



# lean ux anti-patterns

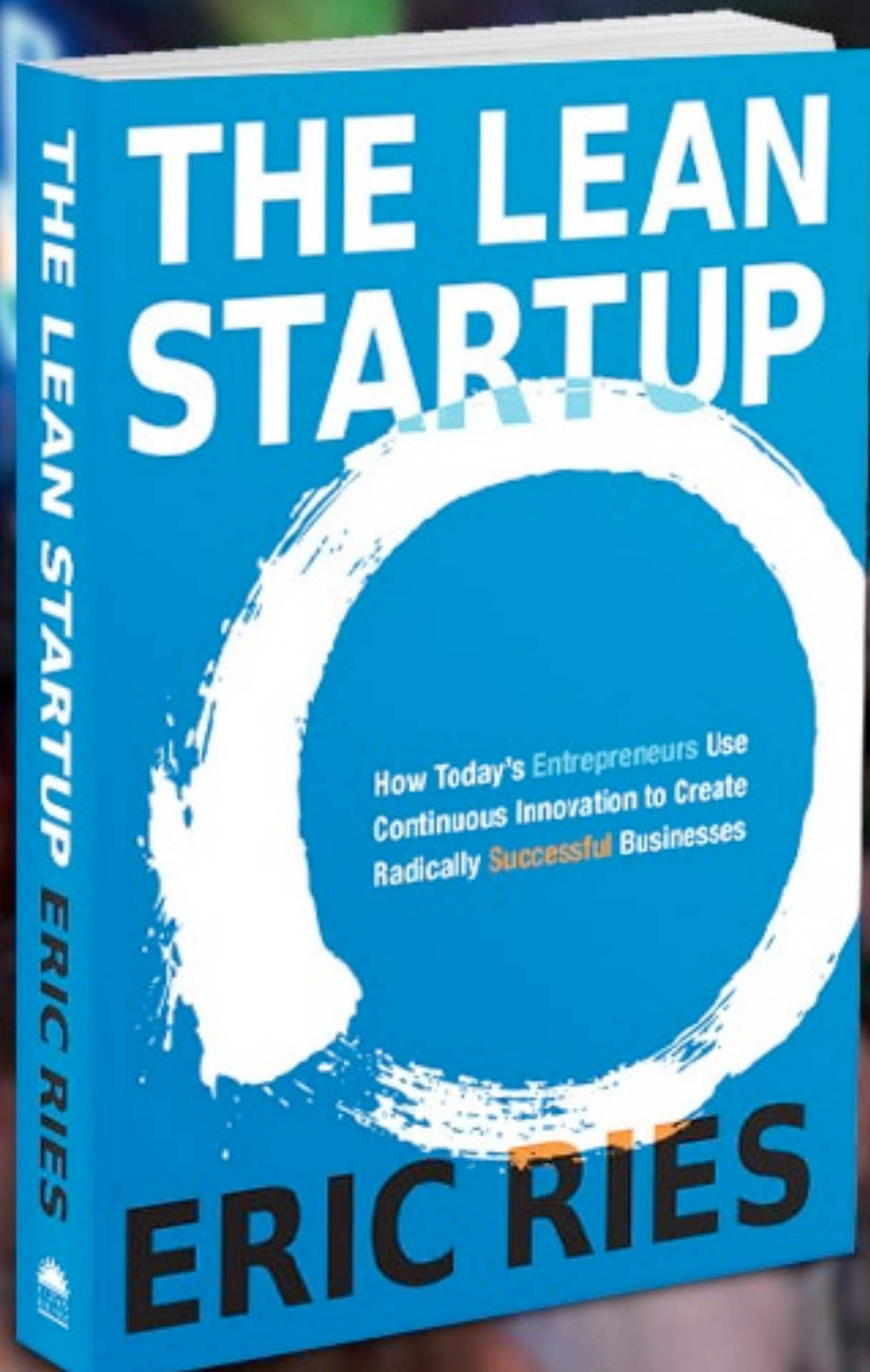
behaviors & situations that can stifle lean teams

**@billwscott on twitter**

bill scott. sr. dir. user interface engineering @paypal

webvisions. sept 26, 2013. chicago.





# lean startup

founded on **build/measure/learn**

get out of the building (GOOB)

invalidate your risky assumptions

go for the minimal viable product (**MVP**)

fail fast, learn fast

get to the **pivot**

# lean ux

designing products for build/  
measure/learn (**lean startup**)

requires 3 rules to be followed at  
all times

get to & maintain a **shared  
understanding**

form **deep collaboration**  
across disciplines

keep **continuous customer  
feedback** flowing

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THE LEAN SERIES

Jeff Gothelf with Josh Seiden

# LEAN UX

Applying Lean Principles to  
Improve User Experience

O'REILLY®

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Eric Ries, Series Editor

# lean ux and paypal

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my journey in championing lean ux @ paypal





# what I came from

continuous customer  
feedback (get out of the  
building - GOOB)

customer metrics drive  
everything

think it. build it. ship it. tweak it

fail fast. learn fast.

lots of experimentation...  
build/measure/learn



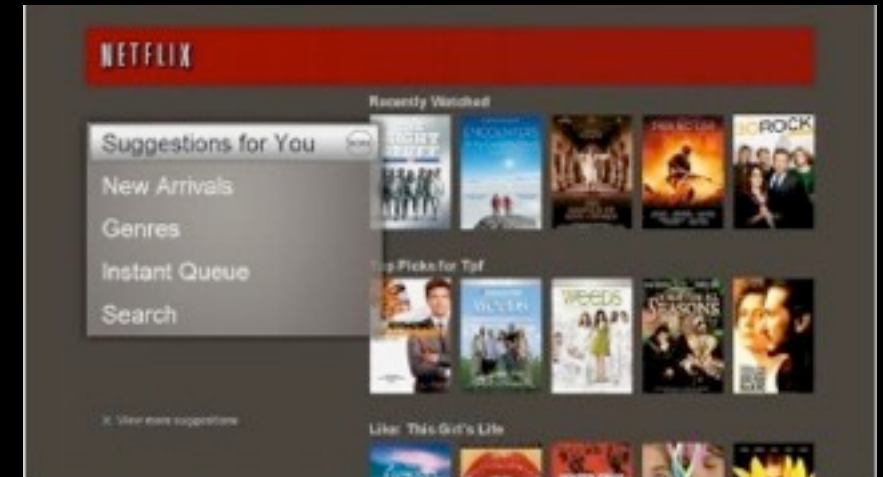
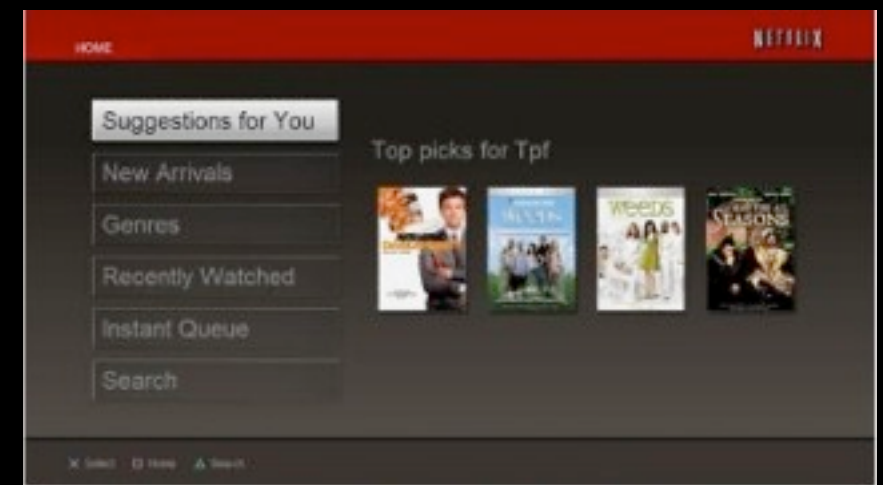
# launching the ps3 experience

16 different test cells

2 different tech blogs were simultaneously reviewing different experiences

focus was on build/measure/learn

*four  
different PS3  
experiences  
launched  
on same day*







NIGHT

AND



DAY

paypal vs netflix



paypal circa 2011

roll your own.

disconnected delivery  
experience. culture of  
long shelf life. inward  
focus. risk averse.



# new dna @paypal

january 2012

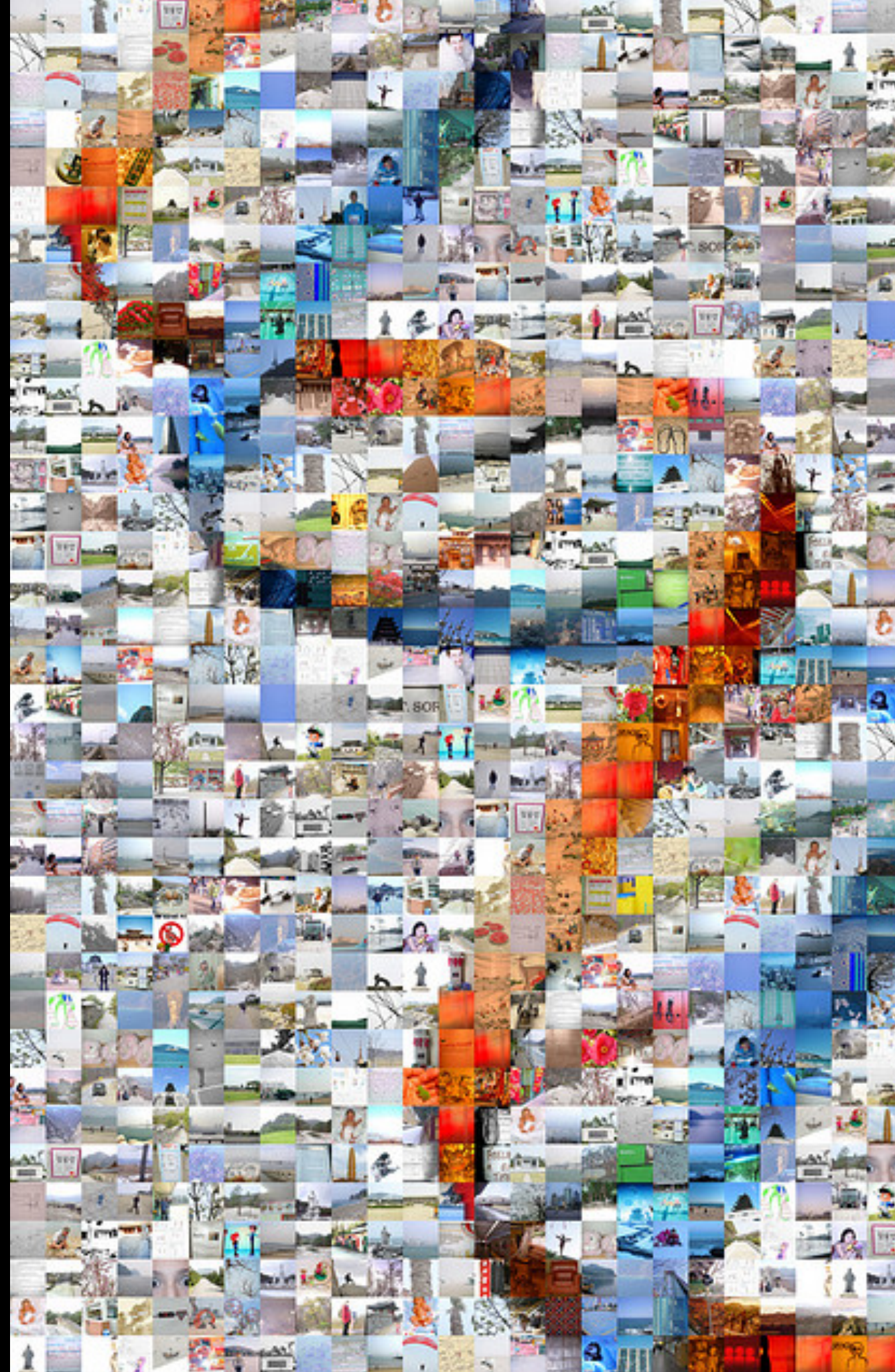
fleshed out ui layer that could  
support rapid experimentation

march 2012

david Marcus becomes president  
of PayPal

april 2012

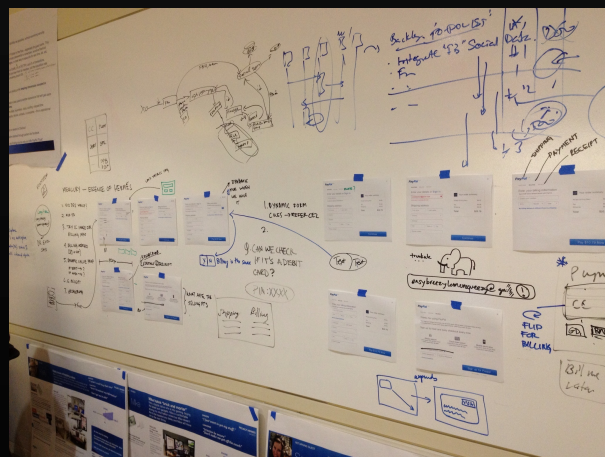
kick off of lean project





# hermes project

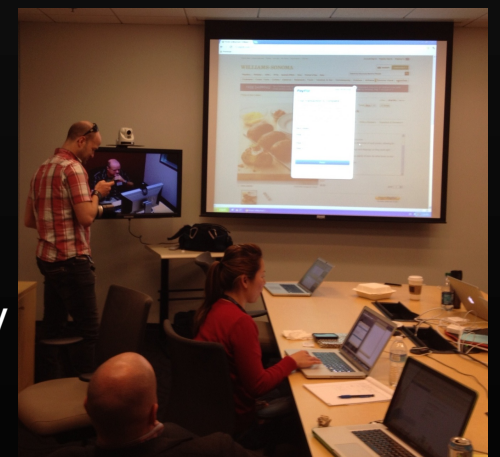
lean ux in action



whiteboard  
to code



code to usability



product/design/engineering teams

usability/  
customers



# before leanux

## Your order summary

Descriptions	Amount
Order Sub-Total	\$60.00
Item price: \$60.00	
Quantity: 1	
<hr/>	
Item total	\$60.00
Tax	\$7.80
Shipping and handling:	\$12.71
<hr/>	
Total \$80.51 USD	

## Review your information

[Continue](#)

### Shipping address [Change](#)

Valued Customer  
123 Street Dr.  
City, ST 12345  
United States

Note to seller: [Add](#)

### Payment methods [Change](#)

Instant Transfer : Chase Manhattan Checking (Confirmed) x-2458 \$80.51 USD

PayPal will use MasterCard XXXX-XXXX-XXXX-4472 to fund this transaction if your bank does not have enough funds.

☐ PayPal gift card, certificate, reward, or other discount [Redeem](#)  
View [PayPal policies](#) and your payment method rights.

### Contact information

valued\_customer@mail.com

[Continue](#)

You're almost done. You will confirm your payment on My Volusion Store.



# after leanux





# the anti-patterns

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lessons learned about what inhibits lean teams from thriving



A hand-drawn sketch on a piece of paper, showing a mechanical linkage system. The sketch includes a central pivot point with several lines radiating from it, some of which are labeled with numbers like '26', '27', '28', '29', '30', '31', '32', '33', '34', '35', '36', '37', '38', '39', '40', '41', '42', '43', '44', '45', '46', '47', '48', '49', '50'. There are also some handwritten notes like '26', '27', '28', '29', '30', '31', '32', '33', '34', '35', '36', '37', '38', '39', '40', '41', '42', '43', '44', '45', '46', '47', '48', '49', '50'. The sketch is drawn on a piece of paper that is slightly crumpled and has some other markings on it.

# genius designer

all design emanates from an huber designer. team doesn't collaboratively participate in design/ideation.

**solution:** Keep the inspiration of genius designer but bring in others to brainstorm. focus on MVP (minimal viable product) to test with customers immediately. critical to build team success early.



# tribal group

when a team is very small members are forced to work across disciplines. As soon as team gets bigger, tribes reform around skills. collaboration stops.

**solution:** keep team reasonably small. leaders in each discipline must form a tribe that works across disciplines. keep collaboration high.







# newcomer

lean teams will form shared understanding. however, when new "stranger" joins we assume this hard earned understanding will just happen.

**solution:** the team must immediately stop and initiate the newcomer. be patient, answer questions, reset vocabulary and enjoy the new voice in the team. get back to regular cadence.



# visitor

input from outside the team is essential. however, watch out. people cycling in & out of the team can cause the same disruption that the **stranger** anti-pattern causes. also known as swoop and poop.

**solution:** customer trumps visitor. take input. test early and often with customers. that is the only “visitor” that ultimately matters.







# naysayer

with collaboration so important it is key to believe in the process to create great products. a single naysayer can bring the team down in an instant.

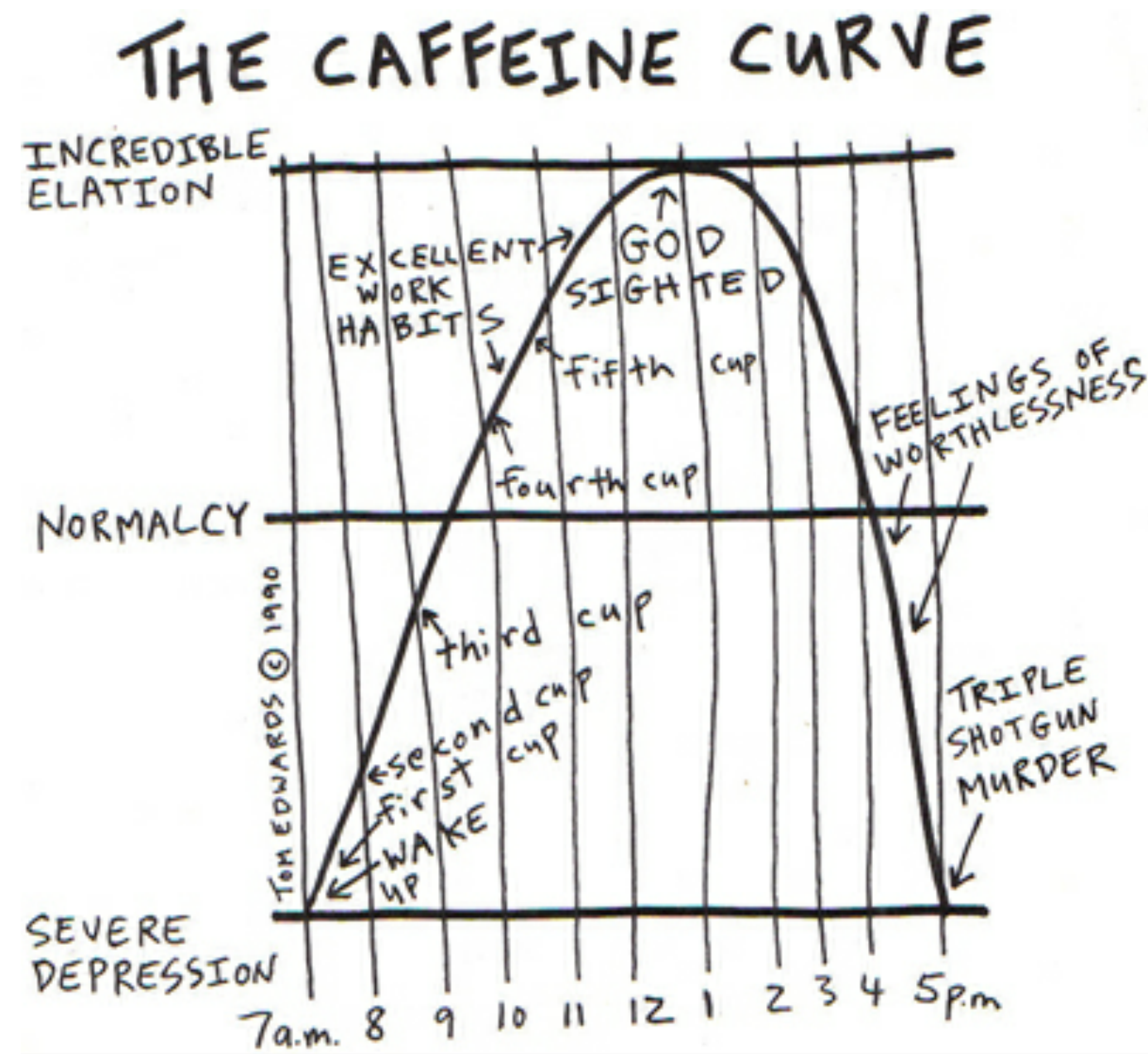
**solution:** the naysayer must either learn new techniques or leave the team. often they have valid concerns. channel that energy convergence time not divergence thinking.



# bad habits

teams will often make a good start by trying out new behaviors and seemingly leave old behaviors behind. beware! old habits will creep back in.

**solution:** you must do it long enough and be successful long enough to ensure team members internalize the new habits. build in checks and balances that enforce new habits.







# magic tools

design & prototyping tools can accelerate ideation and design. however, be careful, tools that empower prototyping can enable designers to work in isolation.

**solution:** use tools as means to collaborate. never revert to “delivery” model of design. sketching is a real key to encourage collaboration. also “design in the wild” approach.



# INSTEAD, JUST USE THE WHITEBOARD

Yep. That's it

Don't have  
different deliverables  
for DESIGN ?  
ENGINEER

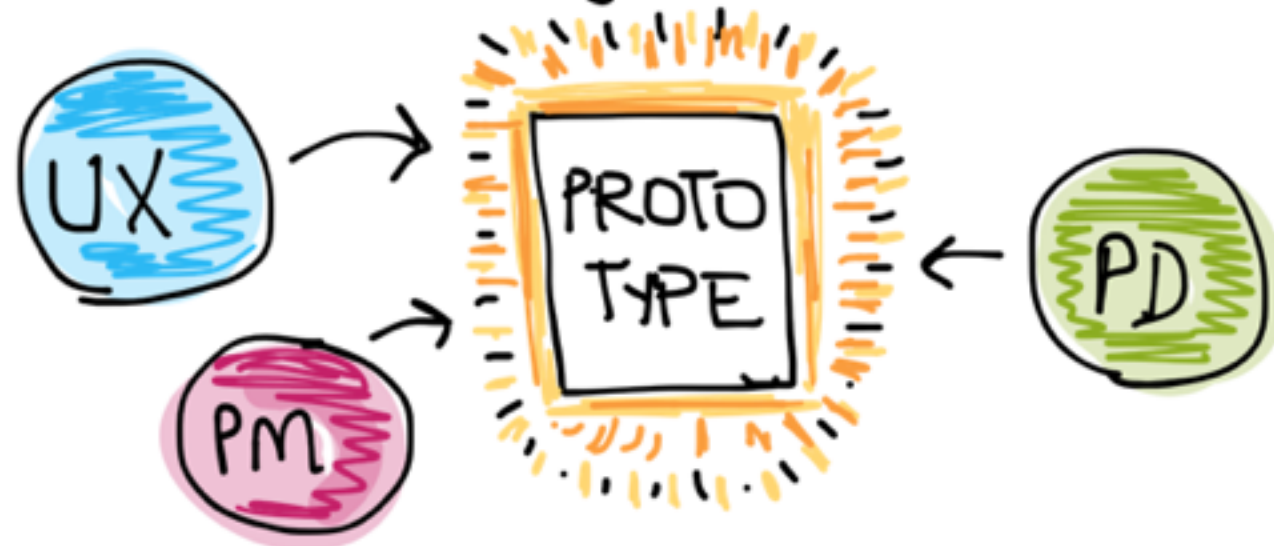


Is this  
all I  
really  
need  
to do?



DESIGNER

Instead, You're all  
working on 1 deliverable





# going dark

when a developer, product manager, or designer goes dark for more than a day (or two) the team is losing valuable collaboration.

**solution:** working in isolation is necessary from time to time. however, limit to short periods of time. make work continuously visible. balance individual productivity with group creativity





# change of cadence

change of cadence is actually a good and normal happening. however, whenever the rhythm changes it can bring productivity down.

**solution:** prepare the team for the change and quickly get focus and re-establish with new cadence.

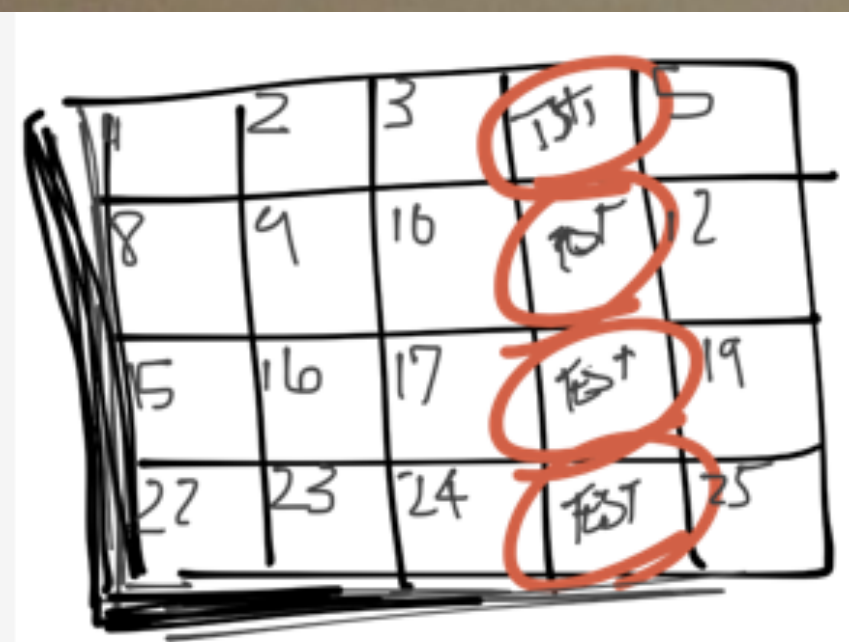




\* DO NOT ERASE \*

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
CO-located in ASTUTE	(all day) - Design - Content - Iterative Coding	(all day) Design Content - Iterative Coding  Hand-off	Feedback + Iterative Coding  ----- 4pm: Usability Delivery	9am Usability Session	1pm - 2:30pm 12:30am Usability Review  ----- 3pm What to build next week
INVOLVED	UGD UIG PO				

\* DO NOT ERASE \*



**typical weekly cadence**



# too many cooks

the work needs to be divided up among different types of cooks (Chef de cuisine, Sous-chef, Chef de partie)

**solution:** have clear decision makers in each discipline and have specific roles (you can also rotate these functions).





# not enough pizza

when a team suddenly scales up in size the team is in danger of losing cadence, shared understanding and focus

**solution:** keep teams to 2-pizza size. clear lines of responsibilities and laser focus for the team must be maintained.







**this is NOT the size of pizza I am talking about**



# tower of babel

shared understanding is key to lean ux. however, it is easy to assume too quickly that team members are speaking the same language

**solution:** always ask, “what do you mean by x?”. always ensure other disciplines understand your jargon. spend time with customers together.





# shared understanding

recognize teams come from different “worlds” and “languages”

Need a “vulcan mind-meld”



credit: Krystal Higgins <http://bit.ly/18uP7N1>





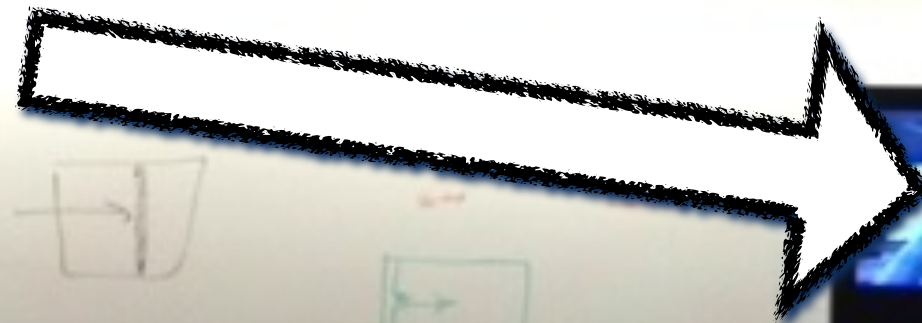
# you got mail

teams can revert to email over collaboration. also, geographically distributed teams can fall into delivery by email vs collaboration.

**solution.** utilize high bandwidth communication (face to face, hangouts, telepresence, magic whiteboards, etc.) balance: asynchronous communication is good.



# Cody-CAM





# inmates running the asylum

this is from Alan Cooper's classic book of the same title. when engineers drive design the inmates are running the asylum.

**solution.** front end engineers must partner with product/design and get out ahead of backend engineers (lean ux). experience debt is equally important to technical debt.







# perfectionist

not embracing the challenge of the unknown, the perfectionist will not share their work till it is perfect. easy for designers to fall into this trap.

**solution:** engineers must not judge rough designs, instead use as springboard for discussion. designers must realize iterative will yield better designs. sketching can break this mindset. make it easy to release experiences.



# weakest link

team members who aren't up to the challenge of close proximity & transparency can cause a team to stumble.

**solution:** talent acquisition must match this style of product delivery. must have freedom to replace talent. soft-skills are highly valued.







# the wall

walls between teams can happen when

- we allow tribes to form
- we see the other teams as separate delivery factories
- geo-distributed teams
- focus on documentation

**solution:** always work in small teams, collaborating not delivering and build shared understanding. challenge every hand-off point.





credit: Krystal Higgins <http://bit.ly/18uP7N1>



# tangled up technology

unless the technology stack is built to have a clear separation from experience & services the lean team cannot make rapid progress. watch out when dev teams care too much about the specific version of the UI.

**solution:** key patterns include building services, APIs and CLIs. Keep the services & UI separate. enable rapid experimentation.





# UI Bits

node.js

prototype &  
production  
stack

java  
(rhinoscript)

production  
stack

c++ stack  
(V8)

production  
stack  
(legacy)



# 3 key principles

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remember these to keep the anti-patterns away



# 1 shared understanding

the more understanding the less documentation

but this doesn't mean ZERO documentation

you need whatever is required to gain and maintain a shared understanding







# 2 deep collaboration

strong belief that ideas come  
from many different voices

trust is essential

all efforts never stray far from  
collaborative efforts



# 3 continuous customer feedback

this is the lifeblood of the  
team

gets rid of politics

turns a team outside-in





## blogs

<http://looksgoodworkswell.com>

<http://designingwebinterfaces.com>

## twitter

follow me on twitter **@billwscott**

## book



designing web interfaces  
O'Reilly

## picture credits

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