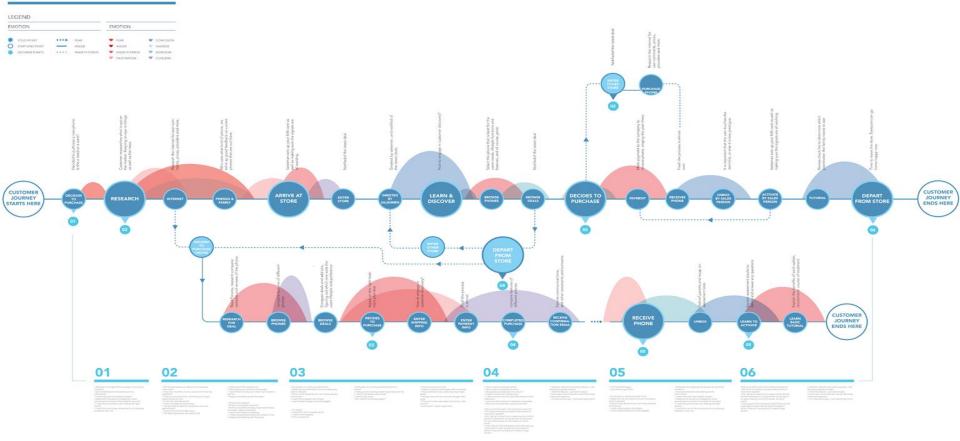
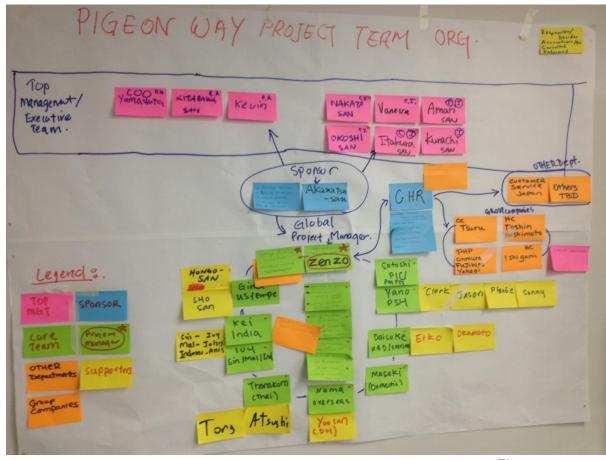


Image Ref: http://www.miscmagazine.com/customer.journey-imapping/Iting, Inc. 2018.

WHO



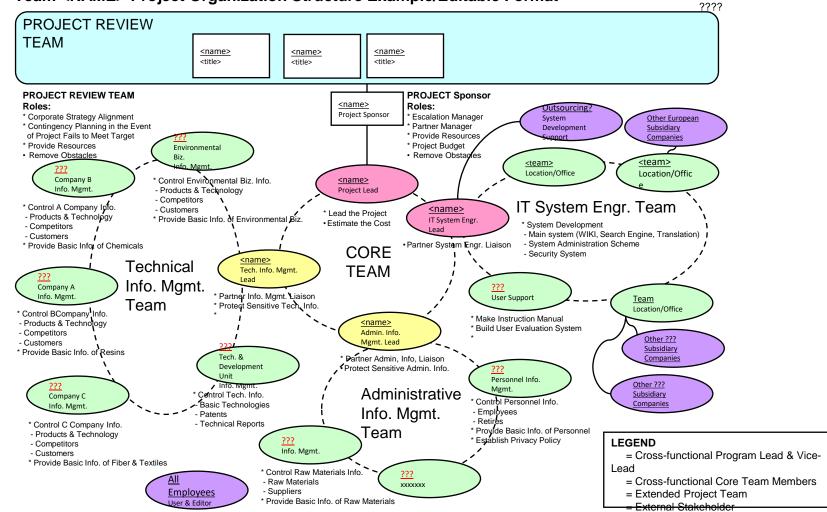
Team Org Chart



E!

Team <NAME> Project Organization Structure Example/Editable Format

Updated:



News Report 2030



News From the Future!

WHAT

& MEASURES

Rock Paper Scissors

Count how many times you win in 15 seconds of ... Rock Paper Scissors

ROCK beats Scissors

PAPER beats Rock

SCISSORS beats Paper



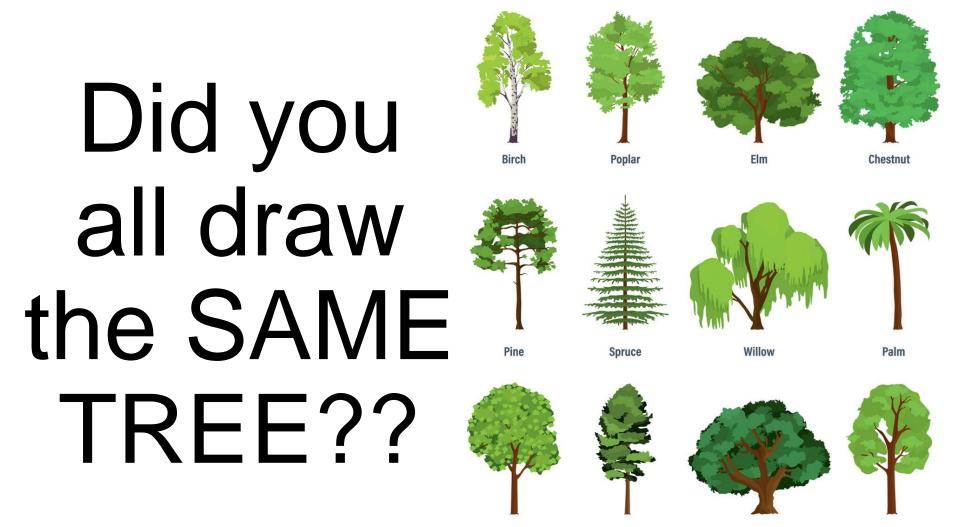
The way we MEASURE "Success" DIRECTLY impacts our STRATEGY & PLANS (Big HOW).



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Imagine a tree.



Maple

Cedar

Oak

Linden

Imagine a tree:

- Christmas tree Pine tree
- •30 centimeters diameter trunk at the base
- •3 meters tall
- •75 branches
- •5289 needles each 3 centimeters long

We would all draw **VERY** similar trees because we took time to define the measures of this tree.



CHALLENGE STATEMENTS

Define – Challenge Statements

The format for a Challenge Statement looks like this...

- "Find new ways to _____"
- "How might we _____"
 - Example: Find new ways to encourage our high performing employees to stay with us.
- In general, a Challenge Statement should be written so that it encourages people to identify...
 - an issue something that isn't working.
 - an opportunity where there is a gap or unmet need.
 - the need of a key stakeholder something that could be more satisfying or productive for someone who is important to your business.
 - a goal or wish something you want!

Great Challenge Statements

- Start with the future!
- One single objective.
- Linked to strategic objectives.
- No evaluation criteria (BIG WHAT) included.
- No solution (BIG HOW) suggested.

+ right level of abstraction + effective framing + clear and unambiguous

OK

 "How can the Big Bucks Company develop brand awareness for its new XYZ brand of products with little marketing or PR funds?"

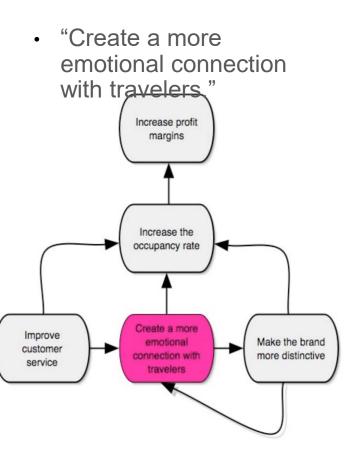
Better

- How might Big Bucks Company improve the brand awareness of its XYZ line of consumer products?
- Solutions ideally would not involve significant marketing or PR funds.

Bad

 "With a diverse and creative workforce, what strategies can BedsRUs implement to deliver a new level of service to guests? We want to provide ideas that can be implemented that would also make the Beds R Us brand more distinctive and thus create a closer and more emotional connection with travelers."

Better



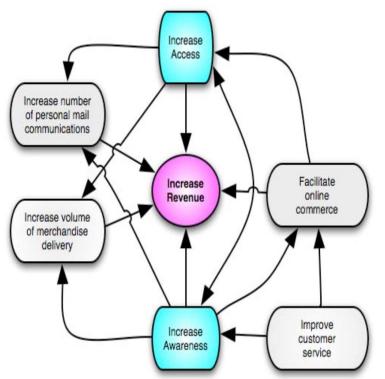
Bad

"The objective for this challenge is to develop a new product/service/ process or an enhancement to an existing product/service process that will result in increased revenue for MaillsUs. This can be accomplished by:

- developing a new product/service/process for current customers
- enhancing an existing product/service/process for current customers
- developing a new product/service/process for new customers
- enhancing an existing product/service/process for new customers
- and/or developing new

Better

How might we increase access and awareness?



I humb Wrestling

Find someone to thumb wrestle with.

Count how many times you win as I will send you \$1M for every time you trap your opponent's thumb in 15 seconds.

3. Clarify "WHAT"



What is

"Success" (through stakeholder's eyes)?

Success

United Way Thermometer

Good metrics include WATT: 12/1/10 ¥1000000 - Where we WERE \square - Where we ARE - TREND - TARGET ¥ 600000 8/1/10 ¥ 400000 • Where we need to be 1/1/10 ¥ 200000 Close gap by adding money 12/1/10 ¥100000 Where we are 11/1/10

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Different Metrics for Horizon 1 - 2 - 3

Best Practices: Metrics Different Metrics for Each Horizon						
TIME	FRAME	HORIZON 1 (0–12 mos)	HORIZON 2 (12–36 mos)	HORIZON 3 (36–72 mos)		
	iving Boal	Run a Business	Become a Material Business	Enter a Business		
Perfe	Key ormance icators	Revenue vs plan Bookings Contribution margin Market share Wallet share "Op Ex"	Target accts vs. plan Sales velocity Time to tipping point M&A to scale Time to materiality "Time Ex"	Name-brand customers Deal size Name-brand partners PR buzz Flagship projects "Cap Ex"		

Success Scorecard

Priority	Goal	Minimum Acceptance Limit	Target	Status	Action to Make it Green
# 1	Add Calendar Feature to Existing Product	Minimum feature set agreed to and defined in the plan	All musts and top 5 wants	Green	NA
# 2	Launch New Wiki Tool on Schedule	Phase 1 schedule + 2 months late at worst	Phase 1 scheduled date	Red	Assign another person to help
# 3	Complete User Manual for Wiki Tool	Rated 4 out of 5 by users	Rated 5 out of 5	Yellow	Get a learning products expert to help

"Big What"

The future we wish to create:

- Long-term ideal future, sometimes called "Vision"
- Major milestones along the path to that ideal future, sometimes called "Mission"
- Steps on the way to fulfilling our mission, sometimes called

"Big What" Vision Examples

"Purpose is a general heading. Vision is a specific destination, a pictures of the ideal future. Purpose is abstract. Vision is concrete." - Peter Senge, The Fifth Discipline

- Every human being on Earth has access to plenty of:
 - o Clean, safe water
 - Healthy food
 - Sanitary toilet facilities
 - Decent healthcare
 - A mind-expanding educatior



"Big What" Mission Examples

"A true mission is a clear and compelling goal that focuses people's efforts. It is tangible, specific, crisp, clear and engaging. It reaches out and grabs people in the gut." – Jim Collins and Jerry Porras

• "This nation should dedicate itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to Earth."

President

• ERADICATE EXTREME POVERTY & HUNGER By 2015

Ref: UN Bietweenelagoand 2015 reduce by 50% the % http://wowpeopleilwhose income istiless than \$1 a day.

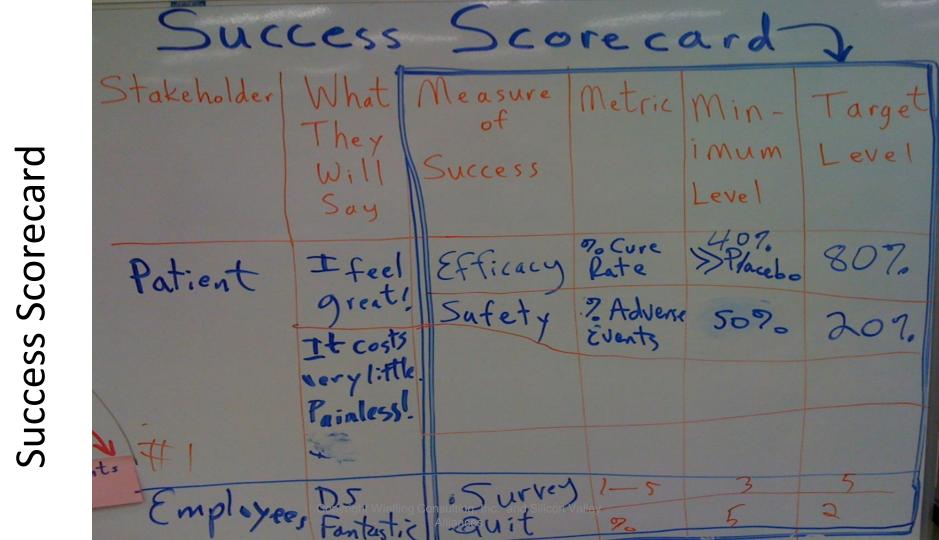
Achieve full productive employment and decent



When Our Project is DONE and WILDLY SUCCESSFUL, Key Stakeholders Will be Saying . . .

1) hat Continue Program - President because important to D.S. business goals to Atalent -HRTeam) Performance · Presentation - Quality - Participants - Delivery · Promoted -Part. Boss Performance behavior . Collab. W7 colleagues Mitivation Opennial Board Approve Membes Projects + Membes support implementation

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Scorecard Example

Priority for this Project	Item & Status (RYG*)	Description	Minimum Acceptance Limit (Go/NoGo Criteria A MUST for making it worth the effort.)	Target
2	Functionality	At least the minimum viable features to be successful in the market.	All "MUST" functionality in the product requirements document.	All of the "MUST" and "HIGH WANTS" functionality in the product requirements document.
3	Schedule	Schedule hits the market window of opportunity.	Phase 1 schedule +/- 2 months, or the Plan of Record (POR) schedule after a scope change.	Phase 1 schedule +/- 2 weeks, or the Plan of Record (POR) schedule after a scope change.
	Revenue	Revenues from sales, service, support meet or exceed minimum estimated to make this a viable product to develop.	Revenue matches forecast +/- 20%	Revenue matches forecast +/- 10%
	ROI	ROI, cash-to-cash meets or exceeds targets.	ROI matches forecast +/- 3%	ROI matches forecast +/- 2%
1	Quality	Quality meets or exceeds customer expectations and our internal cost of quality goals. (Post-release serious and critical bugs, other SW metrics of quality, AFR, DOA, reliability etc.)	AFR rate half of previous product after 6 months shipping.	AFR rate 10% of previous product after 6 months shipping.
	Supportability & Serviceability	We and our customers can effectively service and support the product in the field in the volumes shipped in a timely fashion, at or below our predicted support costs.	Support Staff rates this 2X as supportable as previous product.	Support Staff rates this 10X as supportable as previous product.

Clarify WHY, WHO, "WHAT"



What is "Success"

(through stakeholder's eyes)?

Success measures

United Way Thermometer

Good metrics include WATT: 12/1/10 ¥1000000 - Where we WERE \square - Where we ARE - TREND - TARGET ¥ 600000 8/1/10 ¥ 400000 • Where we need to be 1/1/10 ¥ 200000 Close gap by adding money 12/1/10 ¥100000 Where we are 11/1/10

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Different Metrics for Horizon 1 - 2 - 3

Best Practices: Metrics Different Metrics for Each Horizon					
TIMEFRAME	HORIZON 1	HORIZON 2	HORIZON 3		
	(0–12 mos)	(12–36 mos)	(36–72 mos)		
Driving	Run a	Become a	Enter a		
Goal	Business	Material Business	Business		
Key Performance Indicators	Revenue vs plan Bookings Contribution margin Market share Wallet share "Op Ex"	Target accts vs. plan Sales velocity Time to tipping point M&A to scale Time to materiality "Time Ex"	Name-brand customers Deal size Name-brand partners PR buzz Flagship projects "Cap Ex"		

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# 3	Complete User Manual for Wiki Tool	Rated 4 out of 5 by users	Rated 5 out of 5	Yellow	Get a learning products expert to help

Big WHY



Go to the Dark Side!



Copyright

And LIGHT Side!





Truck Stuck Under a Bridge

Avoid "Rush to Solution" and we might find a BETTER solution!



We could try to raise the bridge, or . . .

Avoid "Rush to Solution" and we might find a BETTER solution!



We could try to raise the bridge, or . . . Let the air out of the tires



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Big How - Values Examples

"Values answer the question 'How do we want to act, consistent with our mission, along the path toward achieving our vision?" – Peter Senge, The Fifth Discipline

DREAMS

- Safety The safety of every student is paramount.
- Respect We will show respect in every way for the dignity of the individual or agency served.
- Reflection Reflecting should be an integral part of each service experience.
 Ref: The BYU Center for Service & Learning
 Selflessness - Our motivation is to give,

Big How – Strategy Examples The Hedgehog Concept Low Price **Circle Three:** Availability What you are deeply passionate about Quality Circle Two: Circle One: What drives What you can your be the best in the economic world at? • Features/Benefit engine

Innovation

Ref: Jim Collins, Good to Great

Click to LOOK INSIDE! Target the tasts. Here are basis, proves helding blocks of what rea works the 4+2 formula for sustained business success William Joyce Nitin Nohria Bruce Roberson

10-year study by 50 academics and business consultants on dozens of 187 companies.

"What Really Works"

The 4+2 Formula for Sustained Business Success By William Joyce, Nitin Nohria and Bruce Roberson

- There are 8 management practices 4 primary and 4 secondary — that directly correlate with superior corporate performance, as measured by total return to shareholders (TRS).
- Winning companies achieve excellence in all 4 of the primary practices, plus 2 of the secondary practices hence, the 4+2 formula.
- All 8 practices have features that are both intuitive and counterintuitive.

The 8 Practices

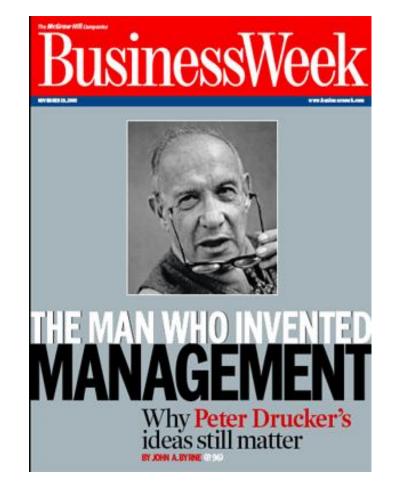
You need all 4 primary:

- Strategy
- Execution
- Culture
- Structure
 - + 2 of the Secondary:
 - Talent
 - Leadership
 - Innovation
 - Mergers/Partnerships

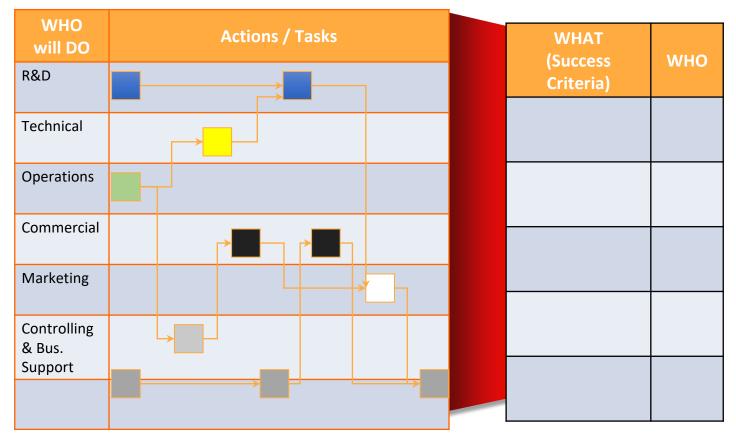


"Culture eats strategy for breakfast."

- Peter Drucker

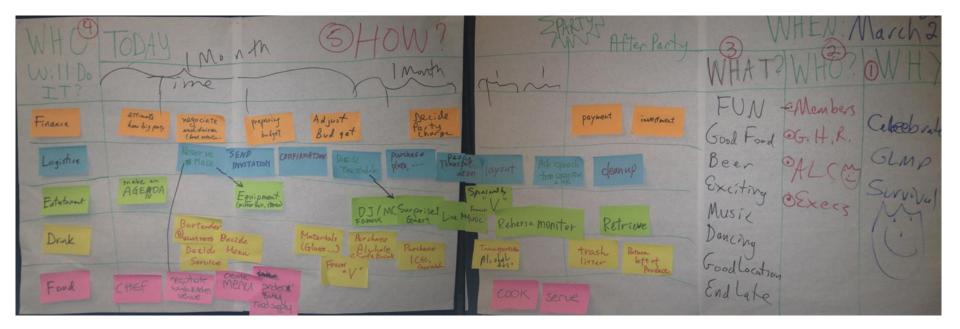


Timeline/Swimlane Action Planning



PRIVATE! to Kimberly Wiefling, Wiefling Consulting, Inc. . DO NOT DISTRIBUTE!

Overall Plan



Timeline Co-creation



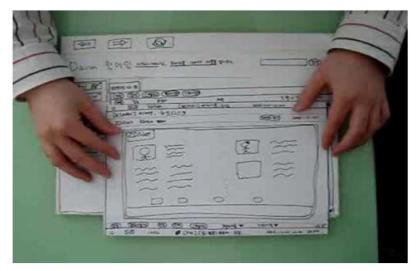
E!

PROTOTYPE

IT!

Prototyping

- Theoretical
 - Problem-Solution
 Interviews



- Virtual/Wizard of Oz
 - \circ Ads
 - Landing Pages
 - Mobile App Simulations
 - Concierge (Zappos)
 - Email Marketing
 - Explainer Video (Smoke & Mirrors)
 - Paper Prototype

REF: <u>https://medium.com/steveglaveski/12-types-of-prototypes-to-test-your-idea-36f6d076c8f5</u>

Some Ways to Prototype

- Role Play
- Simulation
- Paper Mock-up
- Storyboard
- Physical Example
- Low Fidelity

- "Wizard of Oz"
- Unsustainably Expensive
- A bunch more: <u>https://medium.com/ste</u> <u>veglaveski/12-types-of-</u> <u>prototypes-to-test-your-</u> idea-36f6d076c8f5

Prototype, Don't Perfect!

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Paper Prototype



Role Play Prototype



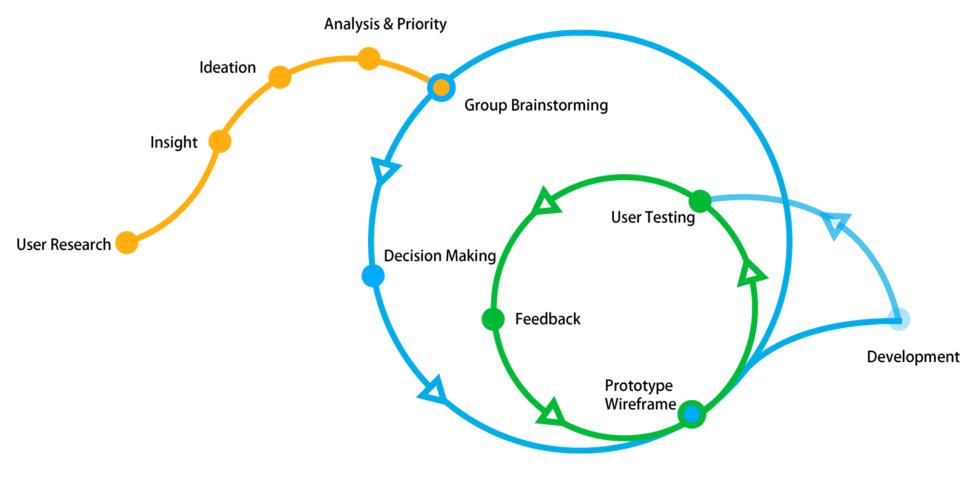
Storyboard/PPT Prototype

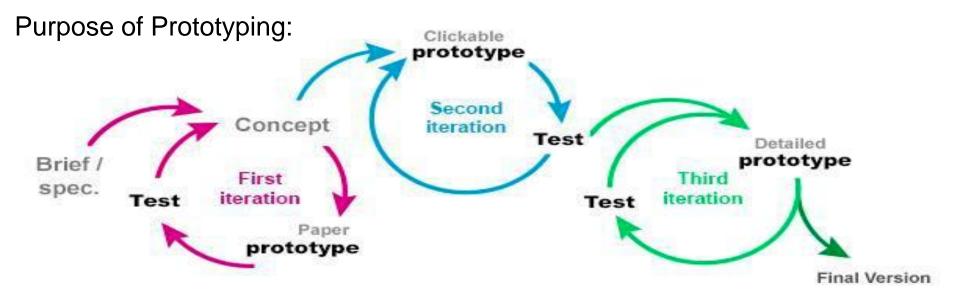


201

Prototype of Humans







Raj & Rafa		
Jobseekers		
Employers		
Indeed People		

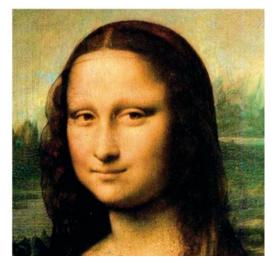
Different Levels of Fidelity

Low Fidelity Fidelity

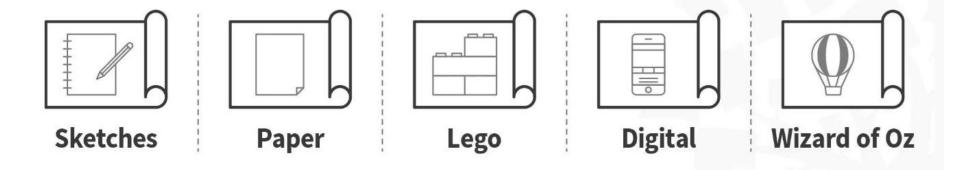
Medium Fidelity High







5 Common Low-Fidelity Prototypes



https://www.interaction-design.org/literature/article/prototyping-learn-eight-common-methods-and-best-practices

LINKS to LOTS of examples:

- * Paper Prototype Examples <u>CLICK LINK</u>
- * PowerPoint Prototype Examples <u>CLICK LINK</u>
- * Role Play Prototype Examples <u>CLICK LINK</u>

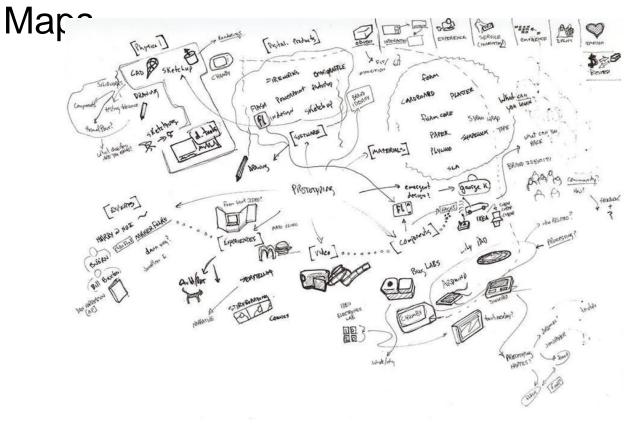
Google searches for

https://www.google.com/search?g=paper+prototype+examples&tbm=isch&sxsrf=A LiCzsYLNcdZRwiuivIgLl4P5QYoYzRhNw%3A1659393368055&source=hp&biw=1 716&bih=959&ei=V1XoYs2bOuHGkPIP0IiRkAY&iflsig=AJiK0e8AAAAAYuhjaLhTbER8UiRsi-9KapE35TZjnA9&oq=paper+prototype&gs_lcp=CgNpbWcQARgAMgQIIxAnMgUI ABCABDIFCAAQqAQyBQqAEIAEMqUIABCABDIFCAAQqAQyBQqAEIAEMqUIA BCABDIFCAAQqAQyBQqAEIAEOqcIIxDqAhAnOqqIABCxAxCDAToICAAQqAQQ sQM6CwgAEIAEELEDEIMBUPAUWOwhYNktaAJwAHgAgAFkiAHyBpIBBDE0LjG YAQCgAQGqAQtnd3Mtd2l6LWltZ7ABCg&sclient=img#imgrc=IQqBoPR3c3cmqM

https://www.google.com/search?q=screenshot+prototype+examples&tbm=isch&v ed=2ahUKEwiD4_KF2qb5AhWJCTQIHeLpBN4Q2-

cCeqQIABAA&og=screenshot+prototype+examples&gs_lcp=CqNpbWcQAzoECC

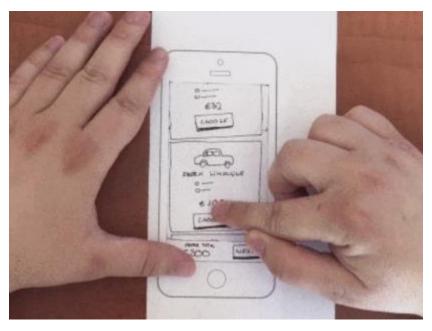
Sketches, including Process Mapping & Value Chain



Paper Prototypes

SOUNDS	0	Resize and crop your screen		
Alerts	@	Q Q.		
SAVE IMAGES	0		FRIENDS	8
] MR.MEOW	Ð
	-		TIBBLES	Ð
			FELIX	9

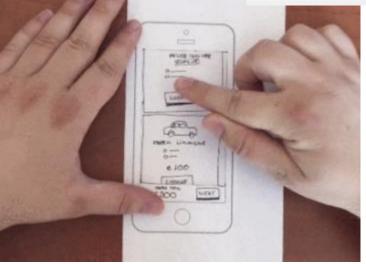
Paper Prototypes



Lots more:

https://app.conceptboard.com/board/xmyr-7ikqqkph-ysrh-q7eu#item=u_7f207d8f-3c53-4d94bb0d-56cb20bdf456-I7JpMf9LXF-50



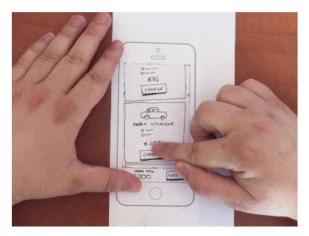


Scroll WAY down to see this MOVABLE prototype: https://uxplanet.org/the-magic-of-paper-prototyping-51693eac6bc3 via Conceptboard

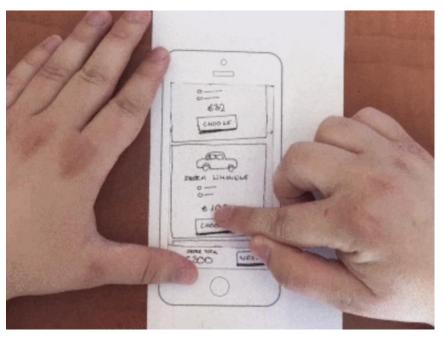
Go here and scroll down for this in video:

10. Create Complex Effects Using Paper

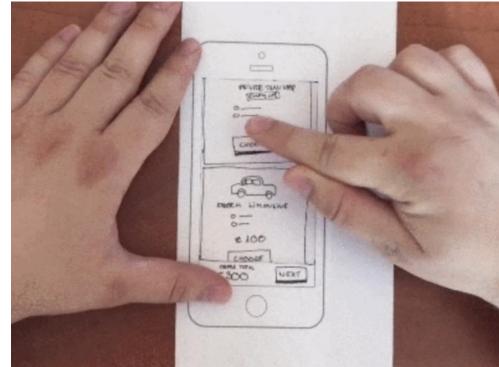
One of the great things about paper prototypes is the way designers come up with all kinds of creative ways of simulating visual effects or interactions. For example, with a little bit of imagination, it's possible to create a scrolling effect on a mobile screen.



Simulate scrolling by pulling a long strip of content through the viewport. Image: Csaba Házi



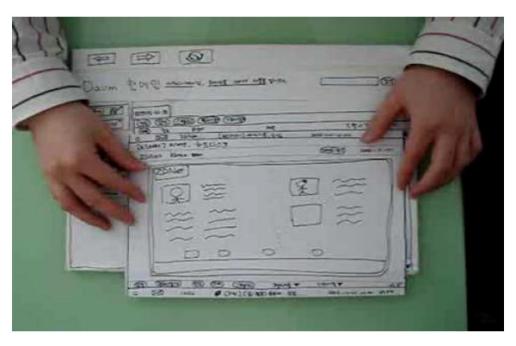
Scroll WAY down to see this MOVABLE prototype: <u>https://uxplanet.org/the-magic-of-paper-prototyping-51693eac6bc3</u>

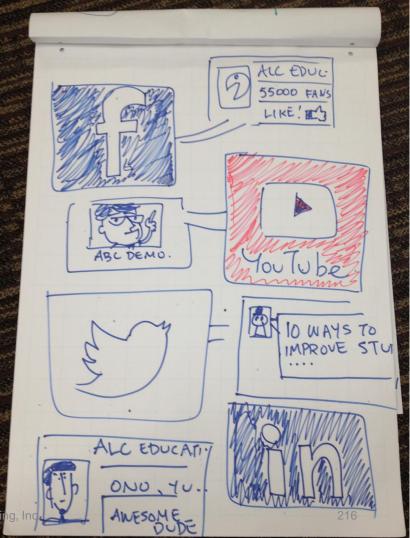


Paper Prototypes

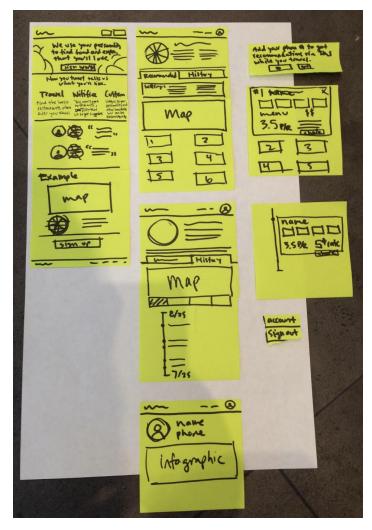


Paper Prototypes

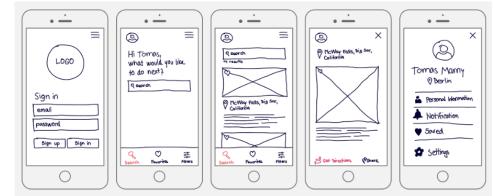




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Role Play Prototypes - Live, Virtual, AR/VR









ective of Student C



D Perspective of Student D

Role Play Prototypes

- Live
- By Zoom
- By VR

Lots more: https://app.conceptboard.com/board/x myr-7ikq-qkph-ysrhq7eu#item=u_7f207d8f-3c53-4d94bb0d-56cb20bdf456-9ipoto7cZZ-0











ective of Student C







D Perspective of Student D



F Perspective of Student F



ective of Student C



ective of Student E



D Perspective of Student D



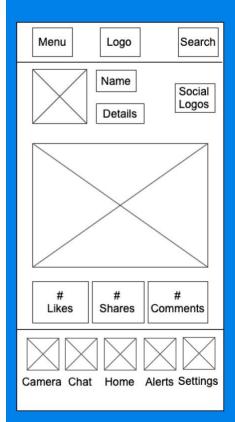
F Perspective of Student F

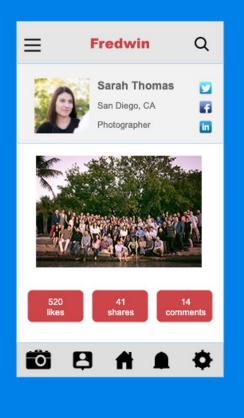


 VR



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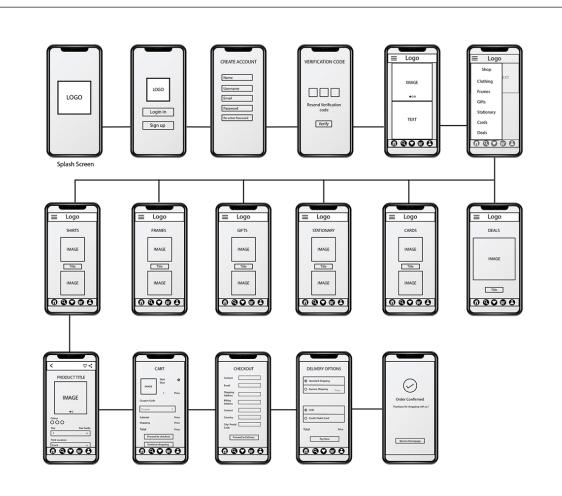




Digital Wireframes (Higher fidelity than Paper Prototypes)

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≡ ■ 88 +		5° 1010 11 24 2 4 6 9907 8	Q QWX AAT 📴 🖵 🚺 🗐 💿
Wireframes			H.Rule 🗸
Login Screen	forget your password?	VISI AT	Position 517 771 X Y Size 356 10 width height
	Login with Facebook		Layering 🗗 🗊 💭 🖧
			Auto-Size
			Border Color Opacity
			Stroke

Wireframes



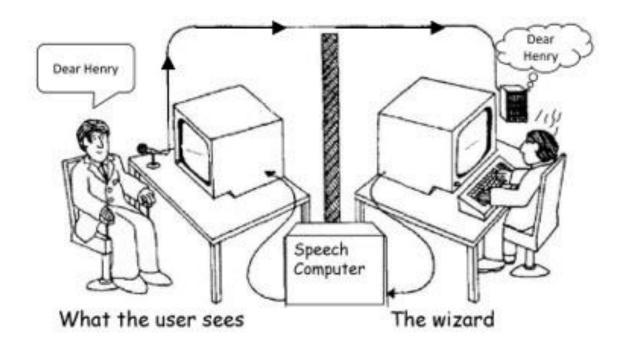
Lego Prototypes



Wizard of Oz

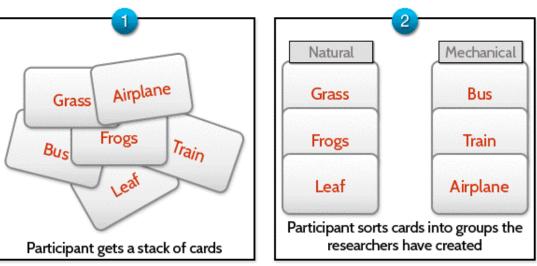


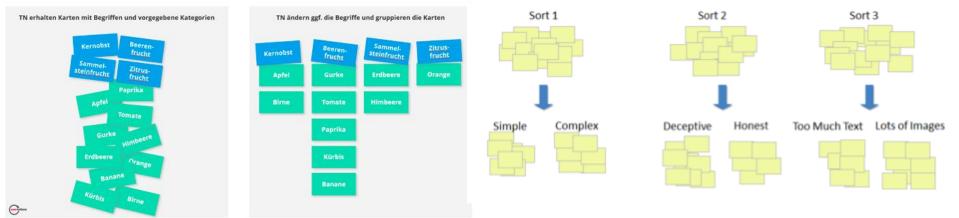
Wizard of Oz testing – The listening type writer 100 190



Closed Card Sort

Card Sorting



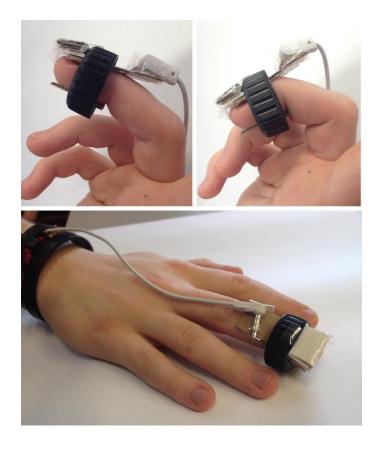


Role Play Prototype

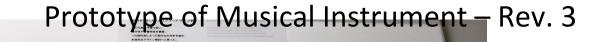




Finger Sensor Prototype



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試作品 (ストレートパラック) Prototype (st

音響検討用の試作品。シミュレーションで検討した モデルの中から、数モデルに1本の割合で、 実際にこのようなストレートパラックを製作し、 調定と試費をおこなった。

Prototype of Musical Instrument – Rev. 2





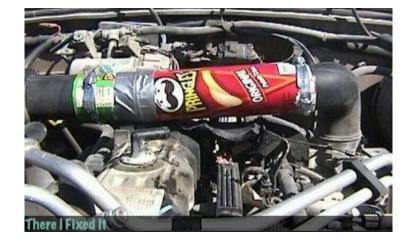














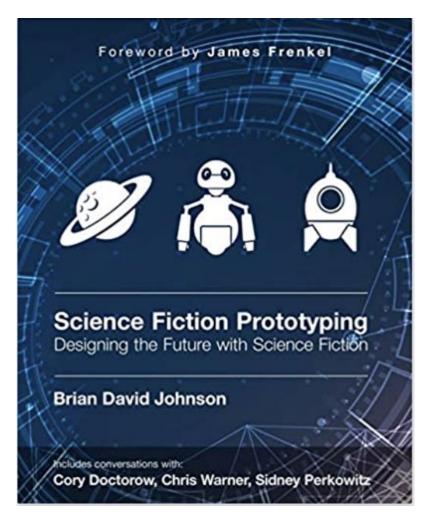
Different Levels of Feasibility

Zappos - They didn't have supply chain! They just took pictures of shoes in stores and posted them. Then when they got an order they went and bought shoes and shipped them to their customers!!!



Science Fiction Prototyping

https://medium.com/sagefuturemakers/science-fiction-prototyping-32bc2763767a



Science fiction is the playground of the imagination. If you are interested in science or fascinated with the future then science fiction is where you explore new ideas and let your dreams and nightmares duke it out on the safety of the page or screen. But what if we could use science fiction to do more than that? What if we could use science fiction based on science fact to not only imagine our future but develop new technologies and products? What if we could use stories, movies and comics as a kind of tool to explore the real world implications and uses of future technologies today?

Science Fiction Prototyping is a practical guide to using fiction as a way to imagine our future in a whole new way. Filled with history, real world examples and conversations with experts like best selling science fiction author Cory Doctorow, senior editor at Dark Horse Comics Chris Warner and Hollywood science expert Sidney Perkowitz, Science Fiction Prototyping will give you the tools you need to begin designing the future with science fiction.

The future is Brian David Johnson's business. As a futurist at Intel Corporation, his charter is to develop an actionable vision for computing in 2021. His work is called "future casting"—using ethnographic field studies, technology research, trend data, and even science fiction to create a pragmatic vision of consumers and computing. Johnson has been pioneering development in artificial intelligence, robotics, and reinventing TV. He speaks and writes extensively about future technologies in articles and scientific papers as well as science fiction short stories and novels (*Fake Plastic Love and Screen Future: The Future of Entertainment, Computing and the Devices We Love*). He has directed two feature films and is an illustrator and commissioned painter.

https://www.amazon.com/Science-Fiction-Prototyping-Designing-Future/dp/1608456552/

Science Fiction Prototyping



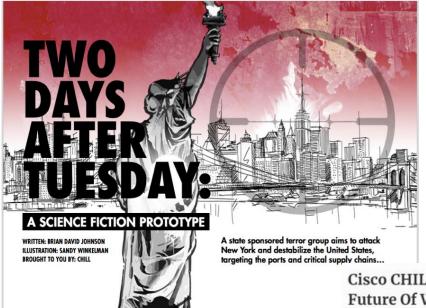
Science Fiction Prototype Science Fiction Prototyping (SFP) incorporates narratives (science fiction stories, comics, movies) as a means of introducing innovation into scientific and engineering practices, business activities and policymaking.

SFPs focus on inventing or imaging a possible future by exploring trends from research and threatcasting.

SFPs allow organizations to investigate the possible impact that has been identified through the threatcasting process.

SFPs scrutinize the political, ethical, legal and business impacts of these futures.

Science Fiction Prototype Applied Industry



"People aren't wired to imagine the future, 10 or even 5 years out, which is a blocker to innovation. We need to create that world for them, so they can immerse themselves in this future scenario, making it immediately apparent what kind of solutions we need to prepare for that future."

Cisco CHILL To Tackle The Future Of Work In 48 Hours



Western Bonime Contributor () Style & Design



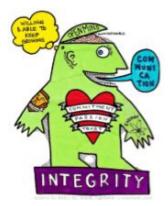
Approach

- 1. Pick Your Science and Build Your World
- 2. Identify the Scientific Inflection Point
- 3. Consider ramifications of the Science on People
- 4. Identify the Human Inflection Point
- 5. Reflect on what Did We Learn?



Recipe for Success

Head AND Heart



Your Goals AND Other People's Goals

Talking AND Listening



Knowing AND Doing



Learning vs. Doing



Researchers conducted an experiment on human behavior.

People studying at a religious university told that they needed to quickly go across the alley to provide a talk to school children about the Good Samaritan. They were told they were LATE!

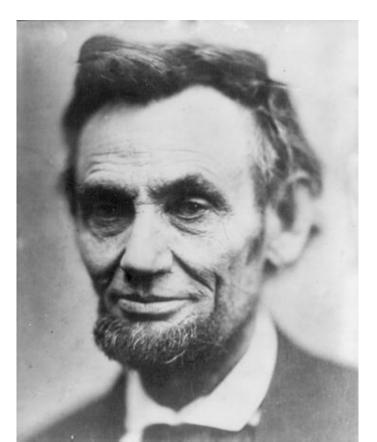
As they crossed the alley between the university and the children's school researchers had positioned a body laying in the alley.

When they were running late . . . what % of people stopped to help the person? In the dark/nighttime? In the light/daytime? When laid in their path so they had to STEP OVER THEM?

Abraham Lincoln on Commitment

"COMMITMENT is what transforms a promise into reality. It is the words that speak boldly of your intentions. And the actions which speak louder than the words. It is making the time when there is none. Coming through time after time after time, year after year after year. Commitment is the stuff character is made of; the power to change the face of things. It is the daily triumph of integrity over skepticism."

– Abraham Lincoln



"Keep away from people who try to belittle your ambitions. Small people always do that, but the really great make you feel that you, too, can become great."

- Mark Twain



Desire vs. Intention ^{願望 vs} 決意

- 願望-やろうと思う

 Desire - TRY
 - to wish or long for or crave.
 - to ask for; request.



決意一必ずやる

- Intention - COMMIT
 - determining to do a specified thing.
 - a concept formed when the mind is directed toward an object, aim, end or purpose

Confidence is NOT Required! 自信はなくてもかまわない

• Confidence 自信

- the quality or state of being certain.
- a state of mind or a manner marked by easy coolness and freedom from uncertainty embarrassment.

- Commitment
 - an agreement or pledge to do something.
 - carrying into action deliberately.

WHATEVER YOU CAN DO, OR DREAM YOU CAN, **BEGIN IT! BOLDNESS HAS GENIUS, POWER** AND MAGIC IN IT.

"Treat people as if they were what they ought to be, and you'll help them to become what they are capable of becoming."

- Johann Wolfgang Von Goethe, 1749-1832, German Poet, Dramatist, Novelist

Magical Power of Writing Down Goals

- How many people here write down goals for your project? For your life?
- Only 4% of people write down their goals even though those who write down their goals achieve them almost 100% of the time.
 - Why do so few people write down their goals?

Commitment to Action

What action will you take to apply what you learned today?

Date you will take this action?

Who will be your "thinking partner" to encourage you to take action, and check on your progress?

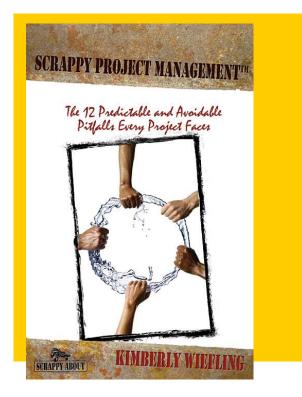
Kimberly's Articles on Design Thinking

Please go here if you want to read about this approach to Design Thinking:

What is Design Thinking? A Powerful Methodology, but NOT Thinking About Design!

https://drive.google.com/file/d/1bfEwLUdMvaaK2EUSRQ4u5qKIIT4ZvV5Z/view ?usp=sharing

Scrappy Design Thinking - Simple Tools, Practical Tools <u>https://drive.google.com/file/d/14f4W0M6LN2eftJRjcRI1RAmENmNgJUdz/view</u> <u>?usp=sharing</u>



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Conceive it. Believe it. Achieve it.