Agile + DevOps EAST

A TECHWELL EVENT

AT14

Agile Product Development
Thursday, November 8th, 2018 1:30 PM

How Design Thinking and Agile Can Be Friends

Presented by:

Mary Thorn and Ian Larson

Mary Thorn Consulting; Lionbridge

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Mary Thorn

Chief storyteller of the book The Three Pillars of Agile Testing and Quality, Mary Thorn is owner of Mary Thorn Consulting in Raleigh, NC. During her more than twenty years of experience with healthcare, financial, and HR SaaS-based products, Mary has held director, manager- and contributor-level positions in software development organizations. A seasoned leader and coach in agile and testing methodologies, Mary has direct experience building and leading teams through large scale agile transformations. Mary's special expertise is a combination of testing, DevOps, and agile scaling skills that her clients find incredibly valuable. She is also a frequent speaker, teacher and author. You can connect with Mary via LinkedIn.
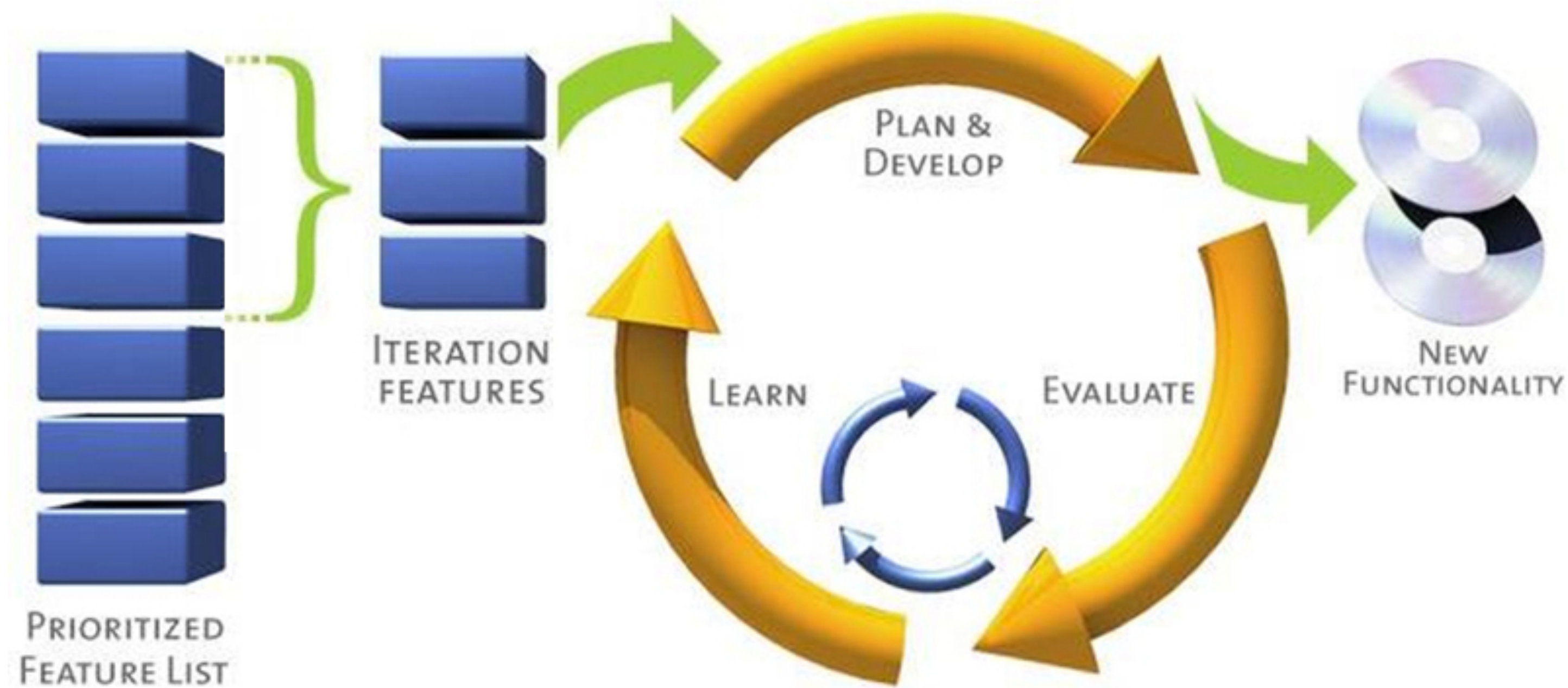
Ian Larson

Ian has more than twenty years of experience designing products for demanding brands in entertainment, publishing, and fintech, including HBO, Disney, EA, Playstation, Activision, UBM, and Ipreo.
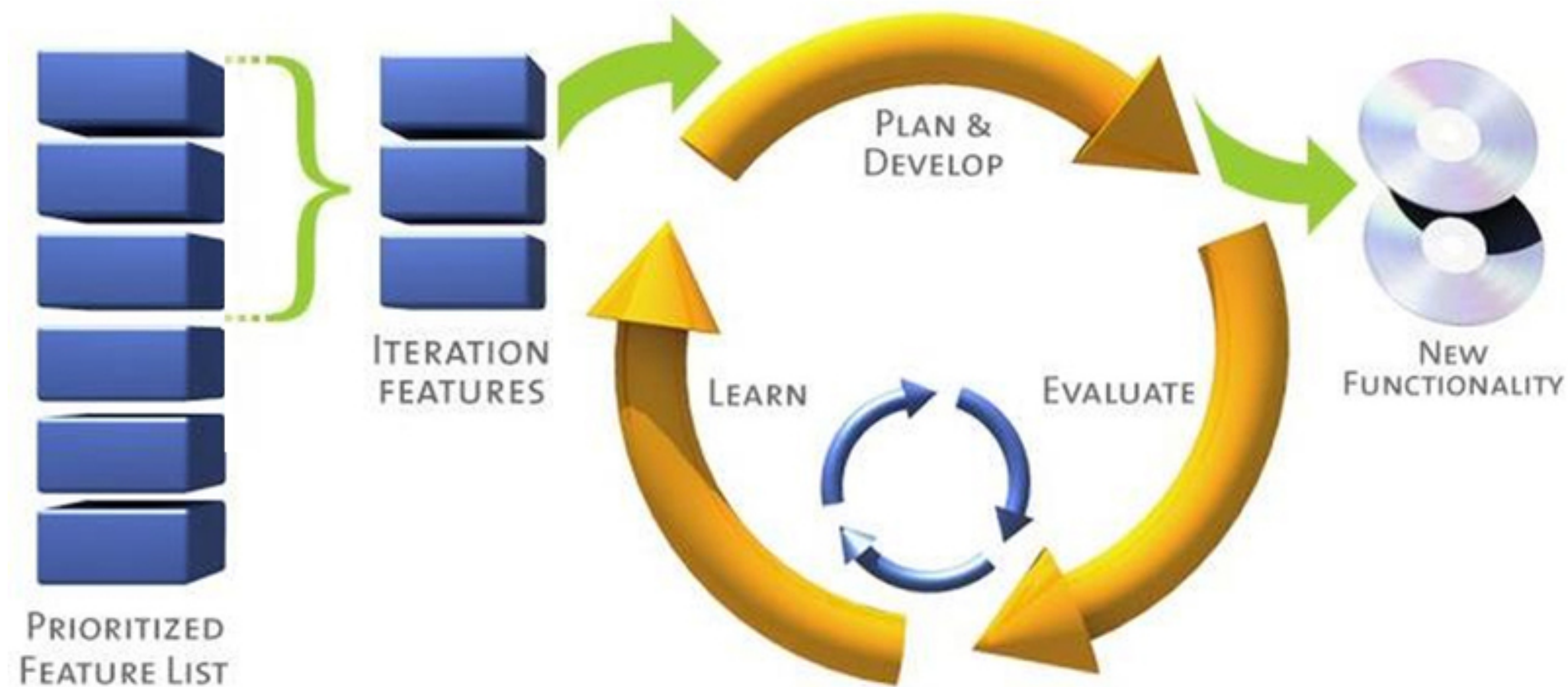
AGILE AND UX
CAN TOTALLY
BE FRIENDS.

WHAT'S WRONG WITH THIS PICTURE?

THE TRADITIONAL AGILE PROCESS INCLUDES TWO IMPLICIT ASSUMPTIONS…

CUSTOMER PROBLEMS ARE KNOWN. AND PRODUCT SOLUTIONS ARE KNOWN.

IS THIS ALL THERE IS?

+ EXECUTION **=**

Balance Sheet for Company XYZ, Inc.

for the year ended December 31, 2008

Current Assets		
Cash	$150,000	1.77%
Accounts receivable	$984,563	11.63%
Inventory	$1,345,230	15.89%
Total current assets	$2,479,793	29.29%
Total fixed assets	$5,987,345	70.71%
Total assets	**$8,467,138**	**100.00%**
Current Liabilities		
Accounts payable	$982,134	11.60%
Accrued expenses	$345,690	4.08%
Short-term debt	$12,983	0.15%
Total current liabilities	$1,340,807	15.84%
Long-term debt	$4,387,632	51.82%
Total liabilities	$5,728,439	67.65%
Shareholders equity	$2,738,699	32.35%
Total liabilities and equity	**$8,467,138**	**100.00%**

Shouldn't we validate our "Strategy" BEFORE we spend all this time and money to build?

How do we know these are "the right" features?

How do we know when we are done? What is the Long-Term Vision?

PLAN & DEVELOP

ITERATION FEATURES

Learn

Evaluate

PRIORITIZED FEATURE LIST

NEW FUNCTIONALITY

What is Progress ≠ New Features? What if we are better off REMOVING something, rather than ADDING something?
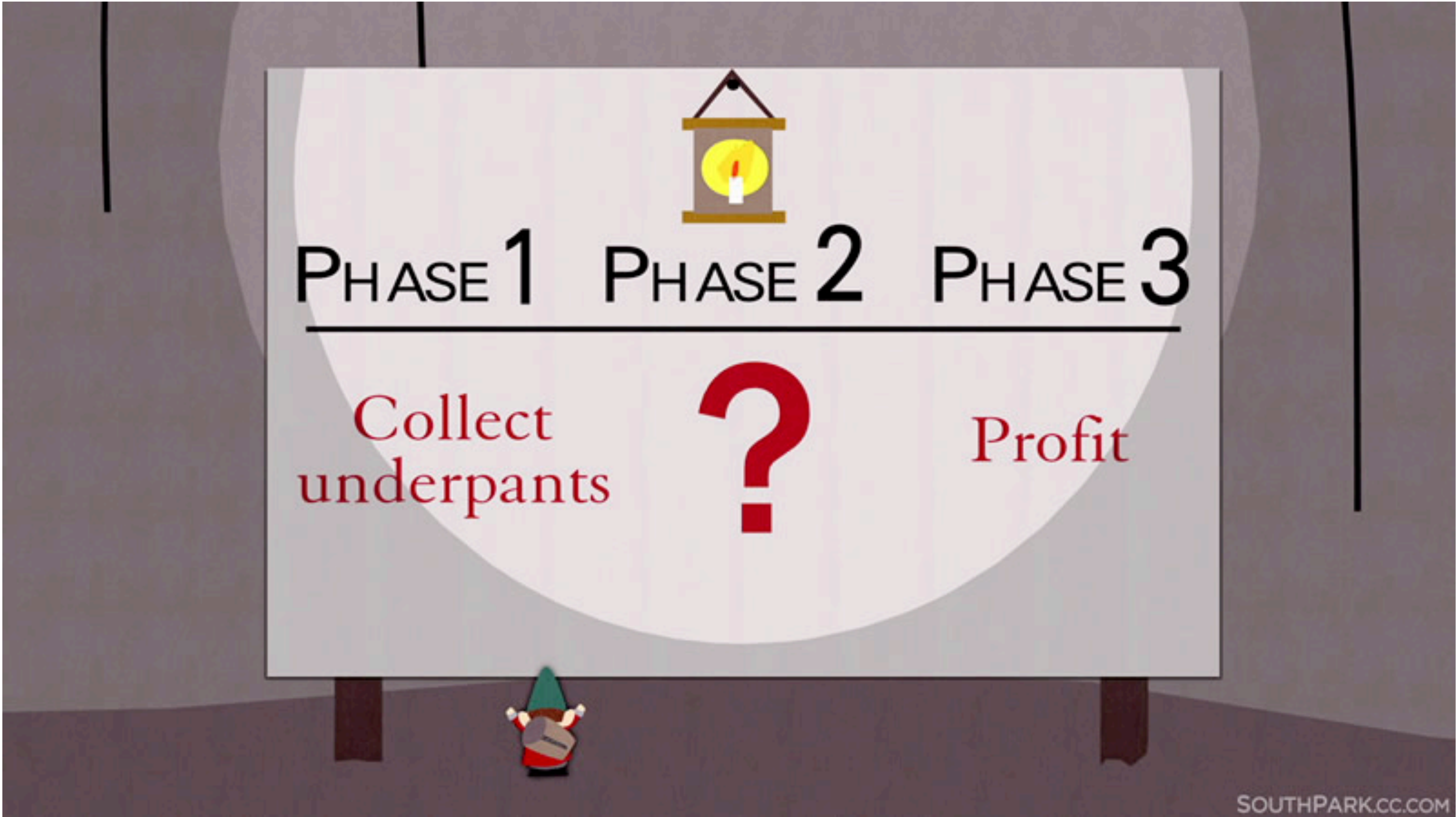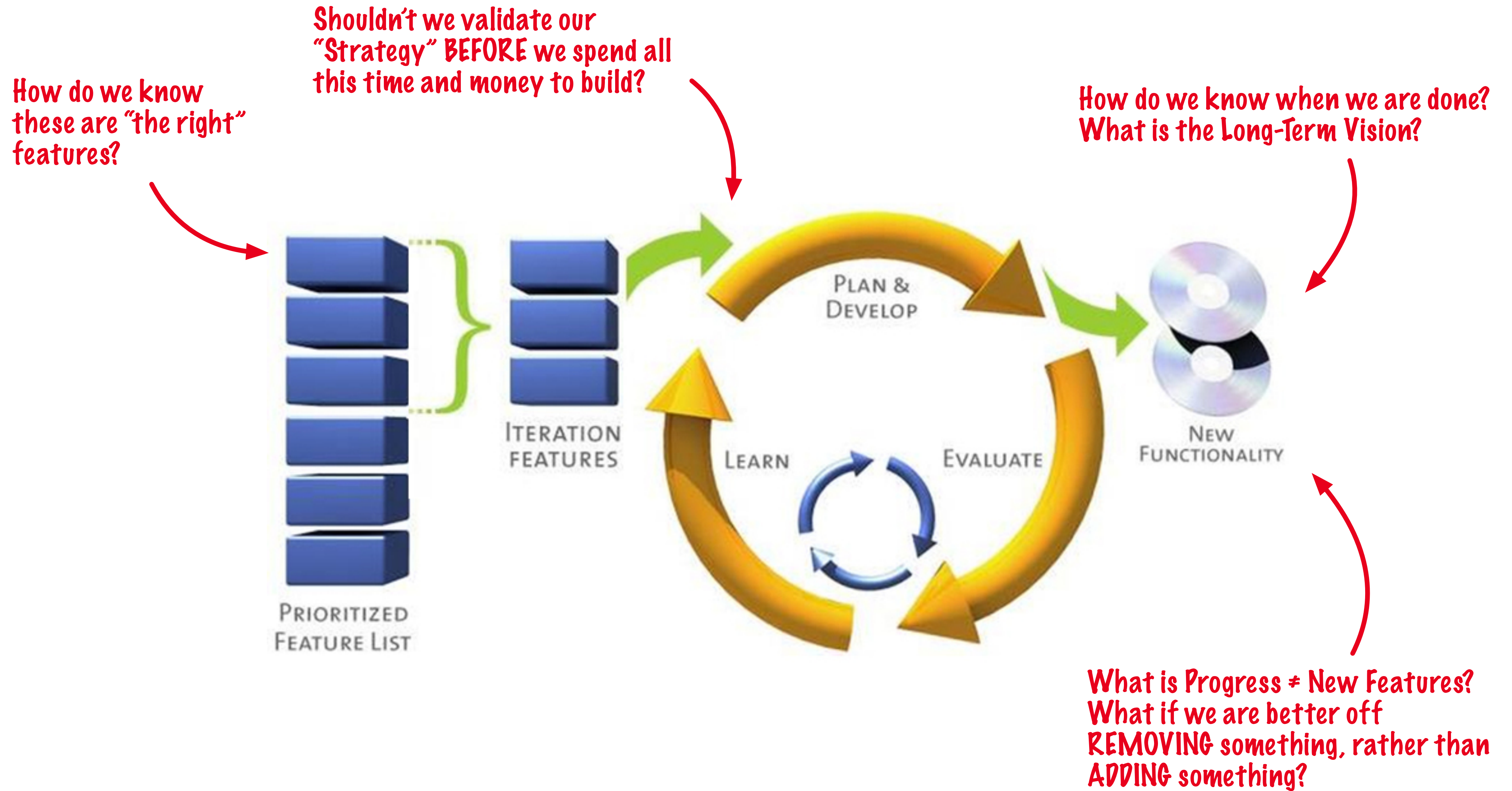
WHAT'S WRONG WITH THIS PICTURE?

WHAT'S WRONG WITH THIS PICTURE?

The bias toward WORKING SOFTWARE too often leads to "GO FEVER"

Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

"GO FEVER"

RICHARD FEYNMAN

BEING OVERLY COMMITTED TO A PREVIOUSLY CHOSEN COURSE OF ACTION WHILE OVERLOOKING POTENTIAL PROBLEMS OR MISTAKES.

IN THE UX WORLD, WE SAY THINGS MUST BE
1. USEFUL
2. USABLE
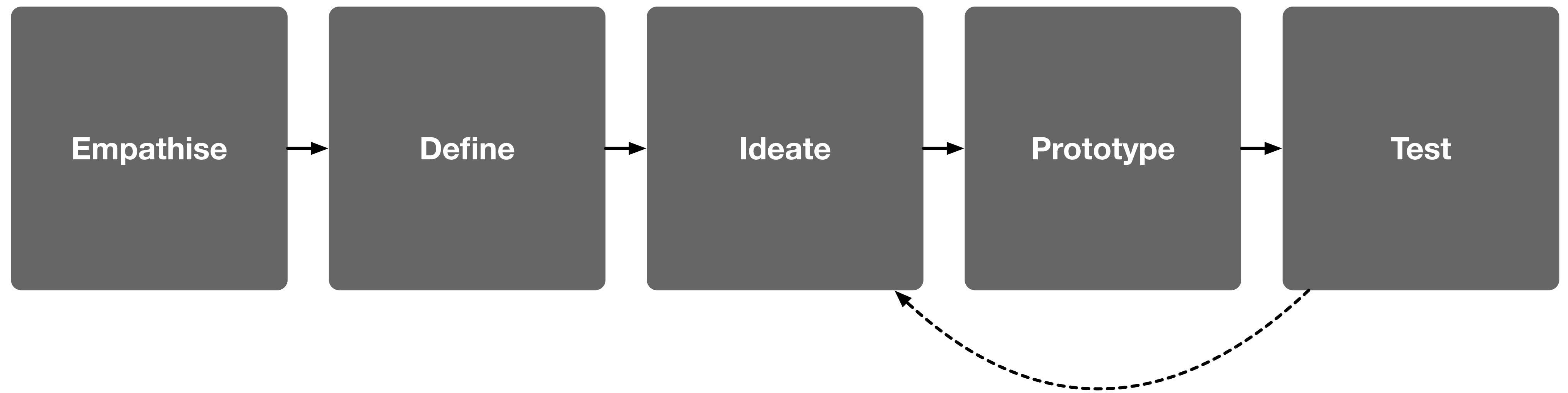# 3. USED

WE APPLY DESIGN-THINKING

Empathise	→	Define	→	Ideate	→	Prototype	→	Test

THE GOAL IS PRODUCT/MARKET FIT

THE GOAL IS TO
MAKE SELLING SUPERFLUOUS.

TO KNOW THE CUSTOMER SO WELL THAT THE PRODUCT FITS HIM/HER AND SELLS ITSELF.

WILL THIS PRODUCT/FEATURE BE
1. USEFUL?
2. USBALE?
3. USED?

IF YOU DON'T KNOW THE ANSWER
DO NOT BUILD ANYTHING!

WHAT IS YOUR HYPOTHESIS?

1. MORE USERS?
2. MORE USAGE?
3. MORE MONEY?

IF YOU DON'T KNOW THE ANSWER
DO NOT BUILD ANYTHING!

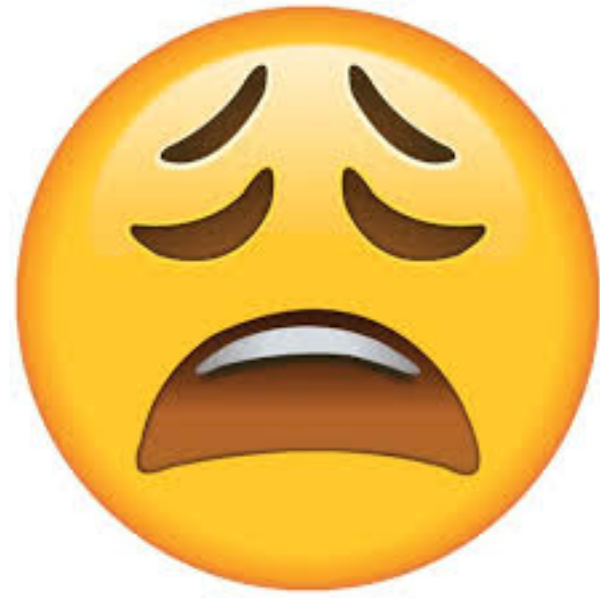*"Never enter into a land war in Asia, and never build software for no reason."*

AGILE WITHOUT DESIGN-THINKING IS JUST A REALLY EFFICIENT WAY TO BUILD THE WRONG THING.

DESIGN-THINKING WILL HELP YOU

1. LISTEN TO YOUR CUSTOMERS, NOT THE HIPPO
2. ELIMINATE THE HIGH COST OF BUILDING THE WRONG THING
3. REDUCE THE COST OF GETTING THE FIRST CUSTOMER
4. HARNESS EARLYVANGELISTS

"Oh no, this sounds like 'big design upfront' and that sounds like waterfall."

BUT EVERY SOFTWARE PROJECT MUST CHOOSE

1. BIG RESEARCH UPFRONT
2. BIG DEVELOPMENT UPFRONT
3. BIG DESIGN UPFRONT

BIG RESEARCH UPFRONT

SOME COMPANIES HAVE HUGE RESEARCH TEAMS. THEY CAN INVEST A TON OF TIME AND MONEY IN FOCUS GROUPS, UX RESEARCH, ETC.

MOST COMPANIES DO NOT HAVE THIS LUXURY.

THE OUTPUT IS STILL JUST AN UNTESTED GUESS.

AND THERE IS STILL A FILTER BETWEEN THE CUSTOMERS AND THE PROPLE BUILDING THE PRODUCT.

BIG BUILD UPFRONT

THE AGILE PROCESS MAKES THIS REALLY APPEALING. BUT THERE ARE ONLY **THREE POSSIBLE OUTCOMES, AND TWO OF THEM ARE BAD**.

TEAMS START BUILDING AND ONCE THEY HAVE SOMETHING BUILT, THEY SHOW IT TO CUSTOMERS, AND…

WHAT WE BUILT SOMEHOW MATCHES EXACTLY WHAT THE CUSTOMER NEEDS!

0% OF THE TIME

WHAT WE BUILTT IS NOT EXACTLY WHAT THE CUSTOMER NEEDS, SO WE THROW IT OUT AND START OVER.

5% OF THE TIME

WHAT WE BUILT IS NOT EXACTLY WHAT THE CUSTOMER NEEDS, BUT WE SHIP A CRAPPY PRODUCT ANYWAY BECAUSE IT'S TOO LATE TO START OVER.

95% OF THE TIME

MOST BUSINESSES FAIL NOT FROM A LACK OF TECHNOLOGY, OR FROM A LACK OF VISUAL DESIGN, OR FROM A LACK OF TESTING, BUT FROM A LACK OF CUSTOMERS.

PRODUCT/MARKET FIT IS EVERYTHING.

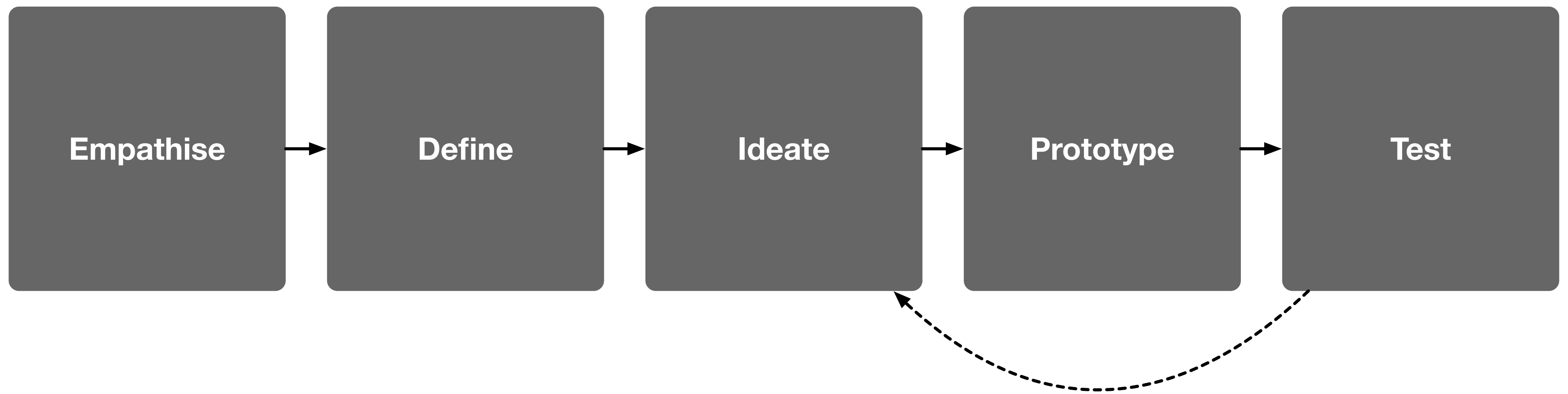# YOU ARE NOT SMARTER THAN THE COLLECTIVE WISDOM OF YOUR CUSTOMERS.

THE GOAL IS SPEED TO LEARNING, NOT SPEED TO MARKET.

NO PRODUCT SURVIVES FIRST CONTACT WITH CUSTOMERS.

RAPID PROTOTYPING + GETTING OUT OF THE BUILDING IS THE FASTEST AND CHEAPEST WAY TO MAKE SURE YOUR PRODUCT VISION IS NOT A HALLUCINATION.

RAPID PROTOTYPING 101

| Empathise | → | Define | → | Ideate | → | Prototype | → | Test |

| Empathise | Define | Ideate | Prototype | Test |

1. WHO IS YOUR TARGET USER?

2. WHAT IS HER PROBLEM?

(IT'S GENERALLY BETETR TO SELL PAINKILLERS THAN VITAMINS)

![Nerdy Nina persona board. Left side shows a photograph of a young woman with glasses and long dark hair, overlaid in blue with handwritten descriptive words: Smart, Imaginative, Neat, Passionate, Techie, <3, Collector, Shy, Geek, Feminist, Control Freak.]

Nerdy Nina

"The book is way better than the movie!"

DEMOGRAPHICS

Age: 25
Location: Sao Paulo, Brazil
Education: Software Engineer
Job: Q/A at Indie Game Company
Family: Lives with her boyfriend

TECH

Internet
Social Networks
Messaging
Games
Online Shopping

GOALS

• Discovering new books / authors to read
• Finding unique stories
• Cataloging book collection

FRUSTRATIONS

• Keeping track of different series
• Forgetting a book launch date
• Finding space for more books

READING HABITS

• Fast pace reader
• Never lends books
• Likes hardcovers and boxed collections
• Pre-order books to get them first
• Reads eBooks, but prefer physical copies
• Always finishes a book
• Loves binge reading and re-reading

FAVORITE BOOKS

American Gods
Neil Gaiman

Harry Potter
J.K. Rowling

Ready Player One

Empathise	Define	Ideate	Prototype	Test

WHAT EXPERIENCES DO WE NEED TO PROVIDE, IN WHAT ORDER, TO GET HER FROM WHERE SHE IS TO WHERE SHE NEEDS TO BE

IF WE GET THIS RIGHT, WE CAN MAKE SOME MISTAKES DOWN THE LINE AND STILL HAVE A PRODUCT PEOPLE LOVE.

IF WE GET THIS WRONG, NO AMOUNT OF DESIGN POLISH, OR TECHNICAL EXCELLENCE, OR BRILLIANT MARKETING WILL SAVE US.
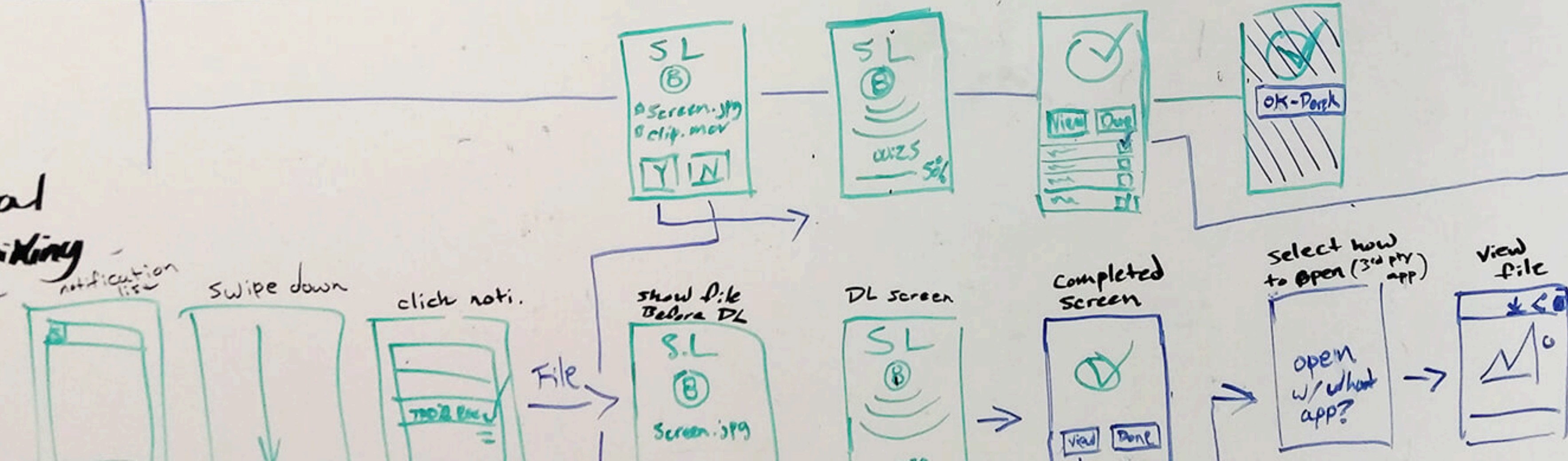
| Empathise | Define | **Ideate** | Prototype | Test |

KEEP SKETCHING.

EXPECT TO THROW AWAY THE FIRST FEW ROUNDS.

ADD MORE FIDELITY, BUT NOT TOO MUCH.
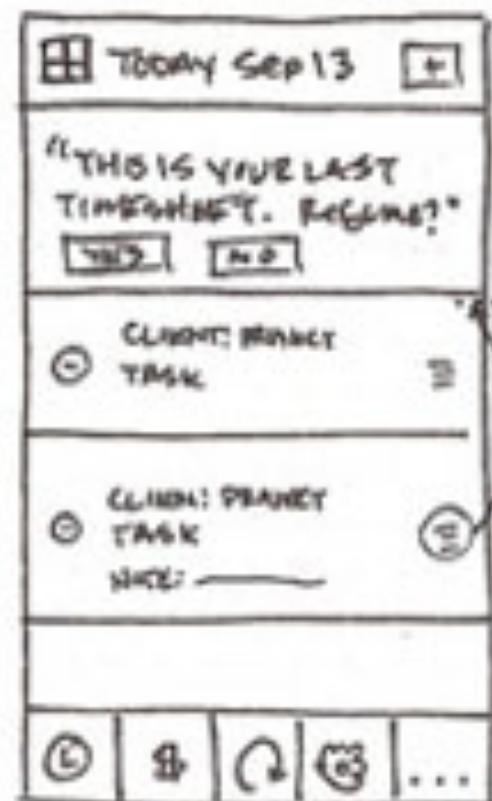
| Empathise | | Define | | Ideate | | **Prototype** | | Test |
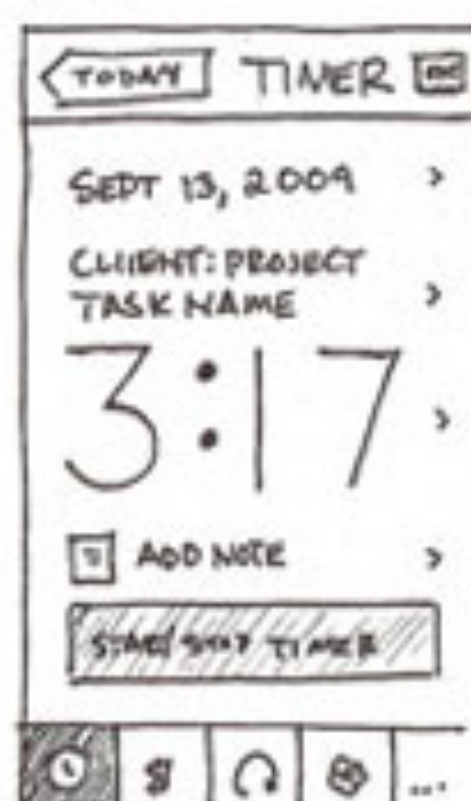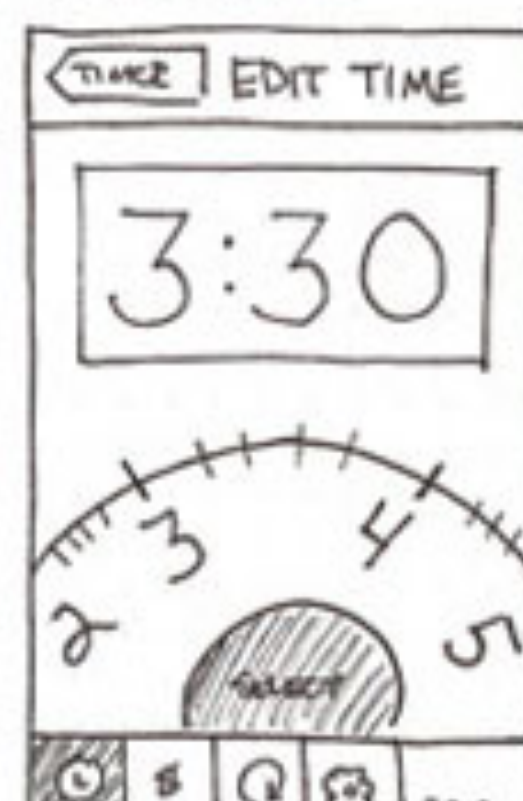
WHAT IS THE LEAST AMOUNT OF WORK YOU CAN DO TO GET SOEMTHIGN IN FROMNT OF CUSTOMERS WITHOUT EMBARRASSING THE COMPANY?

LEVELS OF FIDELITY FOR PROTOTYPES

1. PAPER PROTOTYPE
2. WIREFRAMES
3. VISUAL DESING COMPS
4. FRAMER, ETC.
5. HTML/CSS CLICKABLE PROTYPE

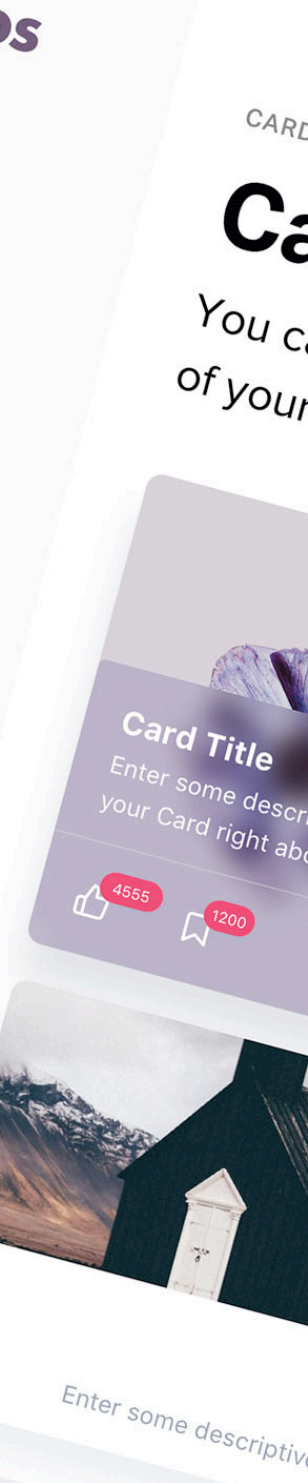Create many card versions with different styles to suit the need... ...ject. All of them use nested symbols for maximum flexibility.

Card Title
Enter some descriptive text for your Card right about here...

Read More

Card Title
Enter some descriptive text for your Card right about here...

Read More

...d Title
...your Card right about here...

Like Photo

...possible to choose a typeface ...point where we can grab that attention we get from using Aktiv Grotesk. This is the ...point where we can grab that attention we get from shape of Proxima Nova, it gives a friendly tone to our voice in the typographic world.

Cards
Buttons & Inputs
Icons
Other

Purple Night
Magic Sky
Bluish
Tan Tan
Red Lips
Miami Vice
Prince
Banana
Levander
Acapella
Blue Steel
Greenish Blue

Snipps
Design System

Content

Introduction
Colors
Typography
Cards
Buttons & Inputs
Icons
Other

Snipps design system styleguide

Let's start the easy way of building your design projects.

Sketch 52 Ready!

Joan Sterjo
joan.sterjo@outlook.com

Content

Introduction
Colors
Typography
Cards
Buttons & Inputs
Icons
Other

Card Title
Enter some descri... your Card right ab...

4555   1200

INTRODUCTION

Snipps — Streamline yo...

With Snipps you can start des... projects in a matter of minutes typography that match your pro... designing right away

Why?

Everytime I had to start working on a new project I had to make everything from scratch input boxes, buttons, shadows, text styles, etc. So in order for me to save more time I decided to use other design systems but all of them lacked the flexibility of modifying elements to the core without changing the symbols i... set on a path to...

Snipps
Design System

COLORS

Solid Colors

These are t...

Content

Introduction
Colors

| Empathise | → | Define | → | Ideate | → | Prototype | → | Test |

"GET OUT OF THE BUILDING!"

IDEALLY MORE THAN 10 POTENTIAL CUSTOMERS.

IDEALLY HIPPOS ARE IN ATTENDANCE.

DO NOT SELL!

LEARN.

"DO WE CORRECTLY UNDERSTAND YOUR PROBLEM?"

"DOES THIS PROTOTYPE DEMONSTRATE A REASONABLE SOLUTION?"

"WILL YOU PAY US FOR IT?"

😩 *"We don't have time to apply this to every single thing we're trying to do."*

THERE ARE DIFFERENT TYPES OF WORK.

1. NEW INITIATIVES, STARTING FROM ZERO.
2. NEW FEATURE.
3. DAY-TO-DAY ENHANCEMENTS, OPTIMIZATIONS.
4. MAINTENANCE ON A MATURE PRODUCT.

HOW TO PUT THIS INTO ACTION…

STEP 1: HAVE A LONG-TERM VISION.

THE TEAM WILL KNOW WHAT'S IMPORTANT AND HOW TO ACT INDEPENDENTLY TO MOVE THE NEEDLE.

(VISUAL IS BEST)

STEP 2: IDEA BACKLOG.

PERSONA + PROBLEM STATEMENT + SOLUTION HYPOTHESIS + BUSINESS OPPORTUNITY + KPI

HIPPOS SELECT "THE BEST" IDEAS AND MOVE THEM FORWARD TO STEP 3.

MOST IDEAS SHOULD <u>NOT</u> MOVE FORWARD. THAT'S A GOOD THING!

STEP 3: TEN PAGE PITCH DECK.

1. WHO IS THE TAREGT USER/CUSTOMER?
2. WHAT IS HER PROBLEM?
3. WHAT IS OUR SOLUTION HYPOTHESIS?
4. WIREFLOWS
5. MARKET SIZE
6. MONEY & MILESTONE ESTIMATES
7. FEEDBACK FROM OUTSIDE THE BUILDING
8. SAMPLE PRESS RELEASE
9. WHEN WILL PROJECTED REVENUE EXCEED PROJECTED COSTS?
10. MARKETING/SALES/ACQUISITION PLAN

HIPPOS SELECT "THE BEST" IDEAS AND MOVE THEM FORWARD TO STEP 4.

MOST IDEAS SHOULD <u>NOT</u> MOVE FORWARD. THAT'S A GOOD THING!

STEP 4: PROTOTYPE.

2 WEEKS MAX.

SMALL TEAM OF 2-3 PEOPLE: DESIGNER, FRONT-END DEVELOPER, PRODUCT MANAGER, SALES/MARKETING/AM.

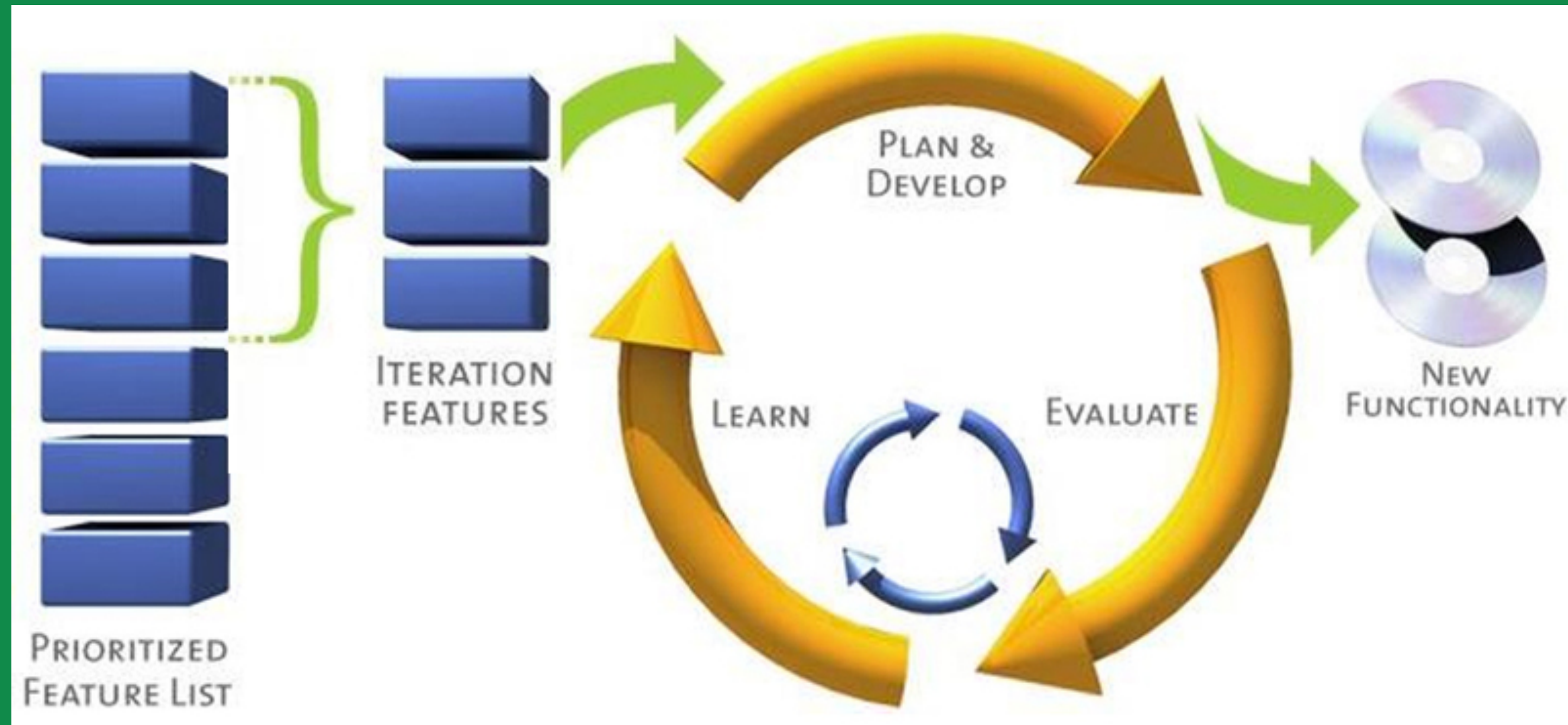**"GET OUT OF THE BUILDING"**

STEP 5: REVIEW.

BASED ON CUSTOMER FEEDBACK, DO WE…

INVEST. THERE ARE CUSTOMERS DYING TO GIVE US MONEY FOR THIS PRODUCT! LET'S ASK THE HIPPOS TO GIVE US $$$ TO BUILD IT.

ITERATE. WE'RE CLOSE, BUT WE NEED REVISIONS.

EXIT. THIS IS BAD IDEA, GOOD THING WE DIDN'T BUILD IT! LET'S FIRE THE PLAN, NOT THE PEOPLE.

STEP 6: BUILD.

BUT CONTINUE TO GET OUT OF THE BUILDING TO SHOW PROGRESS AND LEARN.

THERE'S ONLY ONE STEVE JOBS, DO NOT ATTEMPT STEALTH MODE.

STEP 7: LAUNCH AND MEASURE.

HOW MANY PEOPLE ARE USING OUR NEW PRODUCT/ FEATURE? HOW OFTEN?

DOES THIS ALIGN WITH OUR PREDICTION?

ARE THERE ANY CLOGGED ARTERIES IN OUR FLOW?

WHEN WILL CUMULATIVE REVENUE EXCEED CUMULATIVE COST?

STEP 8: CREATE A LEADERBOARD.

OWNER.
TIME TO MARKET - ESTIMATE VS. ACTUAL.
CUMULATIVE COST - ESTIMATE VS. ACTUAL.
CUMULATVE REVENUE - ESTIMATE VS ACTUAL.
USAGE - ESTIMATE VS ACTUAL.