



# Co-Making Great Products

How whole teams work together to find problems, invent solutions, and deliver great products

Jeff Patton

[jeff@comakewith.us](mailto:jeff@comakewith.us)

twitter: [@jeffpatton](https://twitter.com/jeffpatton)

This team has delivered high quality working software every sprint

But, they're frustrated because they're failing



**snagajob.com™**

This team thinks about

**SUCCESS**

*differently*

1. Safety isn't success
2. Velocity isn't value
3. The invention game
4. Deliberate discovery  
drives delivery
5. Reality bites

These three companies are  
focused on winning the  
software development game

The logo for snagajob.com features the text "snagajob.com" in a bold, black, sans-serif font. A small red dot is positioned between "snagajob" and ".com". The entire logo is set against a solid orange rectangular background.The logo for Nordstrom consists of the word "NORDSTROM" in a black, serif, all-caps font, centered within a white rectangular background.The logo for edmunds.com features the word "edmunds" in a red, lowercase, sans-serif font. To its right is a blue silhouette of a car with the word "com" in white, lowercase, sans-serif font inside the car's body. A small "SM" trademark symbol is located above the car's rear. The entire logo is set against a white rectangular background.

# 1

Safety isn't success



Our everyday process requires  
so much rigor, there wasn't really a  
place for innovation

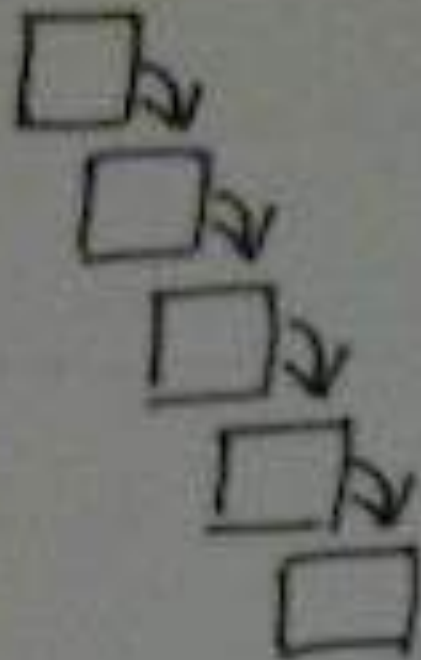


JB Brown  
Nordstrom Innovation Lab

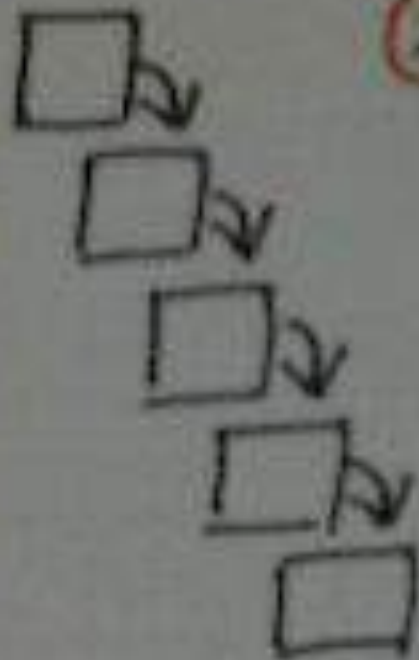
Traditional sequential  
development process is  
safe for individuals



Royce's model

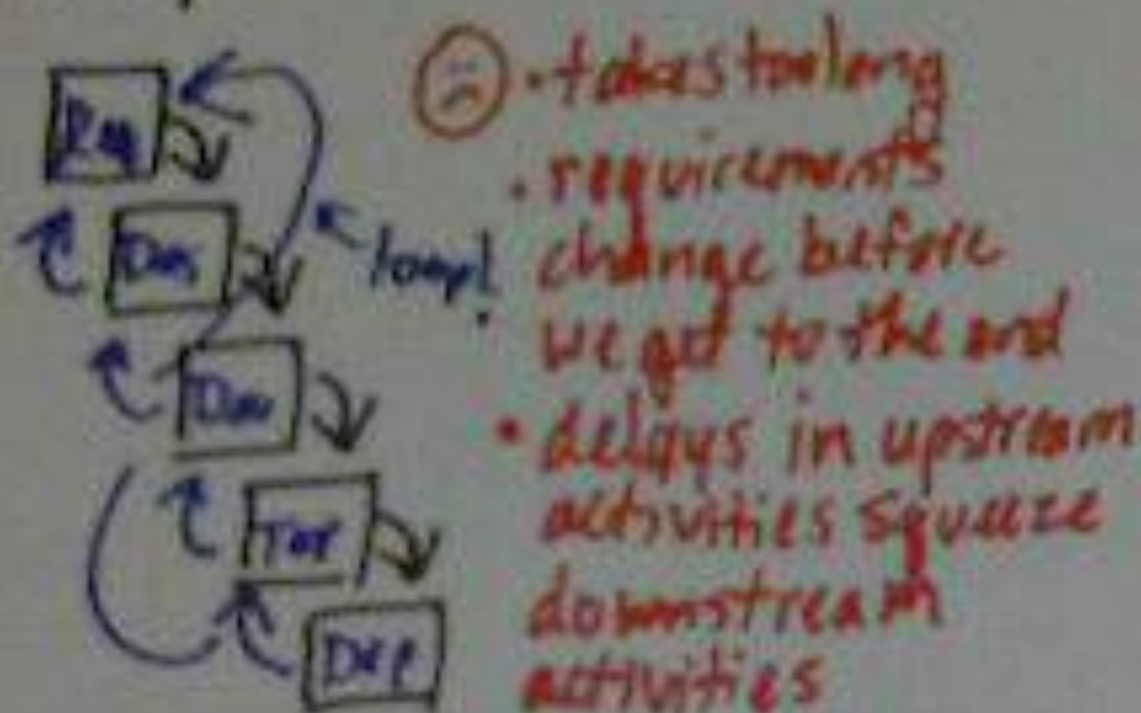


# Royce's model

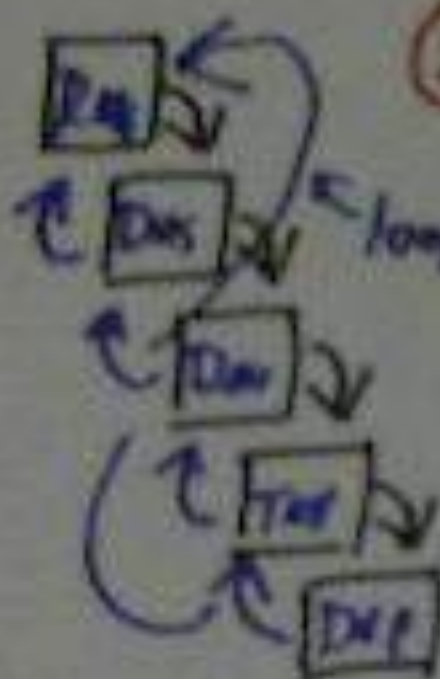


- ⊖ takes too long
- requirements change before we get to the end
- delays in upstream activities squeeze downstream activities

# Royce's model



# Royce's model



- ☹️ • takes too long
- requirements change before we get to the end
- delays in upstream activities squeeze downstream activities

CYA

- 😊 • easy to understand
- easy to plan
- easy to track
- looks intuitive
- clear roles & responsibilities
- clear accountability

Separation of concerns is  
problematic for process





Your jobs been outsourced to a cheaper company.



ouch!



2

Velocity isn't value

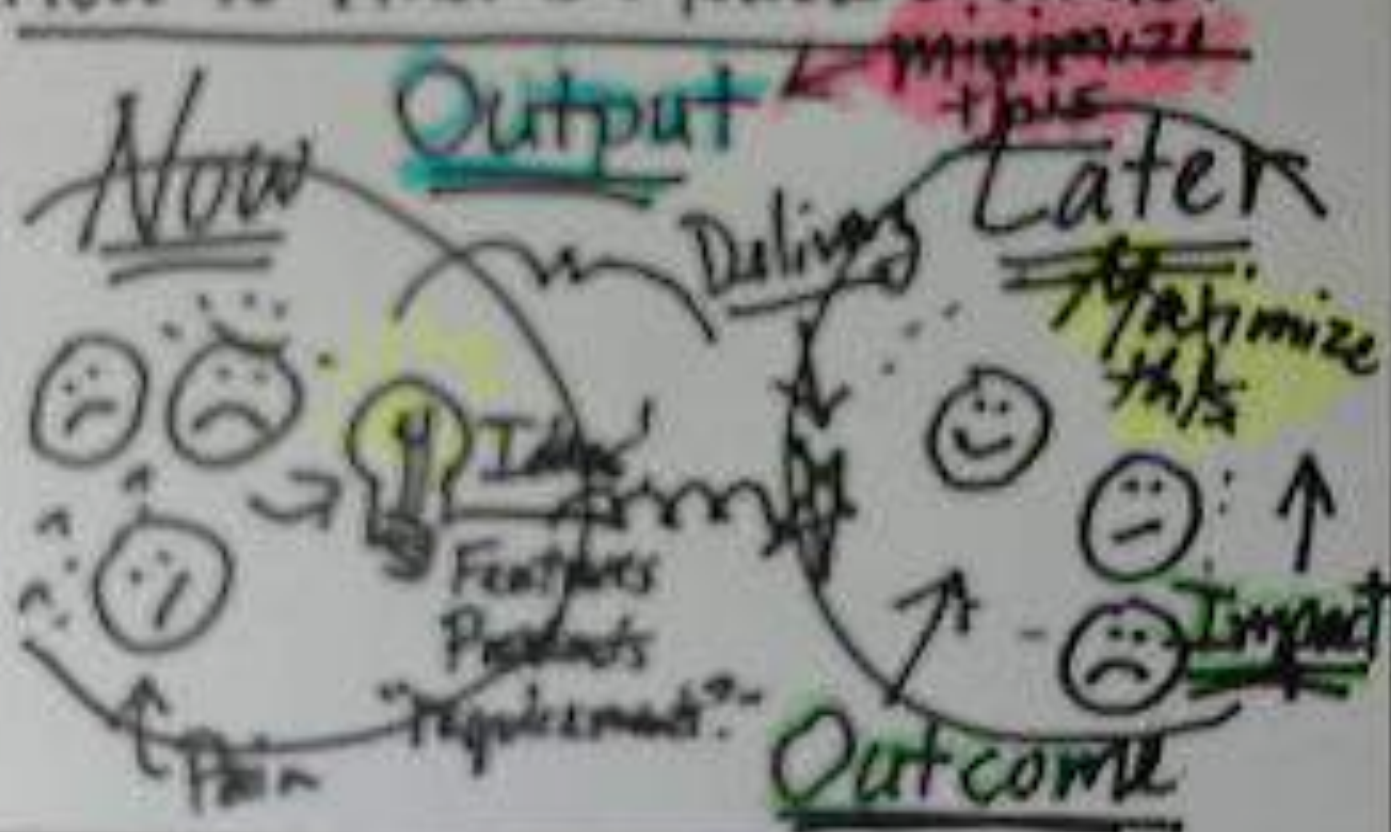
We're great at delivering software using agile approaches. We've just realized it doesn't matter.



Eugene Park  
Edmunds.com

We're not here to build  
software  
we're here to change the  
world

# How to find & Measure Value:



# R & D

[requirements & design]

# Deciding what to build is difficult

*The  
hardest single part  
of building a software  
system is deciding  
precisely what to  
build.*

Fred Brooks, author of *The Mythical Man Month*

# Our decisions become requirements

*If it's your  
decision to make,  
it's design.  
If not, it's a  
requirement.*

Alistair Cockburn, author of Agile Software Development: The Cooperative Game



two words:

UNDERPANTS

GNOMES



South Park clip, the underpants business:

<http://www.southparkstudios.com/clips/151040>

To get value  
you must form  
a hypothesis on  
how you'll get it.  
↑ phase 2

# 3

## The invention game

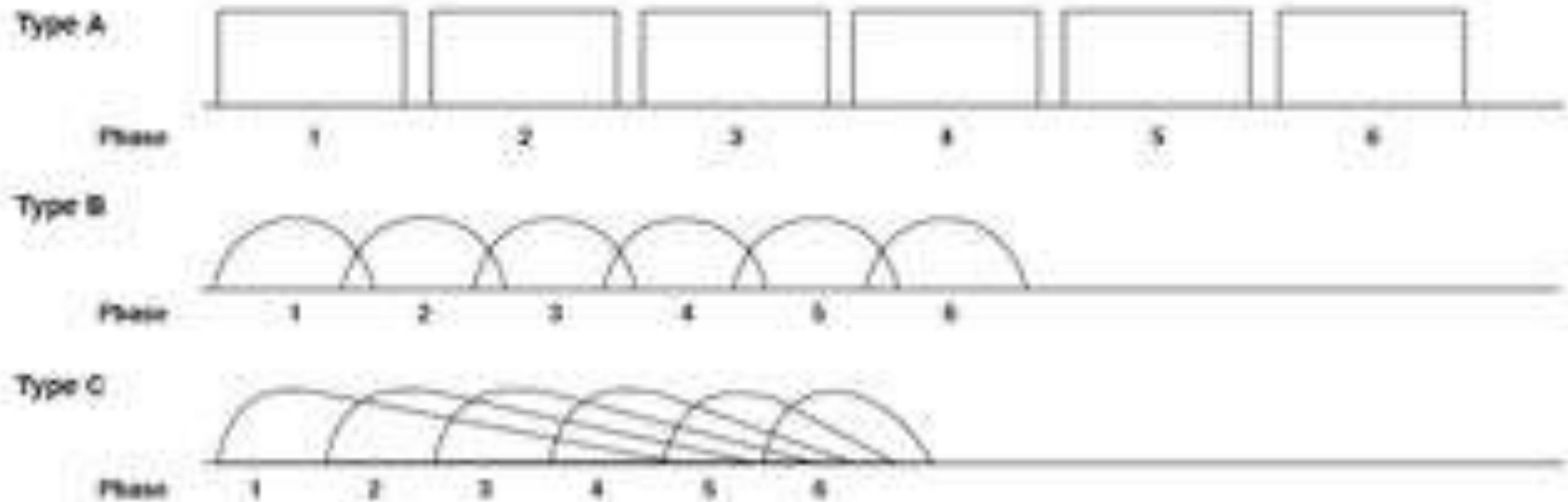
# Process

---

## EXHIBIT 1

Sequential (A) vs. overlapping (B and C) phases of development

---



“Under the rugby approach, the product development process emerges from the constant interaction of a hand-picked, multidisciplinary team whose members work together from start to finish.”

From the 1986 Harvard Business Review paper “**The New New Product Development Game**” by Takeuchi and Nonaka

Game



# Process $\neq$ Skill

knowing how doesn't make you good

# Roles $\neq$ Positions

You might primarily do one thing, but you can't win by doing only one thing

# Finishing On Time $\neq$ Winning

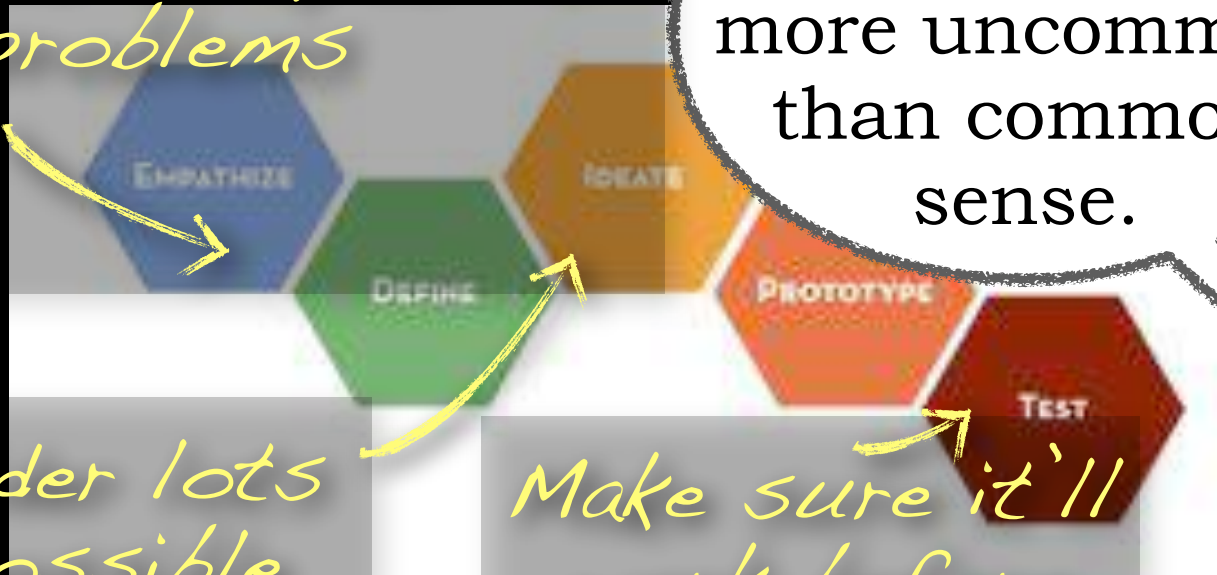
Keep score, don't just keep time

“Design Thinking” is a learning and invention game



# It seems like common sense

*Understand the problem you're solving & focus on specific problems*



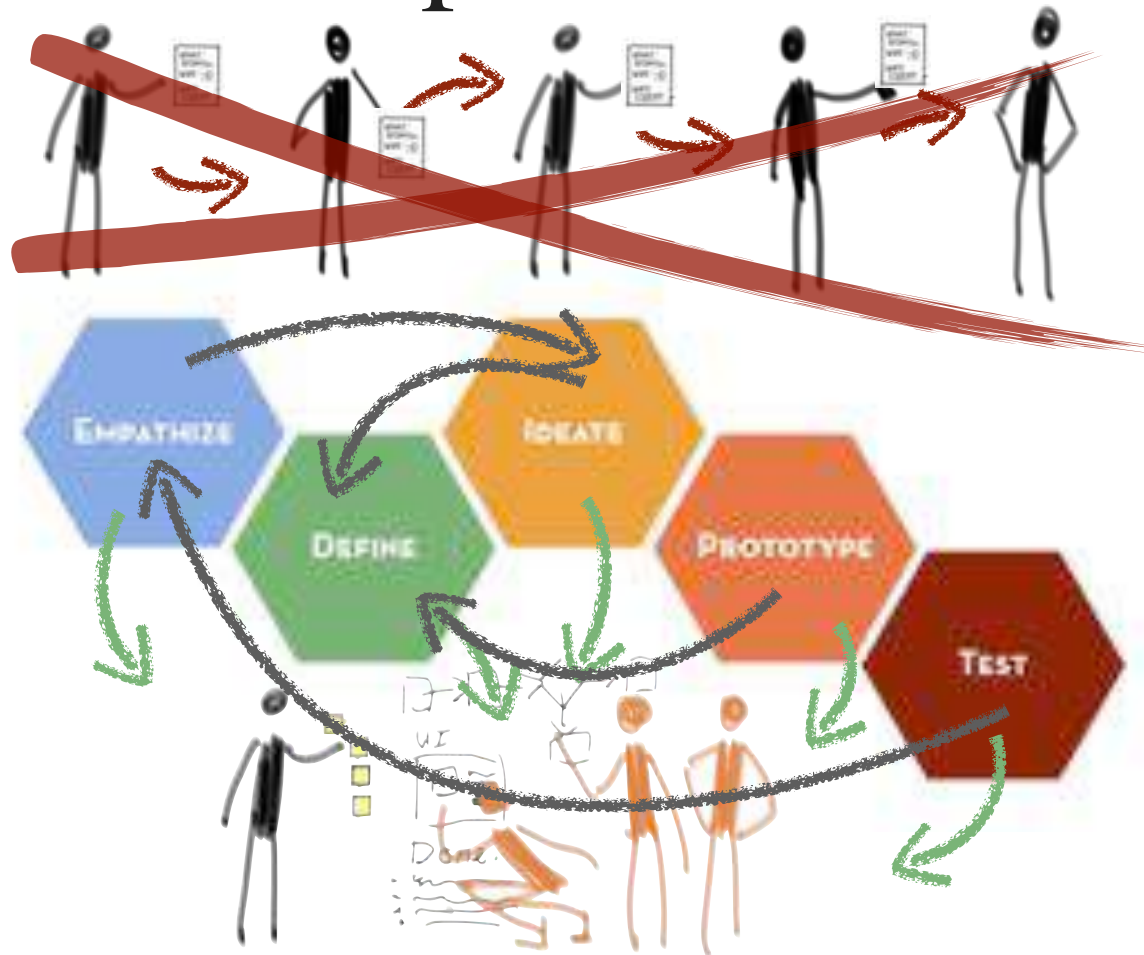
*Consider lots of possible solutions*

*Make sure it'll work before investing big*

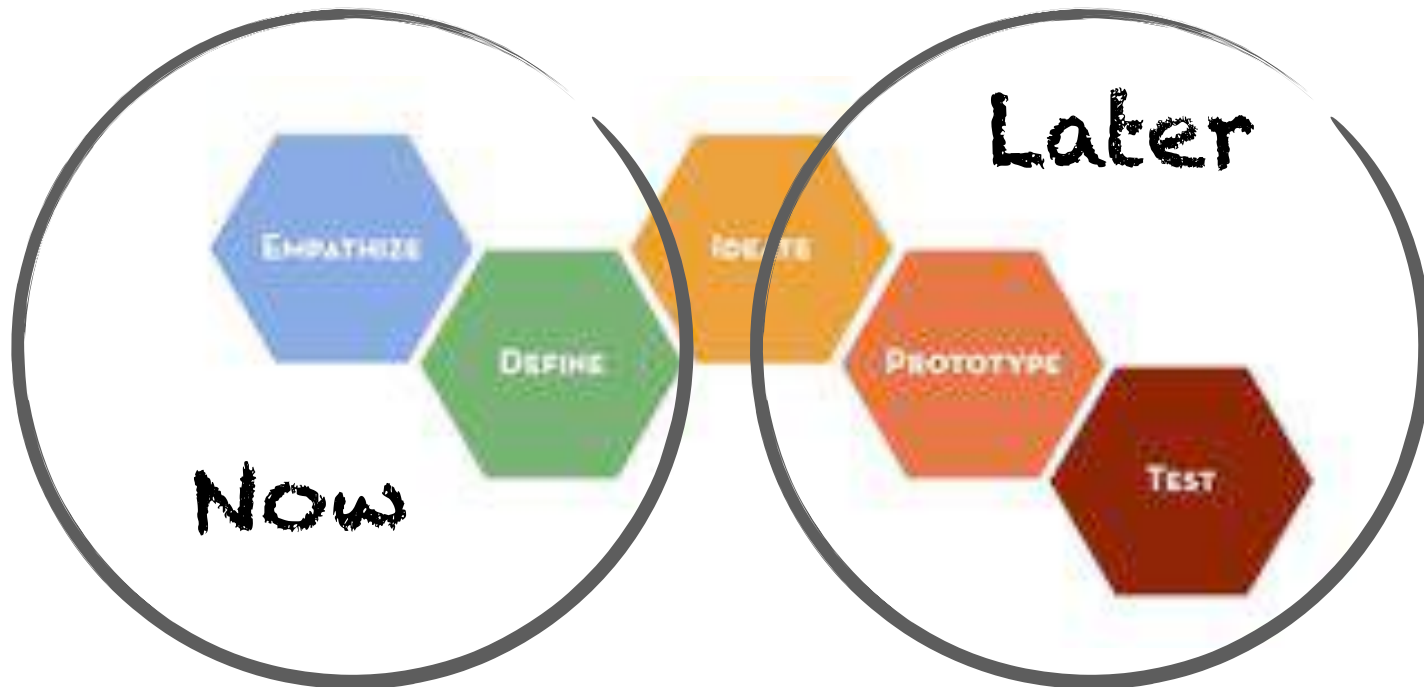
There is nothing more uncommon than common sense.

Scottish Mathematician  
Thomas Chalmers

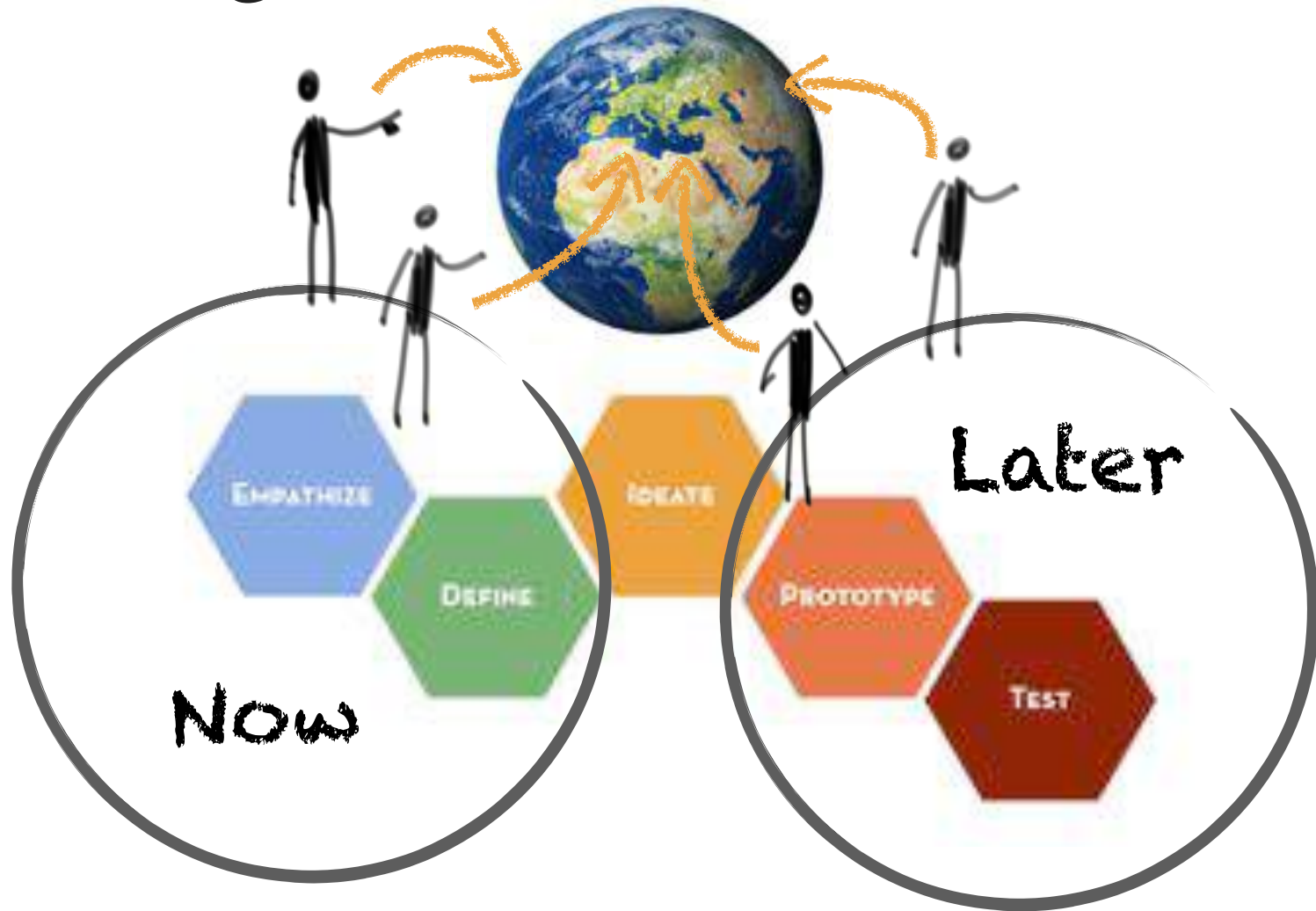
# Different ways of thinking - NOT process roles, hand-offs, sequence and phases



# Study the world now, imagine and test the a new future world



# Learning happens outside the building



# UX Designers act as experts and guides



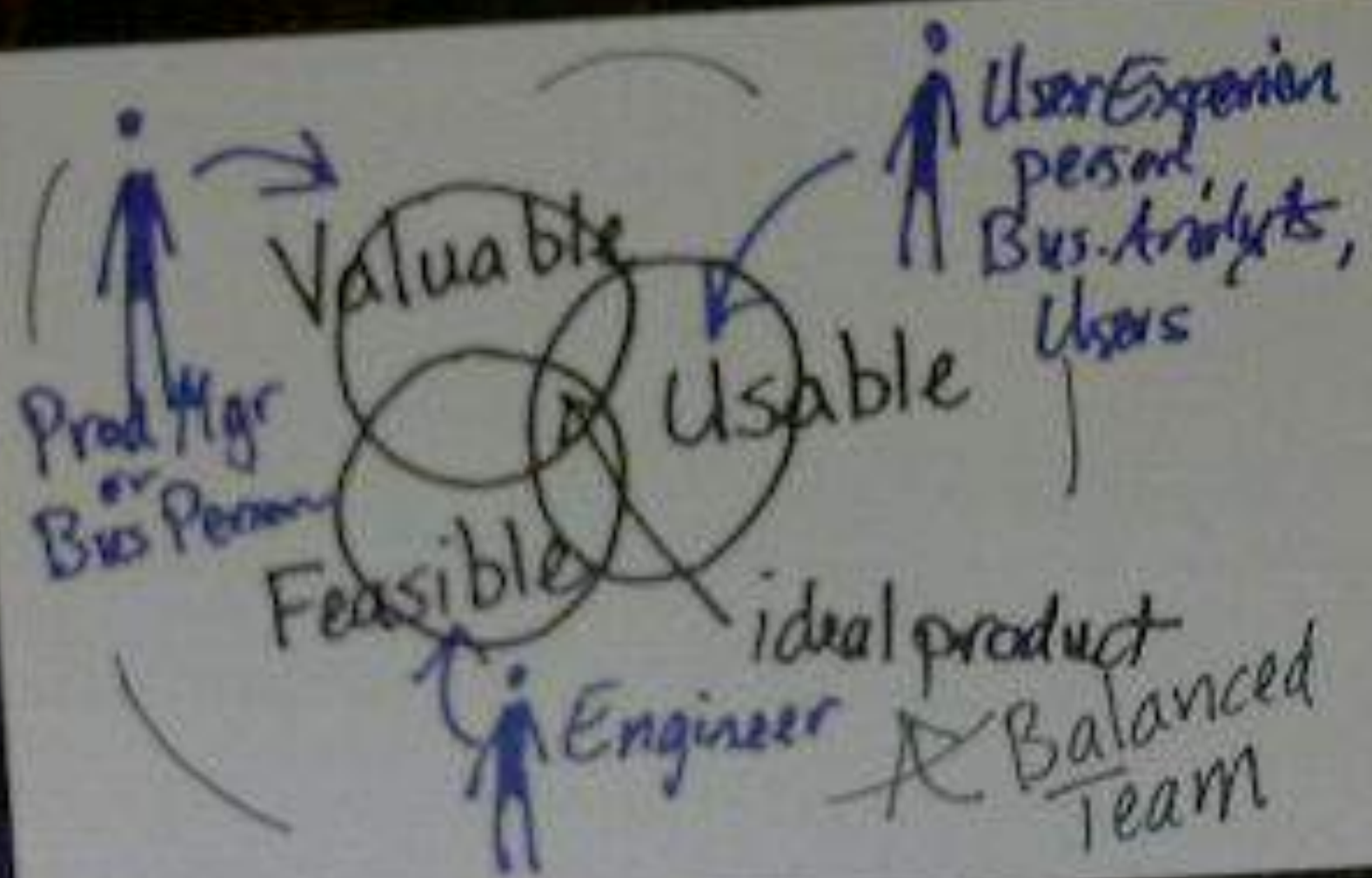
*“Design isn’t a product that designers produce, design is a process that designers facilitate.”*

*-- Leah Buley*

**Leah Buley**

[www.adaptivepath.com/aboutus/leah.php](http://www.adaptivepath.com/aboutus/leah.php)







Who will I blame if this doesn't work?

Who will I blame if this doesn't work?



Who will I blame if this doesn't work?

Who will I blame if this doesn't work?

Share understanding,  
not documents

Often when we verbally discuss ideas, we may incorrectly believe we have the same understanding



"I'm glad we all agree then"

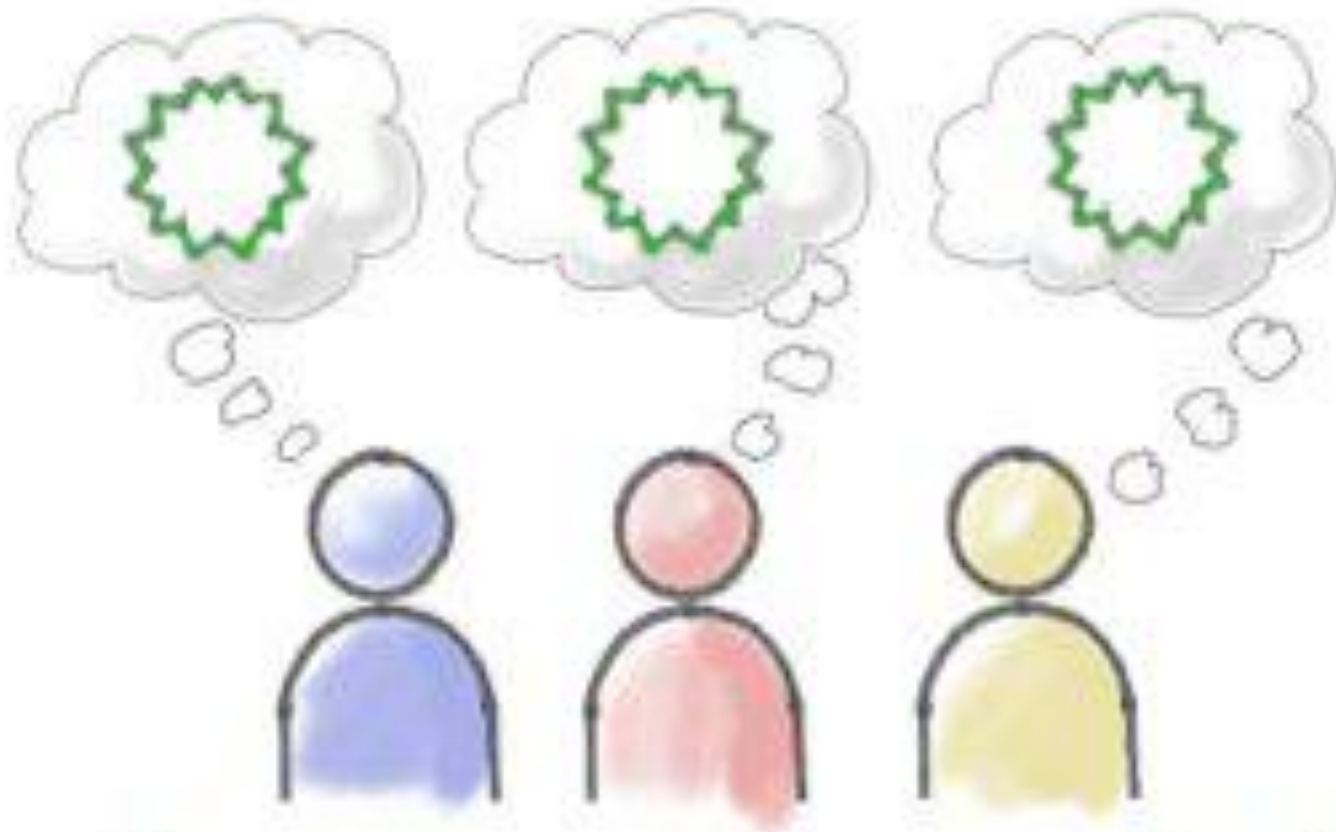
Representing our ideas as models allows us to detect inconsistencies in our understanding



Through discussion and iterative model building we arrive at a stronger shared understanding



Using that **shared understanding** we can work together to arrive at the same future world



"I'm glad we all agree then"



# Shared understanding is the result of successful collaborative work





# Words and pictures help everyone build shared understanding



# GameStorming is a good manual for effective collaborative work



Having a business meeting without artifacts and meaningful space is like meeting blindfolded with your hands behind your back. Yes, you can do it, but why would you want to?



# Shared understanding takes space

“Make Space” is the term coined by the Stanford Design School to describe effective collaborative workspace

Space to model and draw:

- Walls and whiteboards
- Tabletops

Flexible discussion & seating space

Places to store the artifacts created during discovery work





# Shared understanding takes space

“Make Space” is the term coined by the Stanford Design School to describe effective collaborative workspace

Space to model and draw:

- Walls and whiteboards
- Tabletops

Flexible discussion & seating space

Places to store the artifacts created during discovery work



A large work area in the Stanford d.school supports many small design teams.

# Virtual Make-Space?

# 4

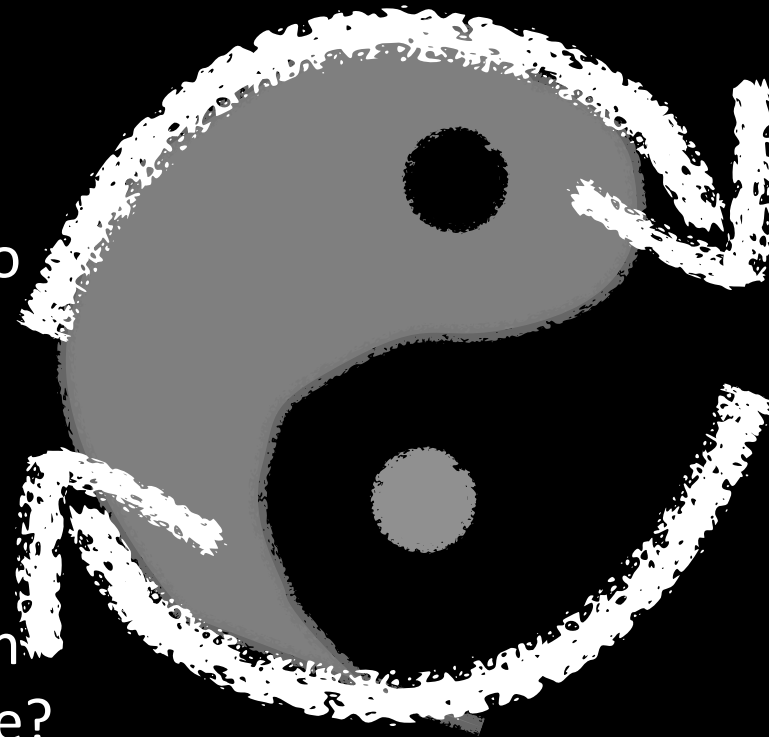
Deliberate discovery  
drives delivery

# Discovery compliments delivery

## Discovery

Use discovery to answer big questions

- What problems are we solving?
- What solution do people want?
- Can people effectively use our solution?
- Can we build it in the time we have?



## Delivery

Use delivery to execute

- Plan the details
- Design, develop, and test
- Measure development speed
- Evaluate progress
- Evaluate quality



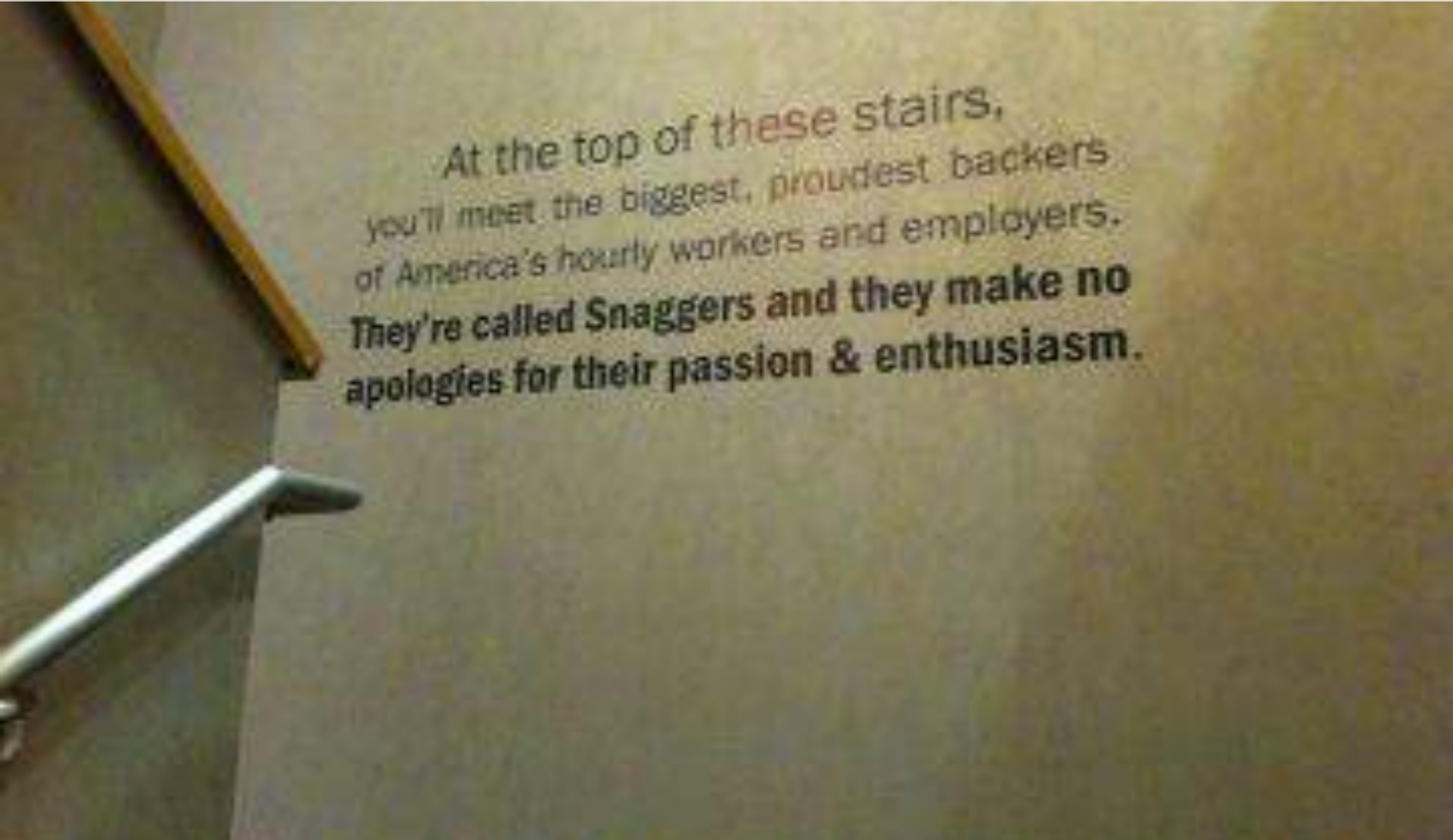
Morale suffers when  
all we do is build software.

The thrill of building  
something fast, measuring it well,  
and debating the results and planning  
next steps make the whole effort  
worthwhile.



Tom Illmensee  
snagajob.com

As you walk up the stairs at Snag-a-job, you'll see the first evidence of company values

A photograph of a wall with a message about company values at a staircase. The wall is a light, neutral color. The text is printed on the wall, following the angle of the stairs. The text reads: "At the top of these stairs, you'll meet the biggest, proudest backers of America's hourly workers and employers. They're called Snaggers and they make no apologies for their passion & enthusiasm." The word "Snaggers" is in a larger, bold font. A metal handrail is visible on the left side of the frame, and a wooden trim piece is at the top left.

At the top of these stairs,  
you'll meet the biggest, proudest backers  
of America's hourly workers and employers.  
**They're called Snaggers and they make no**  
**apologies for their passion & enthusiasm.**

DON'T FORGET TO  
tip, thank & high-five  
AMERICA'S HOURLY WORKFORCE.

Head down the stairs and you'll get an informal reminder of the importance of users of the company's product

Caring about their users is part of their DNA

Discovery teams build shared understanding of:

- the present problems
- the future world
- the solutions we think will get us there



# Discuss and model to build shared understanding of the current and future world



Gary Levitt, owner & designer of Mad Mimi



# Story Maps help us build shared understanding about the future world

*product goals*  
(why build the product)

*users*  
(what are their goals)

*backbone*  
(gives structure to the map)




*workflow*  
(from the user's perspective)

*details*

- smaller steps
- alternative steps
- UI details
- technical details

Gary Levitt, owner & designer of Mad Mimi

# Simple lightweight pragmatic personas build shared understanding about users

<h3>Margarette - Johnny Reader</h3> 		<h3>Stanley - Funeral Director</h3> 		<h3>Rachel - Next of Kin</h3> 			
<p>Holland, MI Obsessed with social networks and social children reads the national paper works at church social network lived in Holland for 20 years</p>		<p>Smith Family Funeral Home One of 3 funeral directors 1 full time support person 1 part time 250 friends &amp; work</p>		<p>Next of Kin Father, who lives in FL Mother is just alive She has diabetes &amp; is on insulin &amp; is on a diet</p>			
<h4>Objectives</h4> <ul style="list-style-type: none"> <li>Know when people in her social network post</li> <li>Know how to respond - what to do and not do it</li> <li>Know to read a good story about someone who passed</li> <li>Search for 5-10 members of family</li> <li>Share stories possibly of what passed &amp; how</li> </ul>		<h4>Values</h4> <ul style="list-style-type: none"> <li>Super on a daily basis, knowing when people in her social network have passed</li> <li>Think how to help her clients about how to do it</li> <li>Provide an organized experience knowing about the loss of someone someone who passed</li> <li>Help her read for someone someone who has passed</li> </ul>		<h4>Objectives</h4> <ul style="list-style-type: none"> <li>Know in what a cabinet or information should</li> <li>Early get the stuff in all the places it needs to be</li> <li>Someone to prepare for when he/she is someone from that family</li> </ul>		<h4>Values</h4> <ul style="list-style-type: none"> <li>Right how some members make it easy to run the show</li> <li>Simple means of placement</li> <li>High how something is up health</li> <li>High how get it done quickly so he can do other things</li> </ul>	
<h4>Objectives</h4> <ul style="list-style-type: none"> <li>Celebrate her father in honor his wishes</li> <li>Know what to do so she can be the right thing</li> <li>Get the right things from a funeral home</li> <li>Tell the story of her father life</li> </ul>		<h4>Values</h4> <ul style="list-style-type: none"> <li>Get the right guidance to be a right person at the right time</li> <li>Get a right - so someone can help her properly</li> <li>Make good decisions</li> </ul>					



# Building them together helps us learn what we don't know



Sharing and talking about them with whole teams builds shared understanding



# You'll need face time with real people to understand





# You'll need to leave your office and visit theirs



Go where the people you're helping work





Go where the people you're helping work



# Go where the people you're helping work





Go where the people you're helping work



Go where the people you're helping work



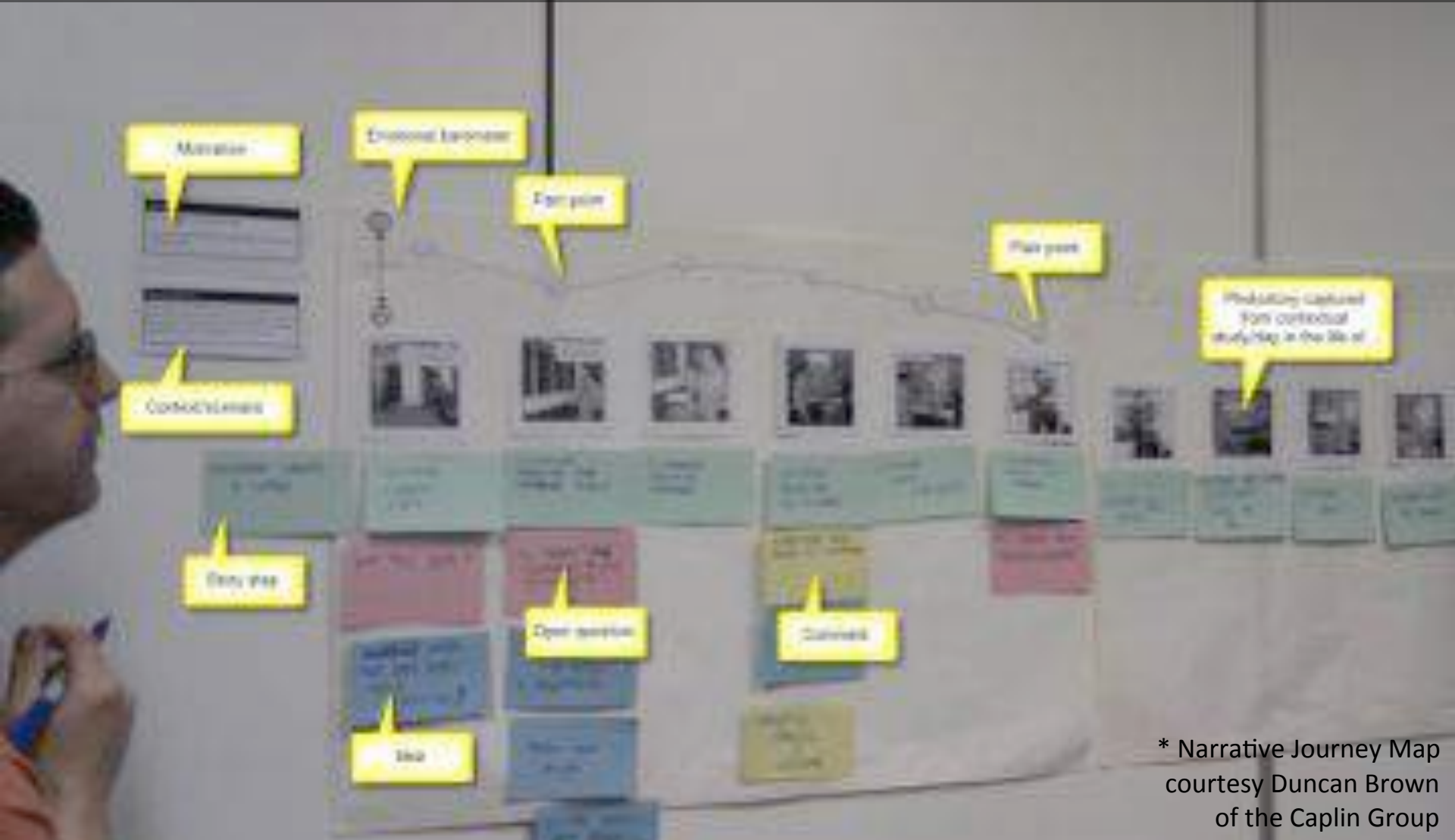


# Map what you learned to build shared understanding of today's world



\* Narrative Journey Map  
courtesy Duncan Brown  
of the Caplin Group

# Journey maps describe today's world



\* Narrative Journey Map  
courtesy Duncan Brown  
of the Caplin Group

# Building a map together helps us explore the whole product



Talking with end users over a story map drives discussion they can engage in



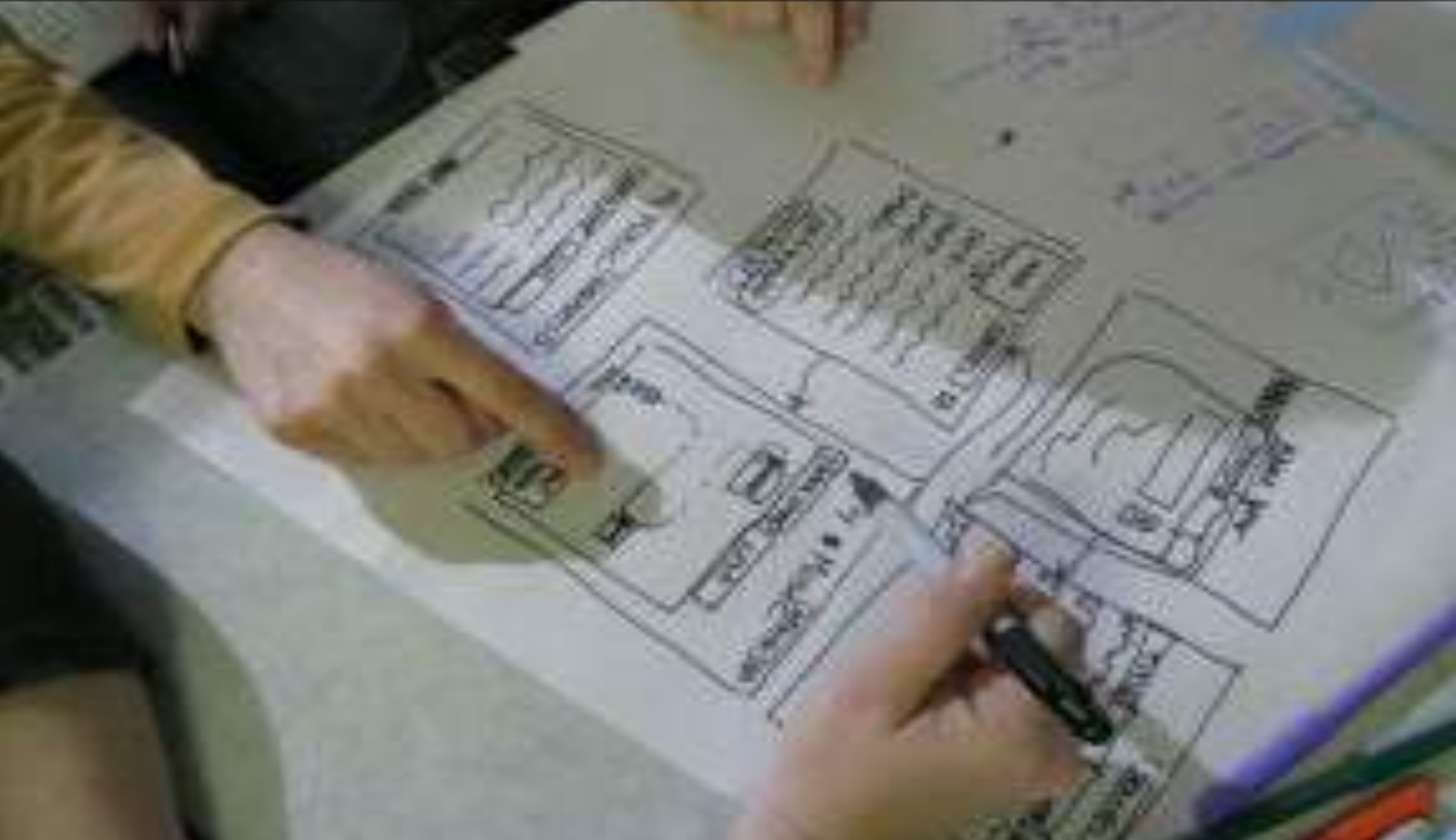


# Story maps put problems and solutions into context





# Words aren't enough



Everyone participates in sketching  
solution idea



Take a little quiet time and sketch independently





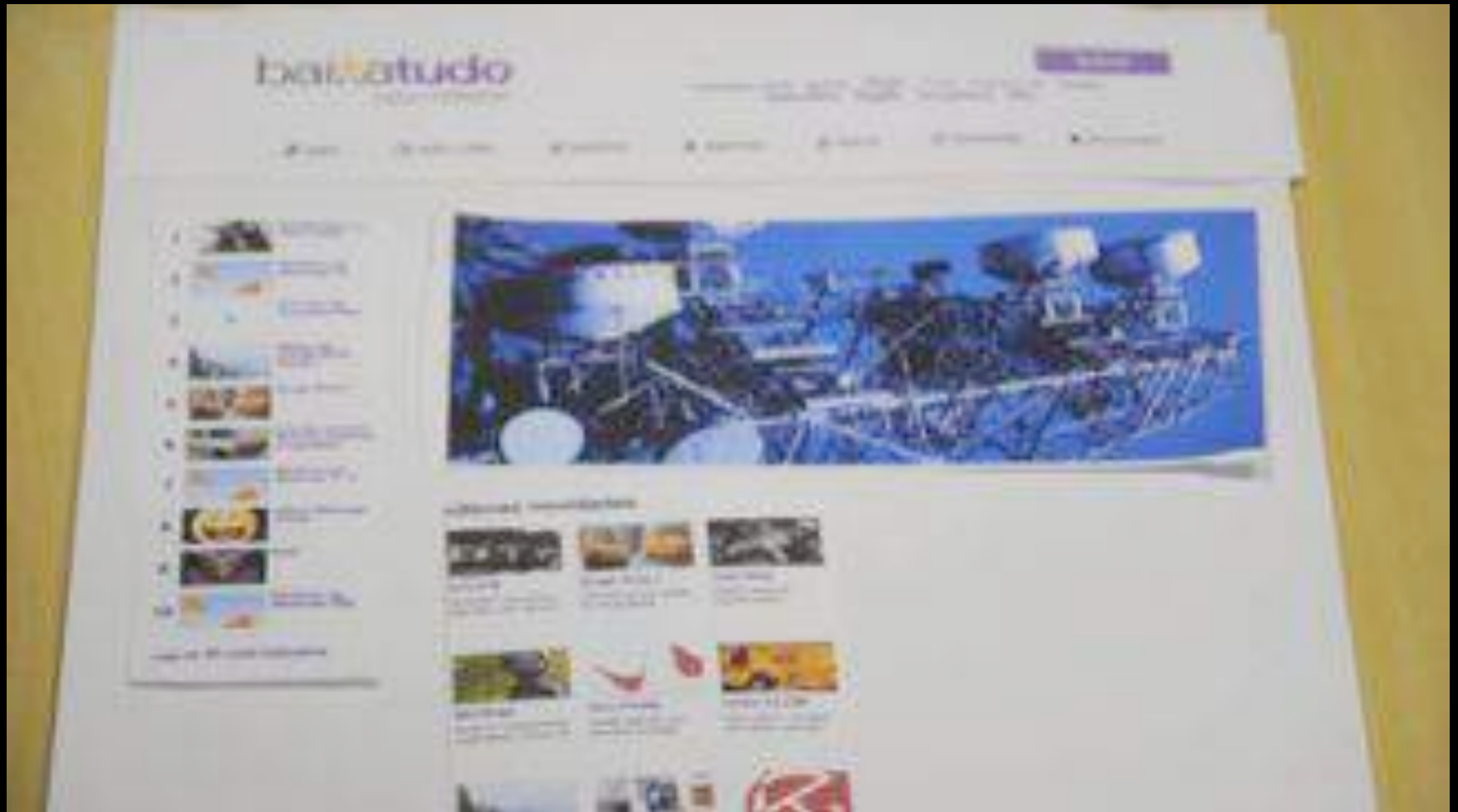
# Share back ideas with the everyone



# Words and pictures help everyone build shared understanding

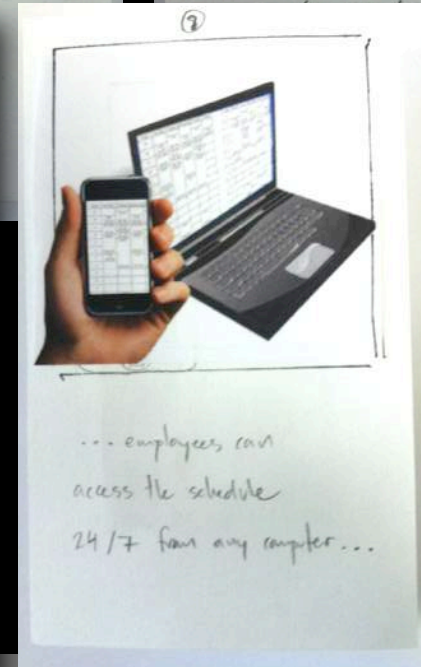
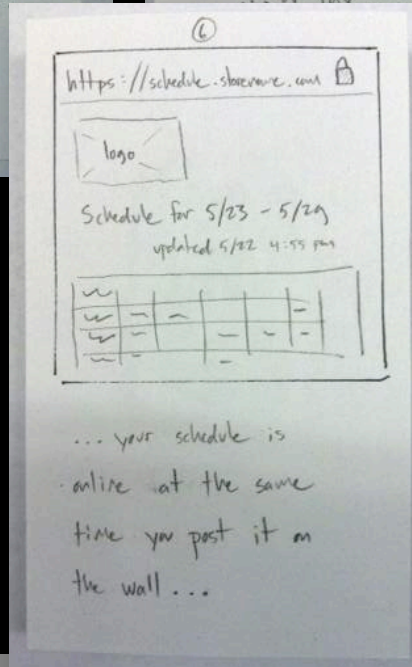
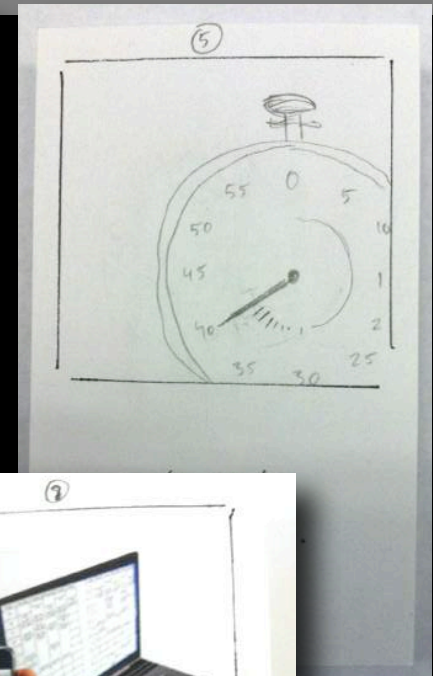
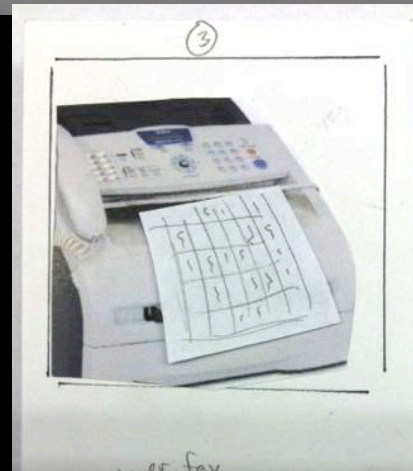
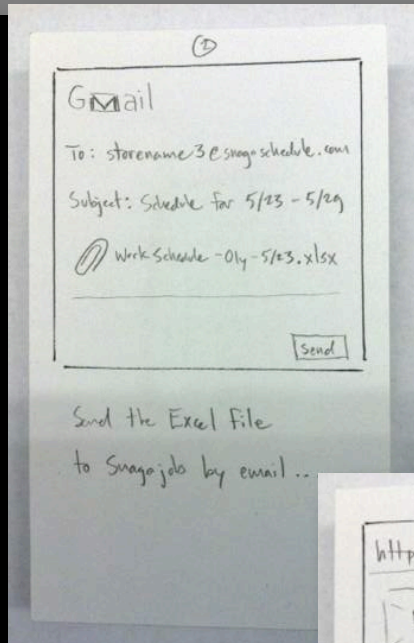
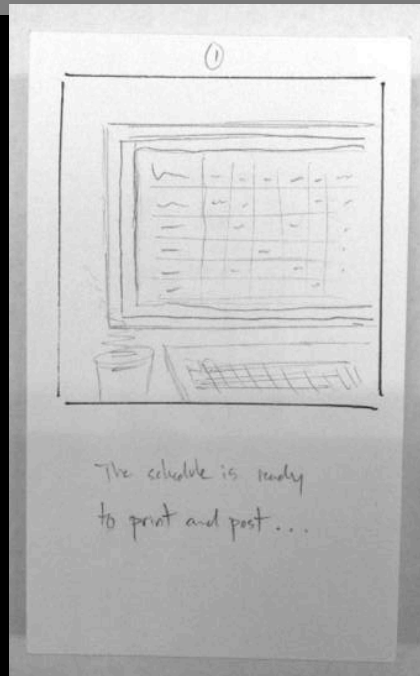


# Globo.com doesn't stop with words





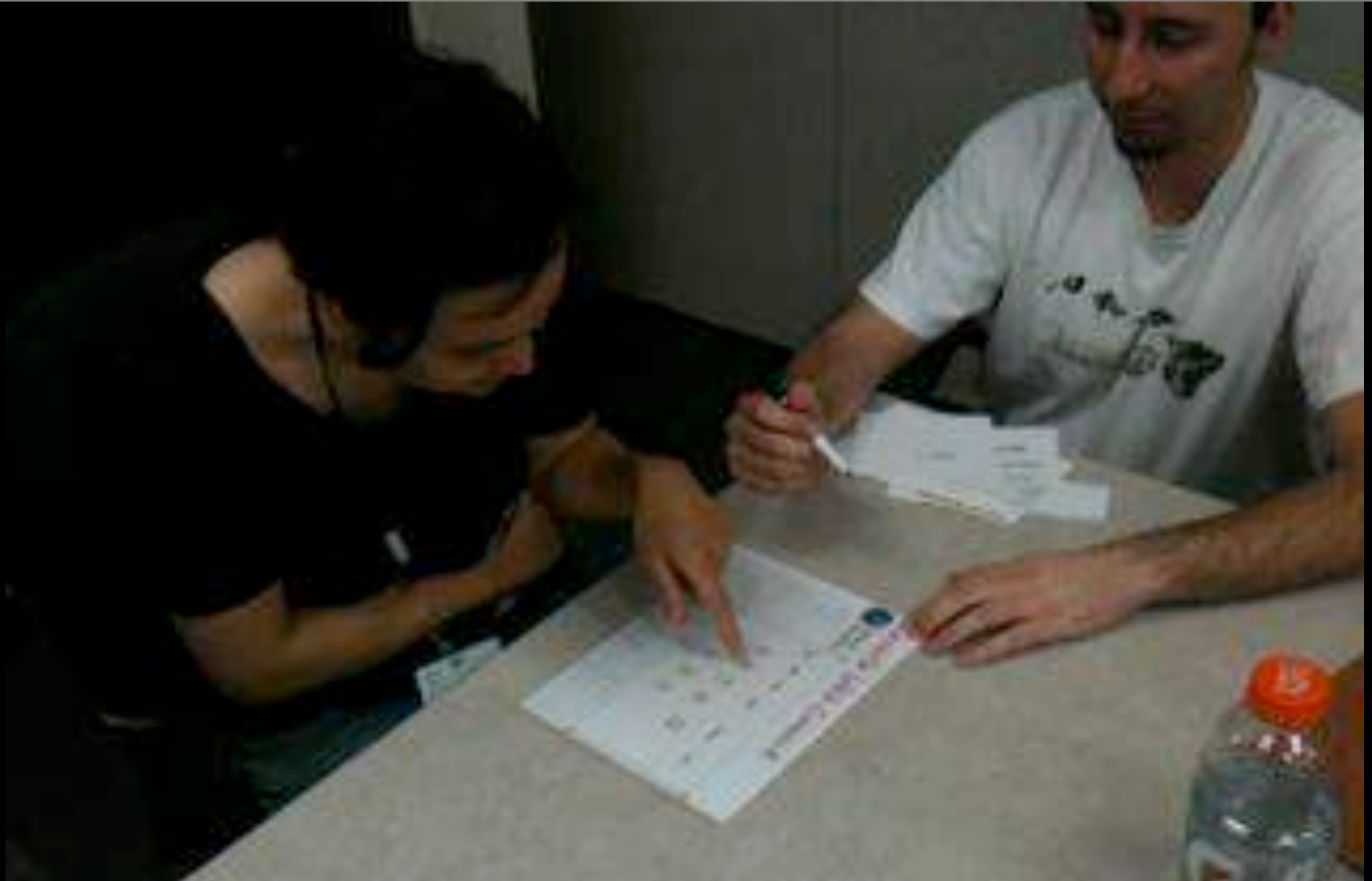
# Use storyboards to imagine user experience “later”



## Snag-a-Job lo-fi storyboard



# Don't just imagine experience, test it



# Tell your product's story over and over



# Edmunds shares the product's story for all teams in an internal "trade show"





# Edmunds shares the product's story for all teams in an internal "trade show"





# Edmunds shares the product's story for all teams in an internal "trade show"



# Edmunds shares the product's story for all teams in an internal "trade show"

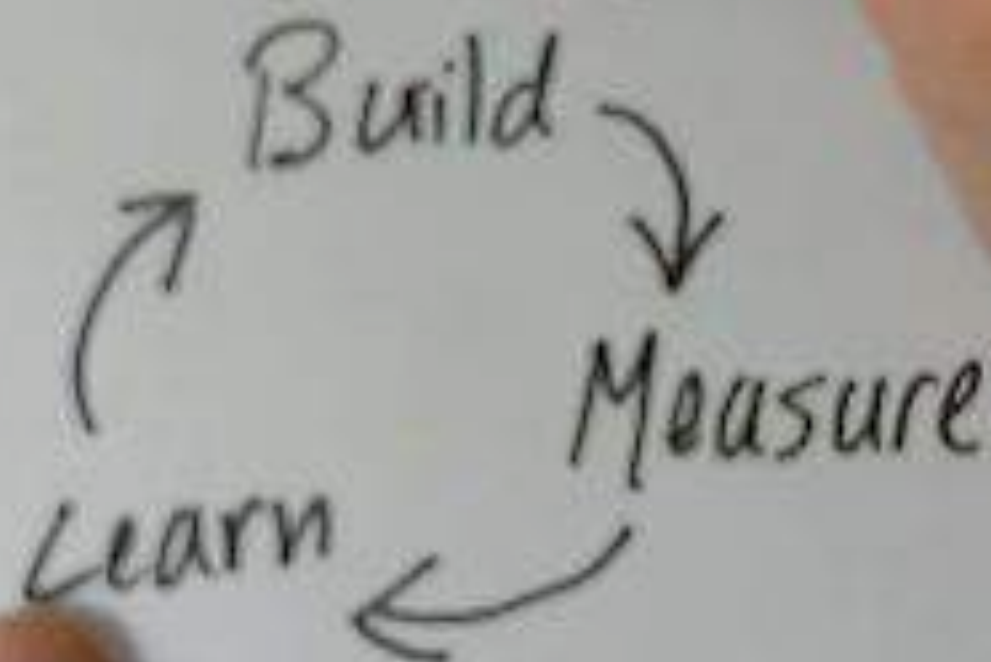


MVP = minimal  
viable  
product

1. Smallest viable product  
for a target market



# Lean Startup Cycle





Lean Startup's

MVP<sub>2</sub> = minimal  
viable  
product

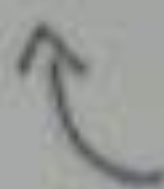
[experiment]  
2. Smallest viable experiment  
to validate a product concept

Release

Build →

Measure

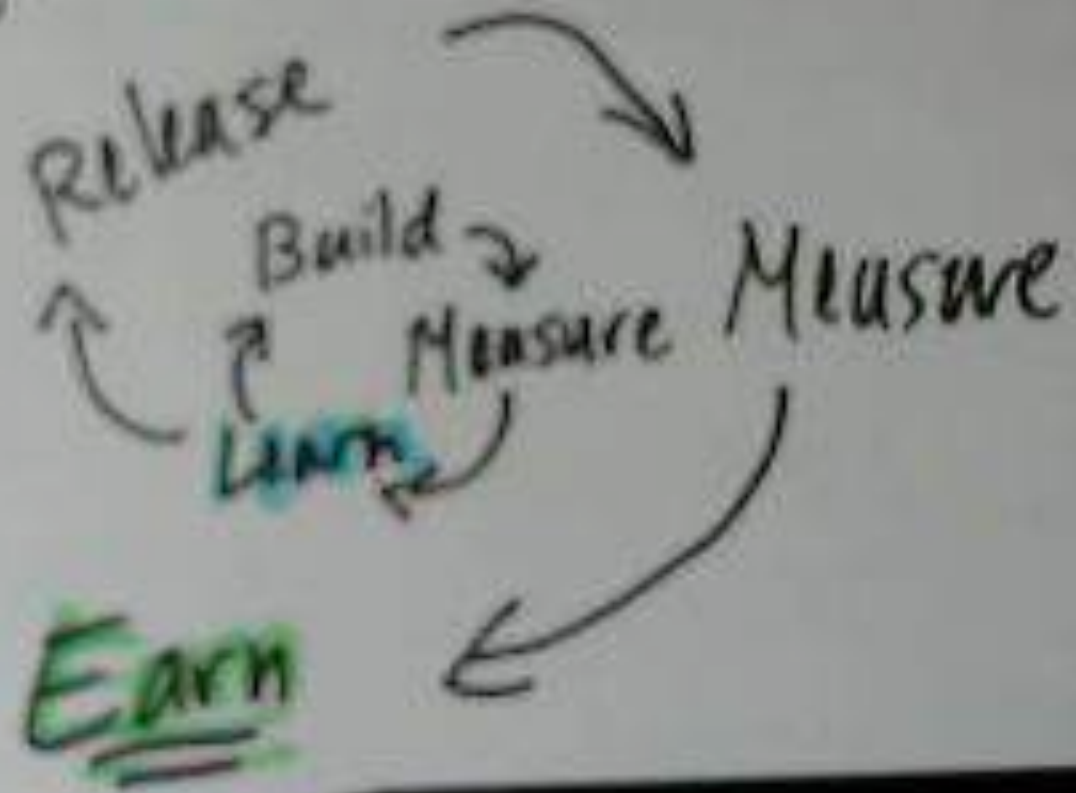
Learn



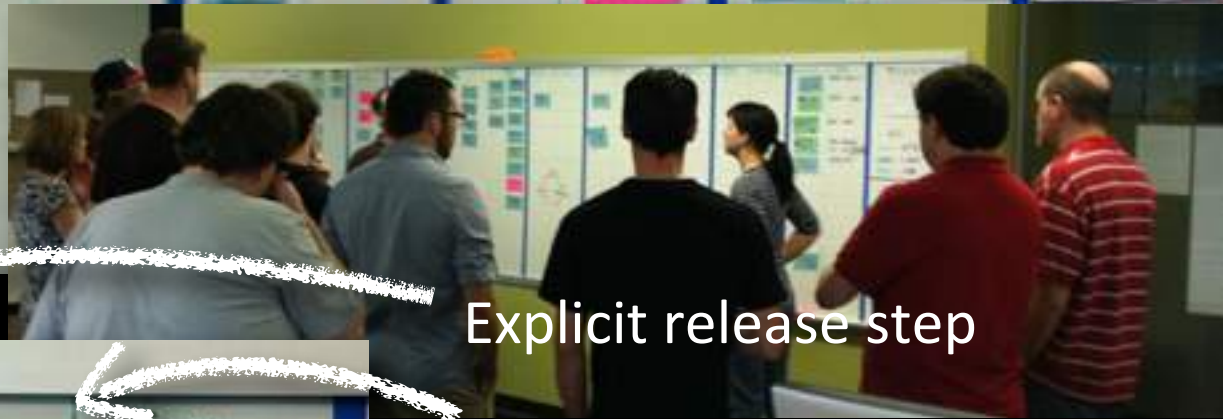
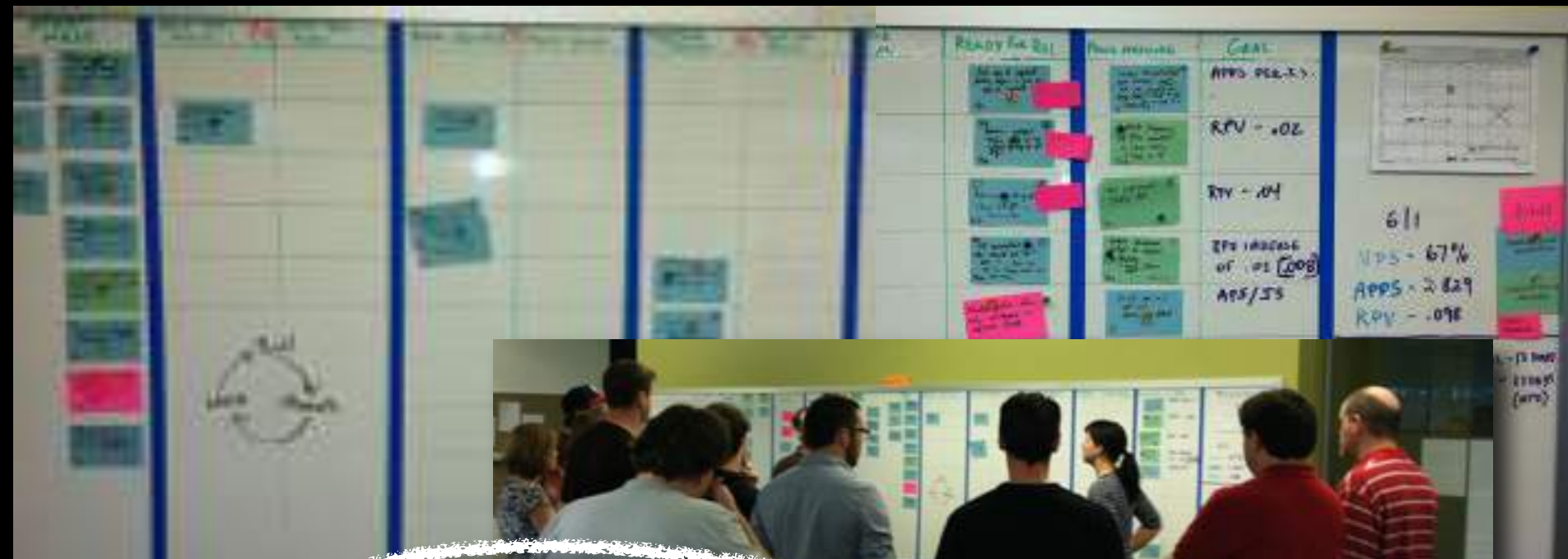


LS Loop Inside the Market Value

Loop







Explicit release step

Explicit measure step & metrics

Nothing leaves the board until there's been a discussion on what we've learned



Snag-a-Job's board courtesy of David Bittenbender

# Nordstrom Innovation Lab's Learning Loop



<http://www.startuplessonslearned.com/2011/10/case-study-nordstrom-innovation-lab.html>



# Nordstrom Innovation Lab's Learning Loop



<http://www.startuplessonslearned.com/2011/10/case-study-nordstrom-innovation-lab.html>

# Nordstrom Innovation Lab's Learning Loop



<http://www.startuplessonslearned.com/2011/10/case-study-nordstrom-innovation-lab.html>



# Nordstrom Innovation Lab's Learning Loop



<http://www.startuplessonslearned.com/2011/10/case-study-nordstrom-innovation-lab.html>

# 5

## Reality bites



Your guesses about the future are probably wrong

Typically about 50% to 80% of all software we ship fails to accomplish it's objectives.

People like Marty say this stuff is hard  
(Marty Cagan, author of **Inspired**, How to Create Products Customers Love)

We're probably  
right about 2 times out of 10

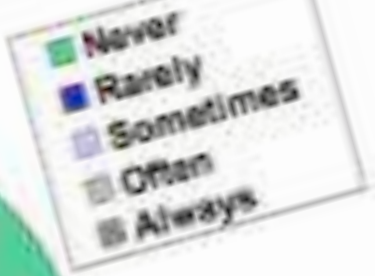
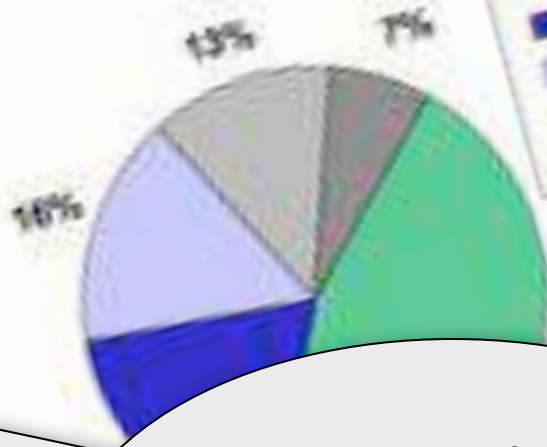




# Is it as simple as building only the features people will use?

THE  
STANDISH  
GROUP

## Features & Function Usage



“Clippy” - Boomed off the Microsoft Office stage as seldom-used and often despised.

It seemed like a good idea at the time....

# It's only after delivery that we really understand value

opportunity:  
integrated music  
management and  
portable music  
player



If you think writing code is  
hard, try making product  
decisions



Scene from The Matrix © 1999 Warner Bros Pictures



Everyone's focused on winning now Snag-a-Job can actually keep score



**snagajob.com**<sup>™</sup>

Snagajob's been trying to crack the  
same tough problem for close to a  
year now

Most of Nordstrom's weekly  
experiments don't result in rolling  
out a new product

Edmunds.com has built, tried, and  
thrown away dozens of ideas

Everyone's  
working directly with our  
clients now

What we're doing  
really matters

We've found  
simple ideas that now  
generate millions in  
revenue every year

When there's  
problems, teams dig in, and  
figure out a schedule to stay and  
solve problems. No one asks  
them to.

People are just  
happier

The new site  
generates the same revenue  
with a fraction of the features  
and code - and our customers  
like it better

What team members  
say is telling



“It’s not easy. We’ve got lots  
of problems.

But there’s no going back.”





# Co-Making Great Products

How whole teams work together to find problems, invent solutions, and deliver great products

# Questions?

Jeff Patton  
jeff@comakewith.us  
twitter: @jeffpatton