



# The Product Manager Who Jump Started DevOps

**John Schmidt  
Aimee Bechtle**



# Meet Aimee Bechtle & John Schmidt

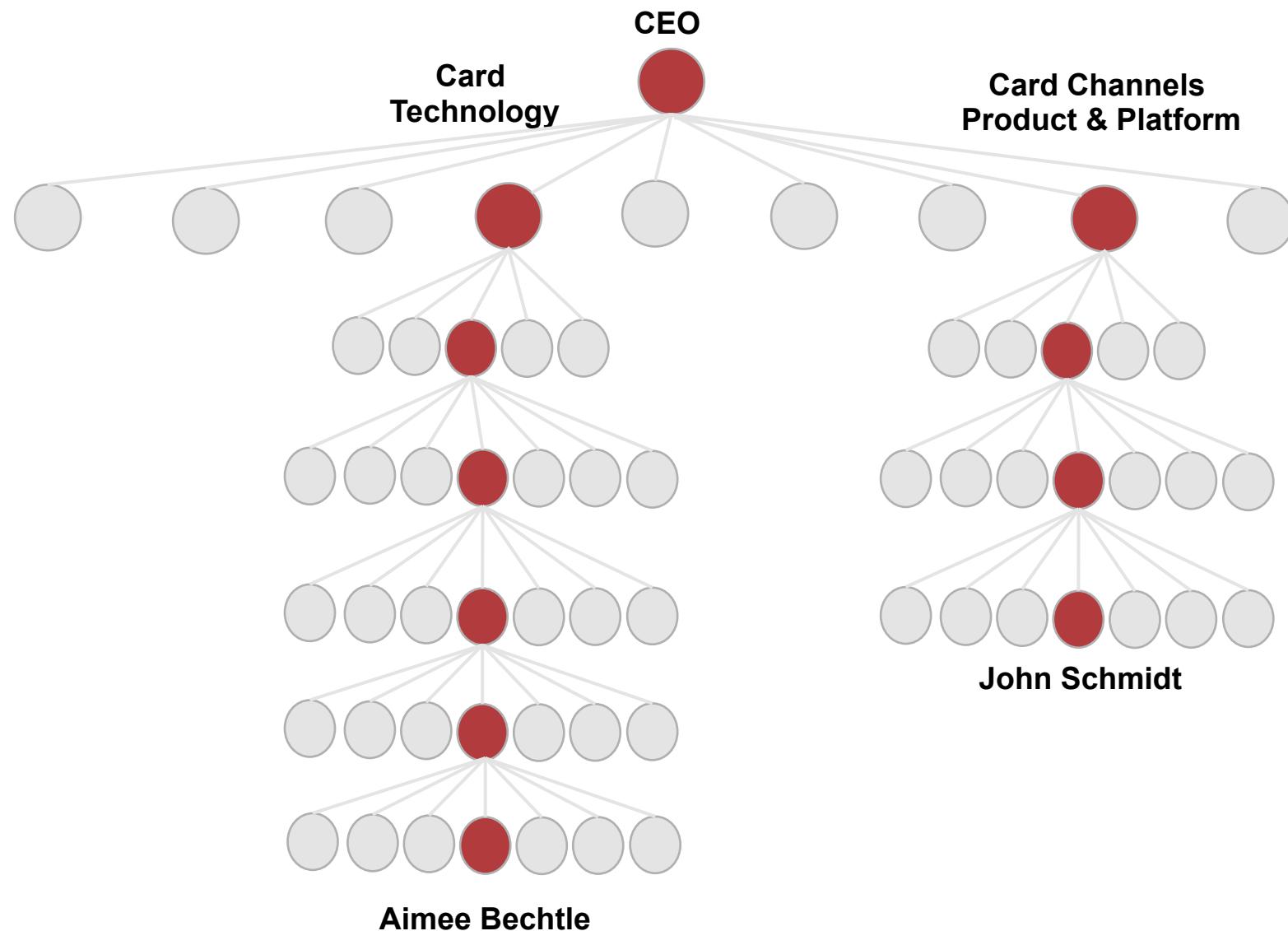


- Joined Capital One Card Tech in Dec 2015, currently a Senior Manager in Public Cloud org
- Passionate about bringing humanity to IT and creating a continuous learning environment
- DOES14 and DOES16 Presenter
- Lives in Vienna, VA with husband of 21 years and 4 children, and way too many mosquitos



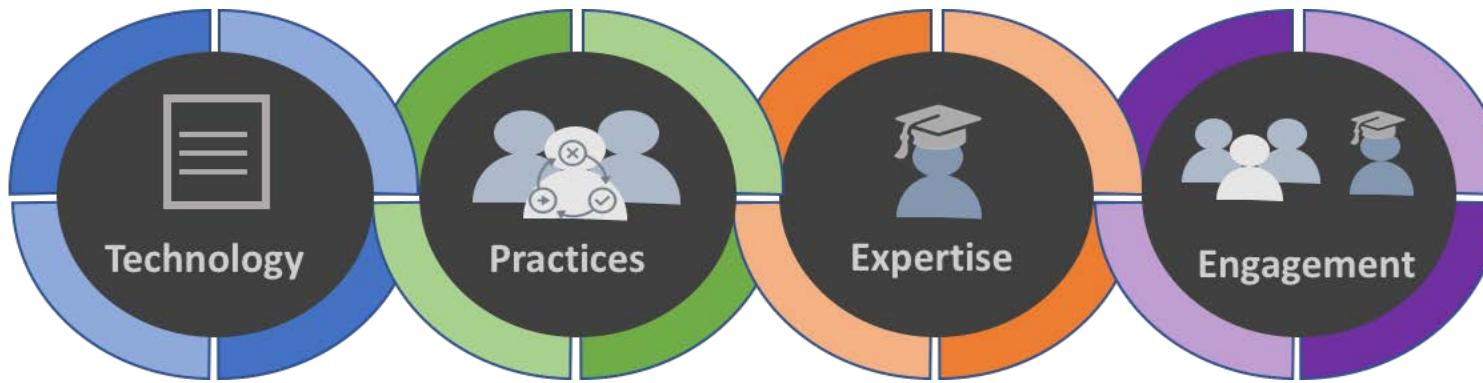
- Joined Capital One in 2014, Director of Product Management
- Excited about investing in software to change the world
- Rarely accused of lacking imagination
- Lives in Falls Church, VA with wife, daughter and way too many squirrels

# There are several layers in the org between Aimee and John



# In 2017 Card Tech Started a DevOps Acceleration service. Aimee targeted Tech Leads to create engagement opportunities

Accelerate the delivery of value to the business



- Agile, MVP
- Branching and merging strategies
- TDD/ATDD
- CI/CD Pipelines
- Feature Toggles
- Auto Provisioning & Configuring
- Zero-downtime
- Automated Acceptance & Perf Testing
- Test Data Management
- Monitoring
- Resiliency
- Security

Aimee Bechtle

It was a struggle to get engagement through Tech Leads, they couldn't get support from their Product Owners to dedicate time and focus on DevOps

# Aimee got an opportunity to present at a Product Manager's forum

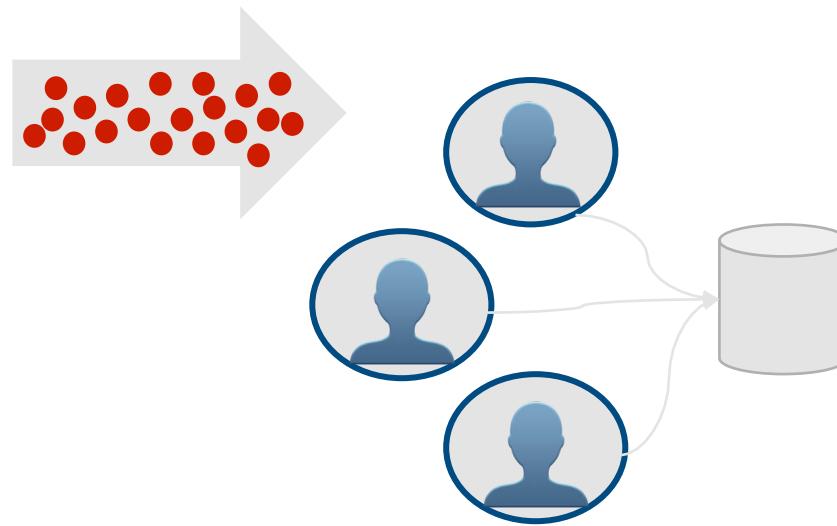


John Schmidt

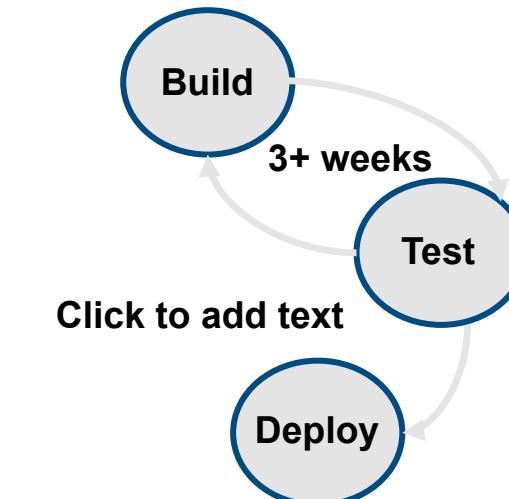
"It is going to take much more than new tools and a few non-functional stories squeezed into every sprint to get the results I want. I better hurry up and do this"

# John was facing some challenges that had not yet been solved for

## Real-time Streaming & Federated Contributors Platform



## Problematic, Lengthy Delivery



## Insufficient DevOps Skills



We had great investment support and strong hypotheses on how we could make things a lot better for our customers. Such as more control over how their cards are used, combatting fraud, etc.

John Schmidt

**“Let’s do a Dojo!”**

# The Dojo is an immersive learning model that accelerates upskilling and supports culture change



- Model pioneered by retail giant Target
- Accelerated & Contextual learning
- “Place of the way”
- Fully immersive, experiential
- ~ 6-weeks in duration
- I believe this is the most effective way to foster culture and skills change in a tech transformation

**Agile • Lean • DevOps • Cloud**

# For John's teams an immersion experiment was scoped and planned



Web API



Infrastructure

Two teams in  
home location

	A	B	C	D	E	F	G	H
I	X		X	X	O		O	X
2		X	X	O		O		
3	O	O	O	X	X	O	O	X
4	X	X	X	X	X	O	O	X
n	XX	XXX	XXX	X	XX	XXX	O	XX

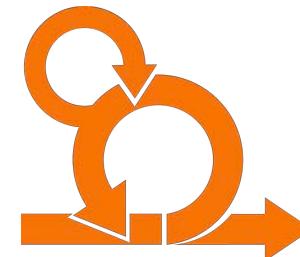
Skills Matrix



6 Weeks



Expertise & Coaching

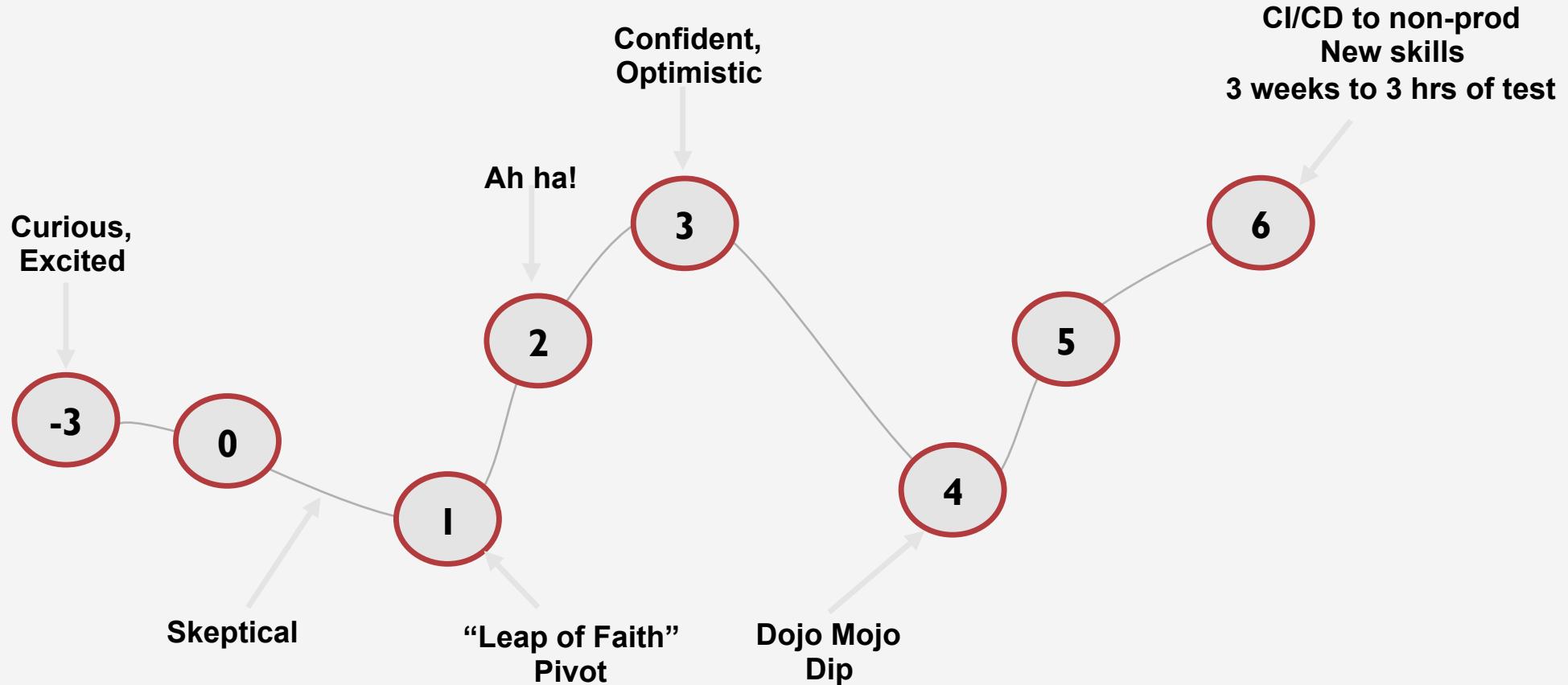


Agile & CI/CD Pipeline

John Schmidt

“It’s going to be messy”

# The 6-weeks had its ups and downs



John Schmidt

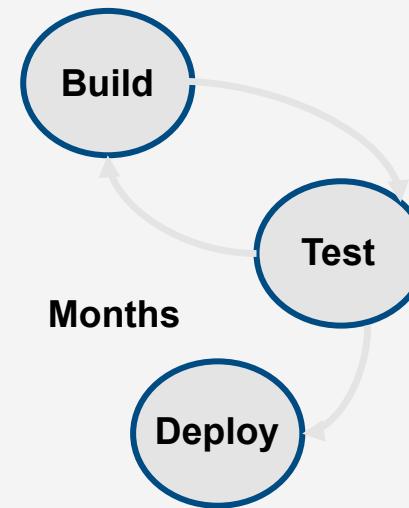
**"These teams wouldn't be set up for long term success if they didn't make a deep investment in evolving their culture and full-team upskilling."**

# John moves into Machine Learning & Data Science space and observes the same challenges

## Machine Learning & Container Orchestration Platform



## Lengthy, Manual Delivery



## Insufficient DevOps Skills



They had a strong Data Science skillset but not a strong engineering skillset. Certainly not a strong DevOps skillset. We had a steep hill climb to get the rate we wanted to learn.

John Schmidt

“Let’s do another Dojo!”

# The Data Science immersion engagement is scoped and planned



Data Science



Data Engineering

Two teams in separate location

	A	B	C	D	E	F	G	H
I	X		X	X	O		O	X
2		X	X	O		O		
3	O	O	O	X	X	O	O	X
4	X	X	X	X	X	O	O	X
n	XX	XXX	XXX	X	XX	XXX	O	XX

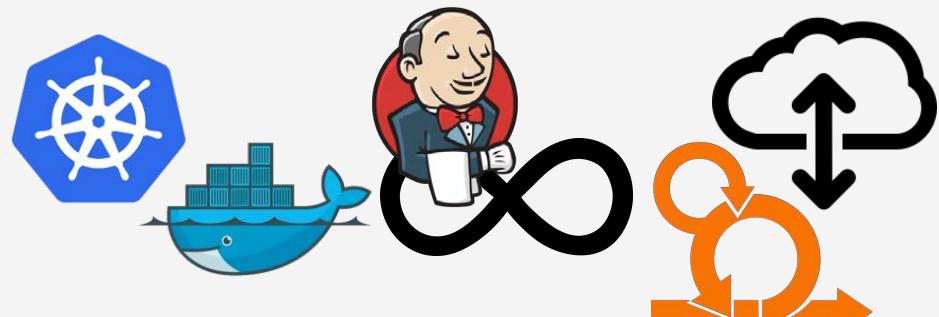
Skills Matrix



10 Weeks



Expertise & Coaching

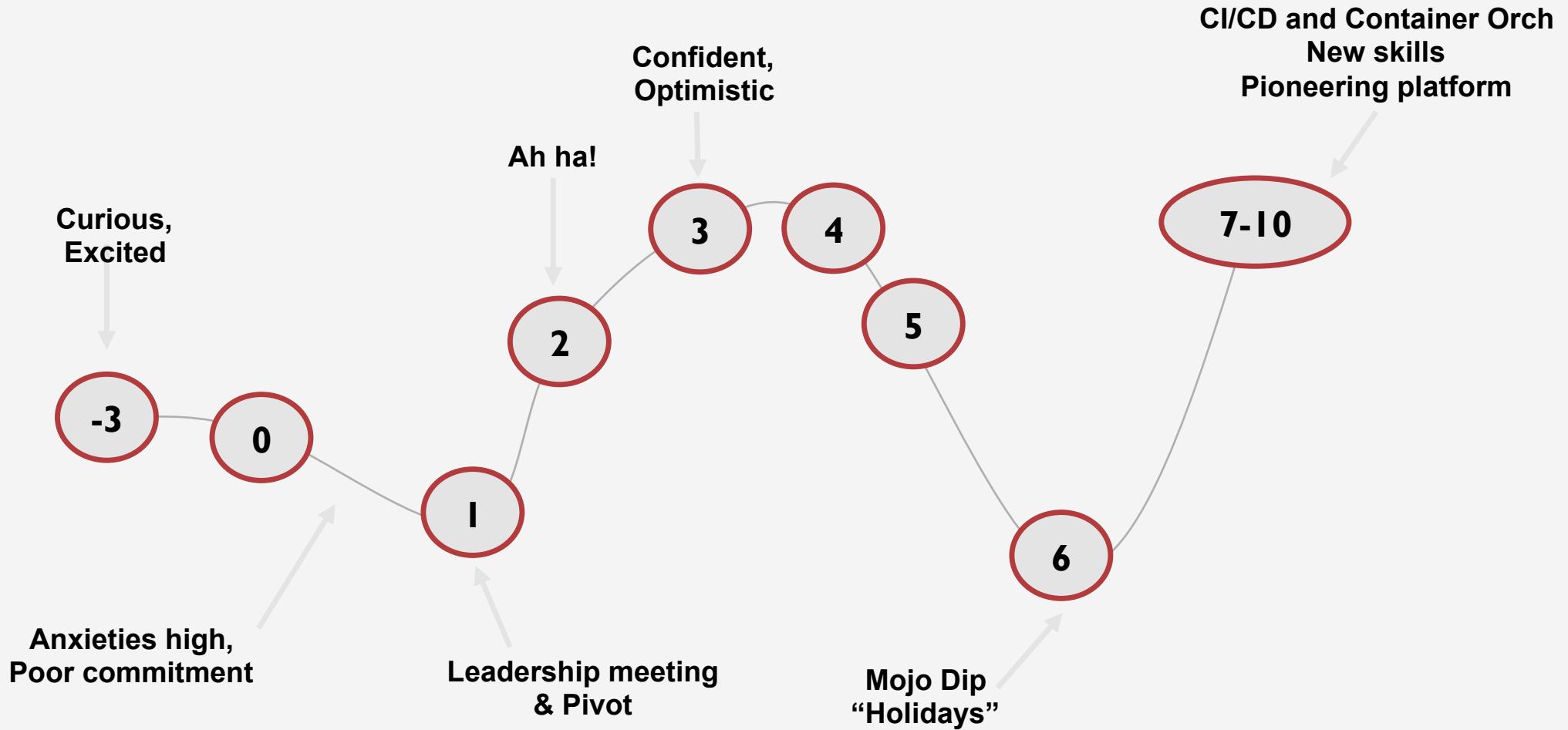


Agile, CI/CD Pipeline, Container  
Orchestration, Cloud

John Schmidt

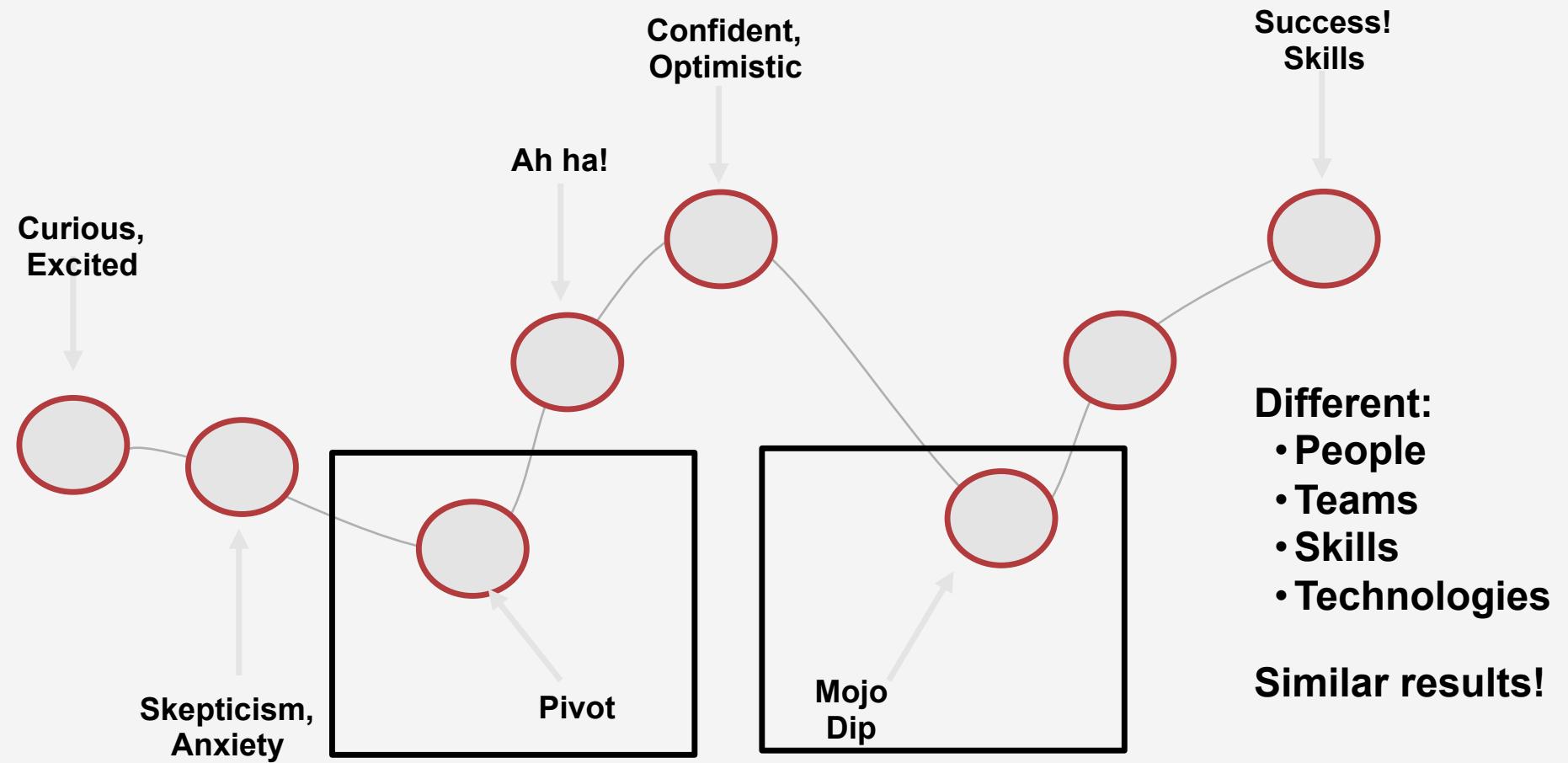
“It’s going to be messy”

# The 10-weeks had its ups and downs



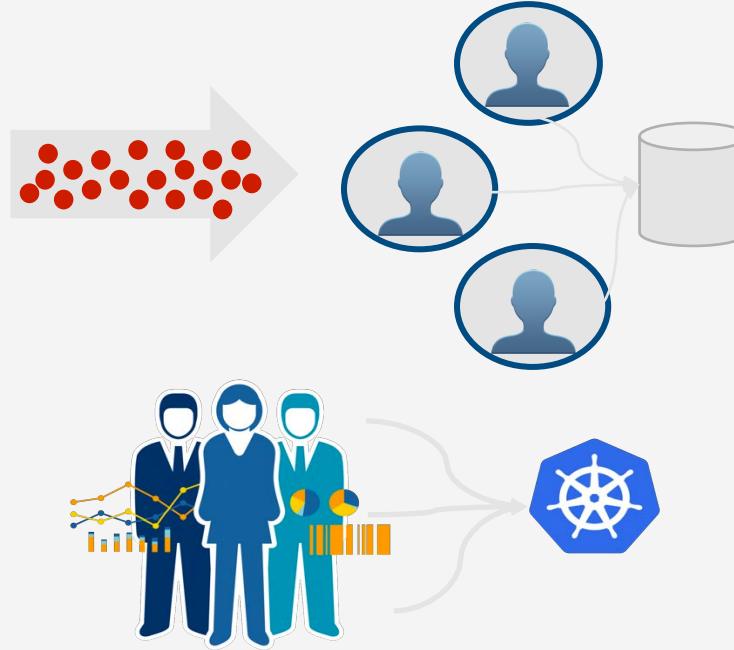
**The immersion model drove accelerated team forming, storming, norming, conforming. The team did in two weeks what normally takes months**

# A similar pattern emerged between both immersion experiences

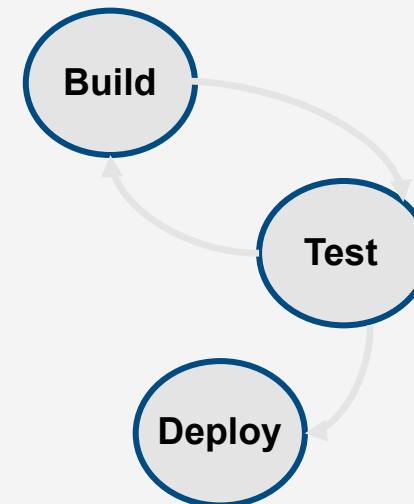


**There is a point in the journey where a team will face a pivot and a dip. Product Management is CRITICAL at these point in staying the course and sustaining motivation**

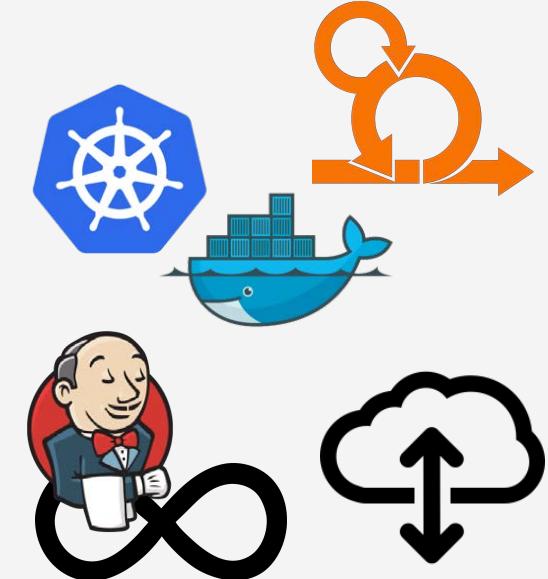
# Today the teams that had their DevOps journey jump-started by John are faster, skilled and delivering value to the business



**Multiple Contributors  
Multiple ML Models**



**Substantially Reduced  
Delivery Times**



**Skilled Engineers &  
Scientists**

John Schmidt

**“The journey is never finished”**

# We can't share all of the details, but the results have been real and lasting



Re-usable building blocks that increase our options and continue to create a durable, competitive advantage



Stability, safety, resiliency dramatically reducing the "Oops Tax"



In one case, speed of iterating went from months to hours

John Schmidt

**ROI is already a large multiple of the investment to accelerate, with more to come**

# A summary of the events that drive these successful outcomes



**Presented at  
Opportunistic Forum**



**Appealed to an interested  
Product Manager**



**Agreed to and executed  
successful immersion  
experiment**



**Product Management  
buffered and supported  
teams...**



**Created an emotionally  
safe environment where it  
was OK to fail**

**Aimee Bechtle**

**I was lucky to have found a partner in the business that wanted to invest in DevOps. How can you achieve this?**

# How do we influence the business to invest in DevOps so others can experience these results?



**What do these items have in common?**

# Quick Review of an Ancient Secret: Understand your audience and what motivates them



# Quick Review of an Ancient Secret: Understand your audience and what motivates them



People want to avoid pain (bears), so it's important to understand what they are most concerned about.



Most people are well-intentioned but we all operate in different contexts and have different perspectives.



There are also intrinsic and extrinsic rewards that motivate us: understand incentives!

# Quick Review of an Ancient Secret: Understand your audience and what motivates them



# Quick Review of an Ancient Secret: Understand your audience and what motivates them



Our brains are wired to disproportionately weight "bear" inputs  
5 times more heavily than "picnic basket inputs"

So, if you don't understand your audience's "bears",  
all the "picnic baskets" you have to offer may not even register

John Schmidt

**"As a Product Manager, I'm interested in investing in software to create or sustain a competitive advantage"**

# So what does a Product Manager care about anyway? What is my bear?



Meet the “Angry Bag of Money”

# So what does a Product Manager care about anyway? What is my bear?



A metaphor to describe how it feels when you succeed in winning investment support, but don't feel like you're making enough progress, fast enough. For example:

- Options too constrained
- Bottlenecks causing painful trade-off battles
- Fear that competitors/disruptors will get there better/faster

Meet the “Angry Bag of Money”

# Why is the bag of money angry?



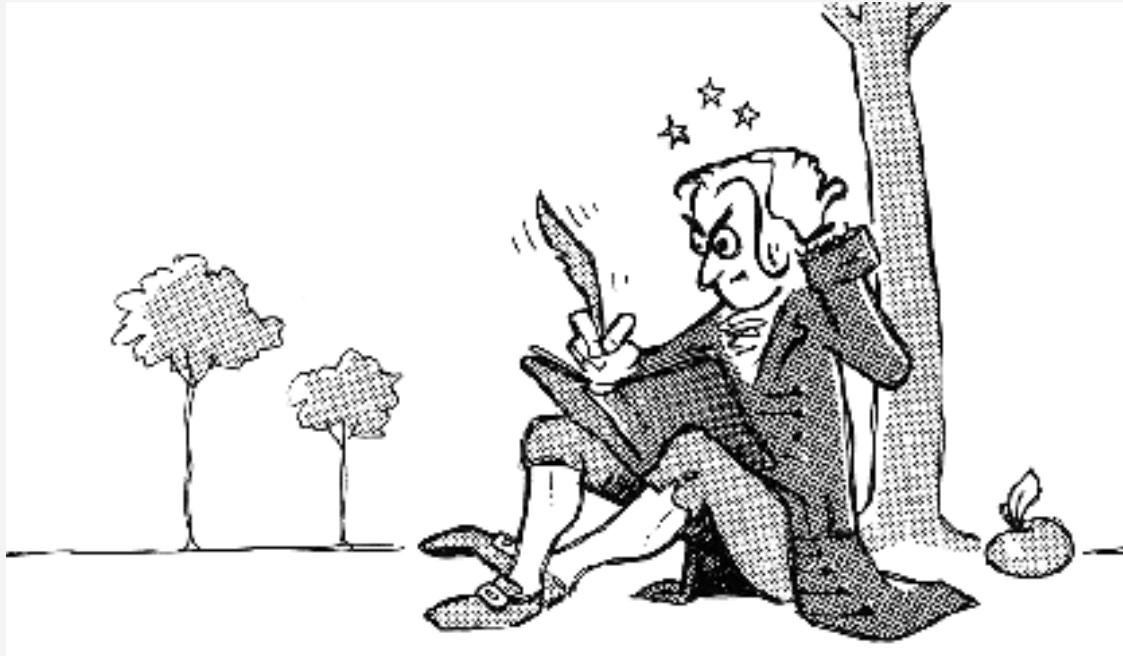
**Let's play the “Ask the Angry Bag of Money Game”!**

# How do you make the bag of money happy?



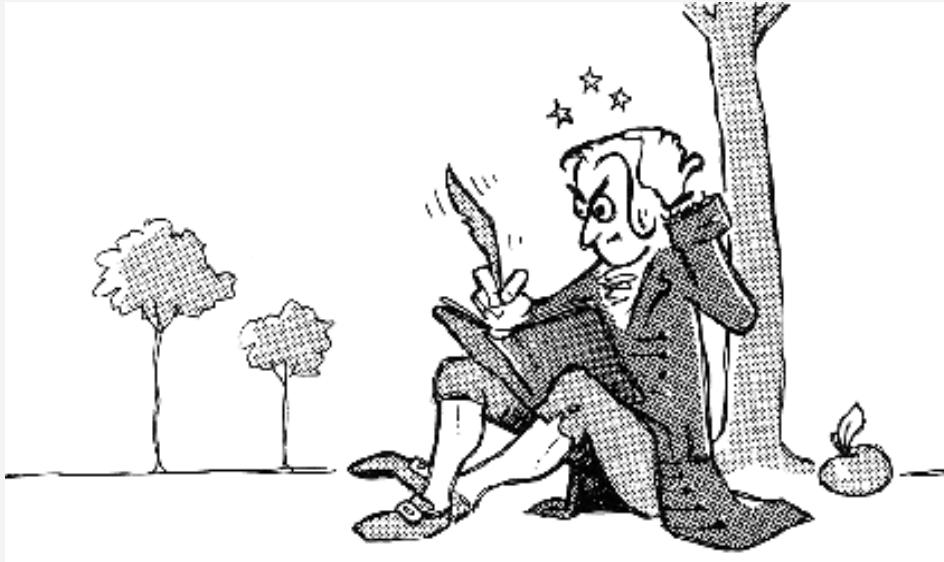
**Frame your arguments around how they will support or accelerate outcomes**

# Let's Review a Law of Physics



**Speed – Safety = CRASH**

# Let's Review a Law of Physics



**Speed doesn't exist as a pure, simple goal**

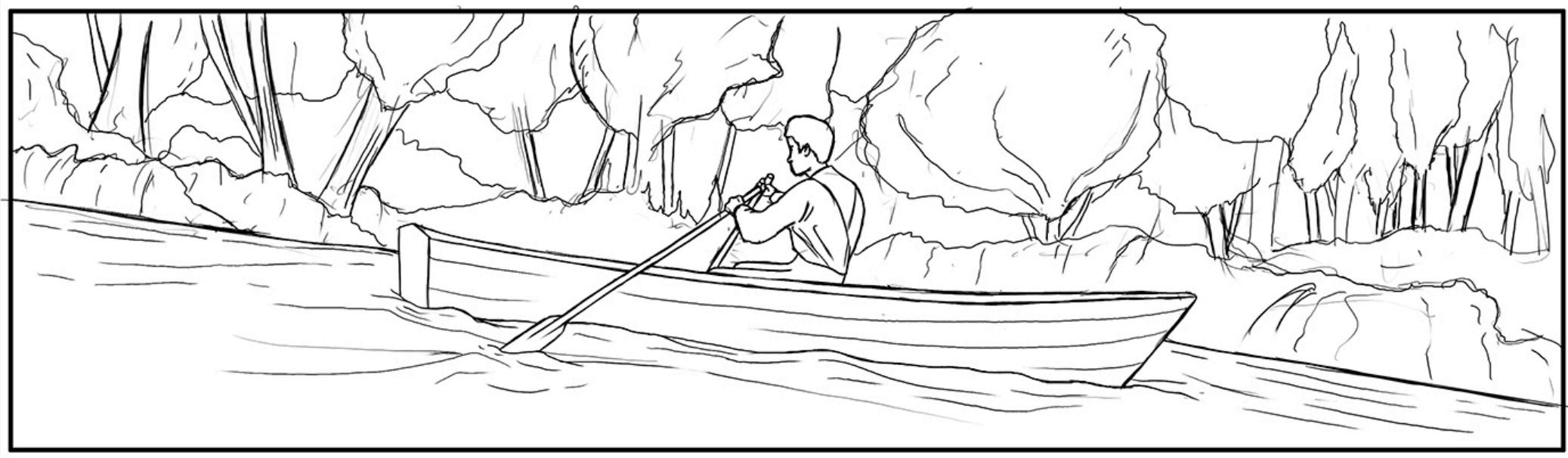
- Doesn't matter how fast you are, if your speed is not balanced with the right level of safety, you will crash
- Frequent crashing (or the dreaded "Oops Tax") will make you much slower overall

**Speed – Safety = CRASH**

# An allegory about speed as told through rowboats



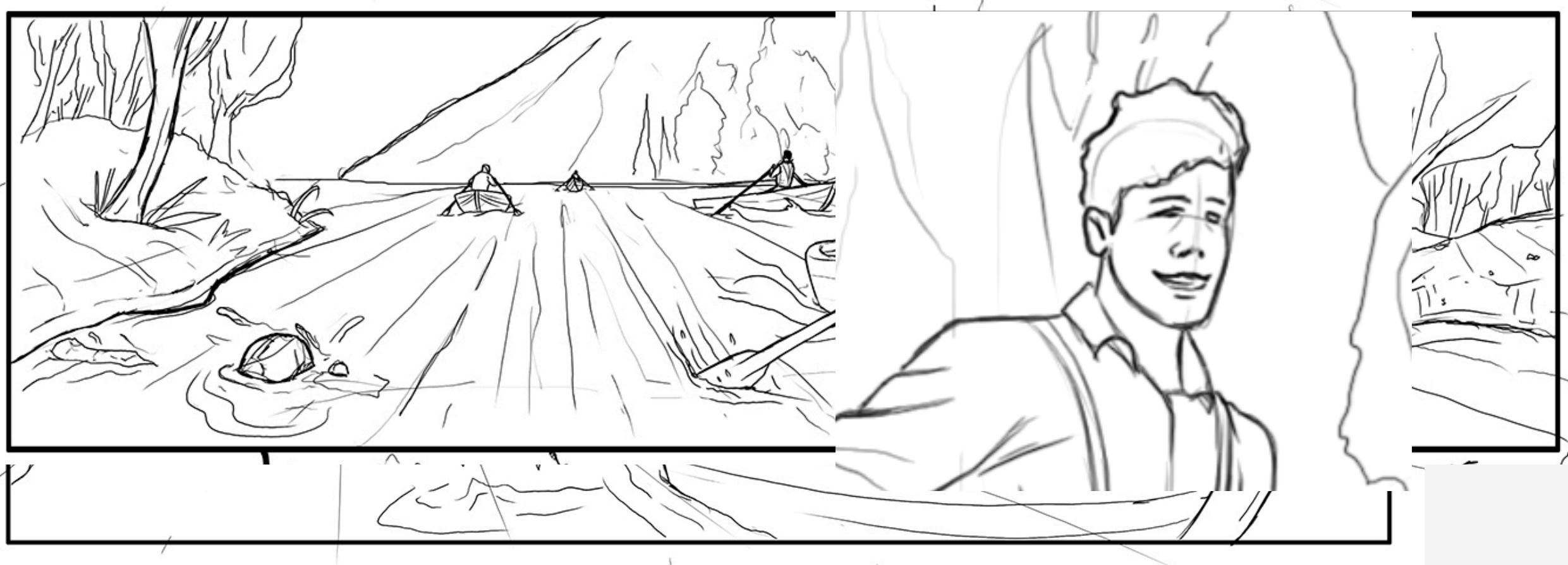
# An allegory about speed as told through rowboats



- Our hero is a strong rower, working hard, feeling good about progress

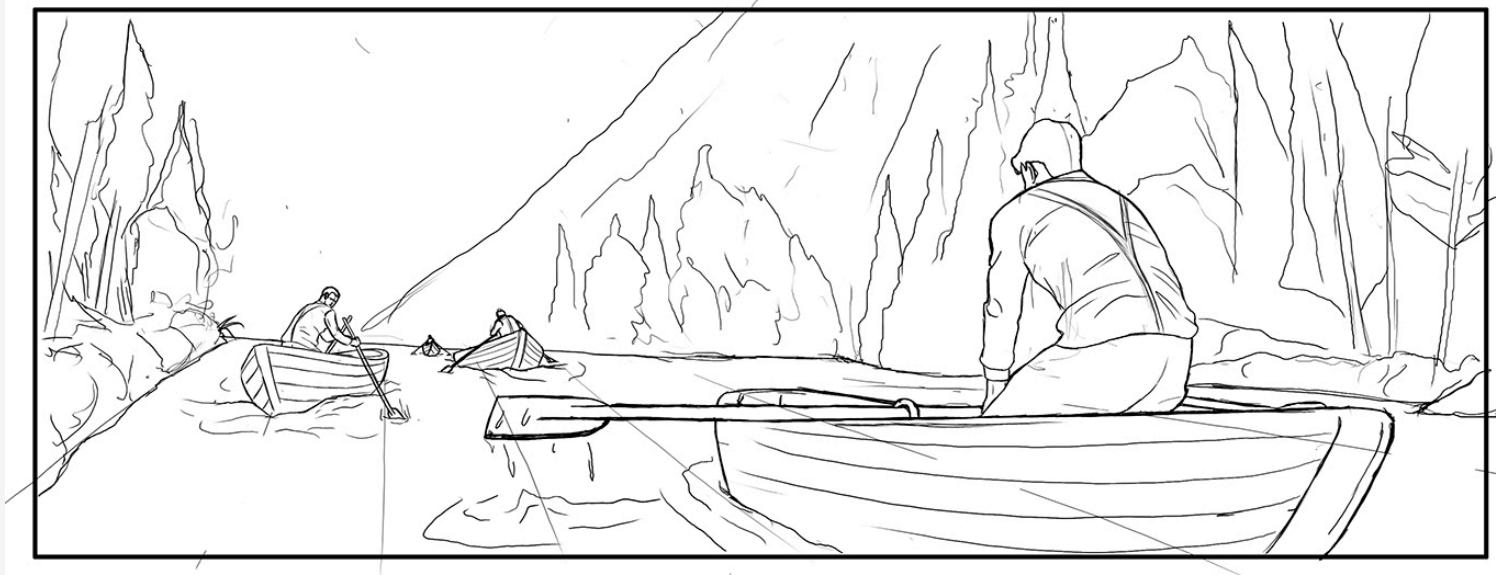
**Rowing on a river**

# An allegory about speed as told through rowboats



You are content, even pulling ahead of the other rowers

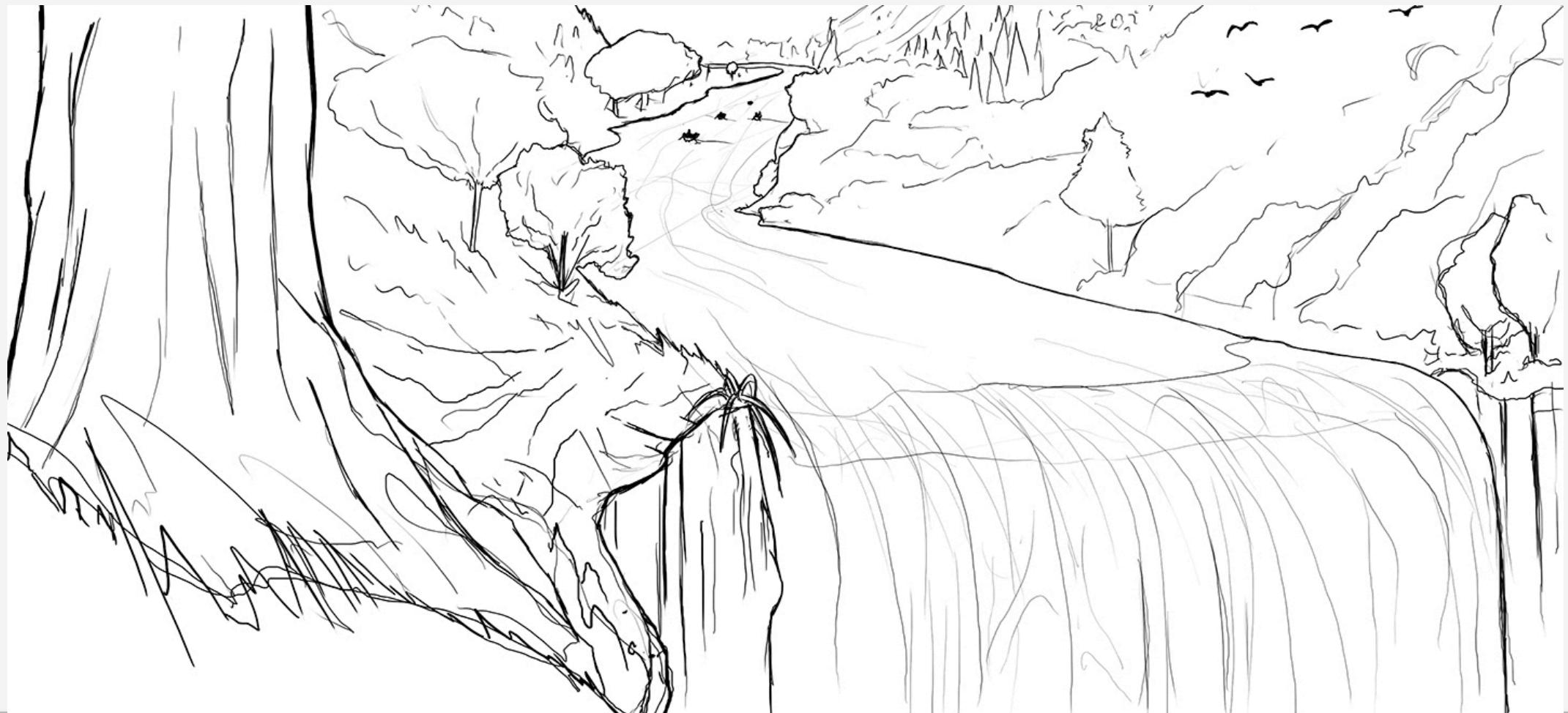
# An allegory about speed as told through rowboats



- Our hero is faster than the other rowers, feeling really good about pulling ahead of them.
- Even stands up to take some rest and get a view of the exciting stuff ahead

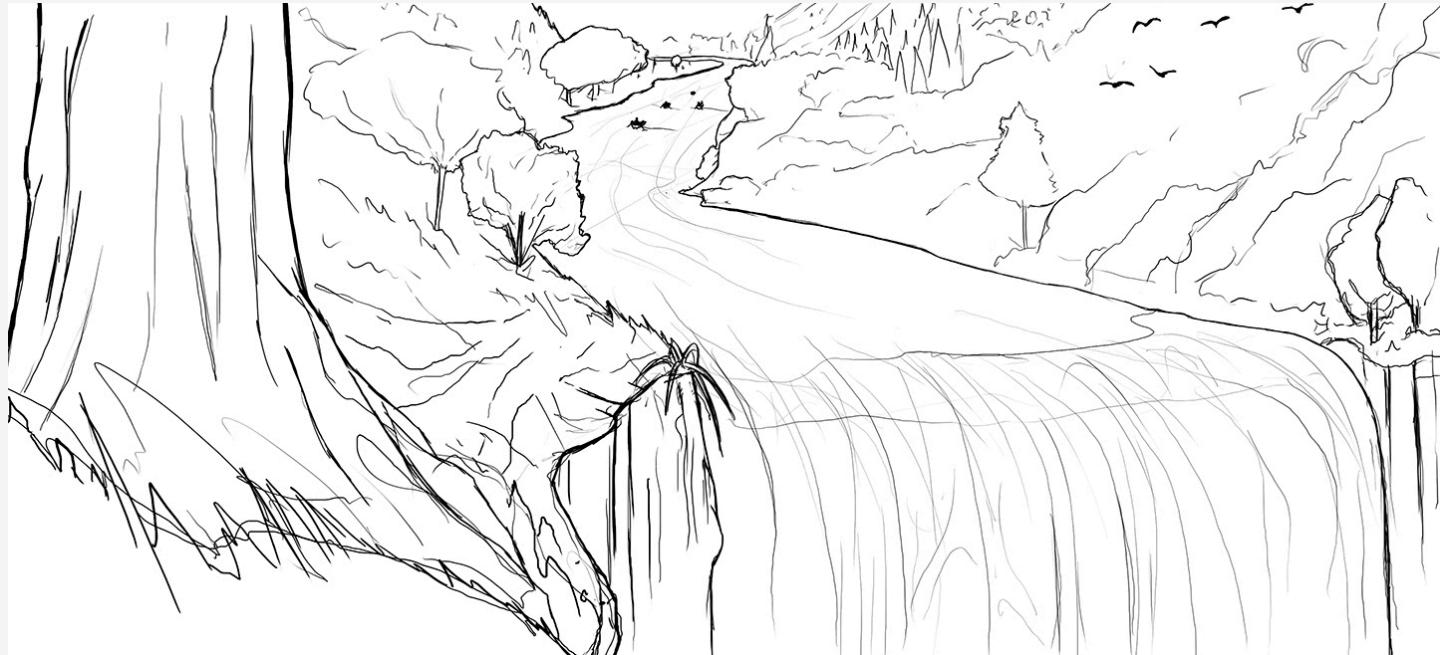
**You are content, even pulling ahead of the other rowers**

# An allegory about speed as told through rowboats



**But you don't see the waterfall drop ahead**

# An allegory about speed as told through rowboats

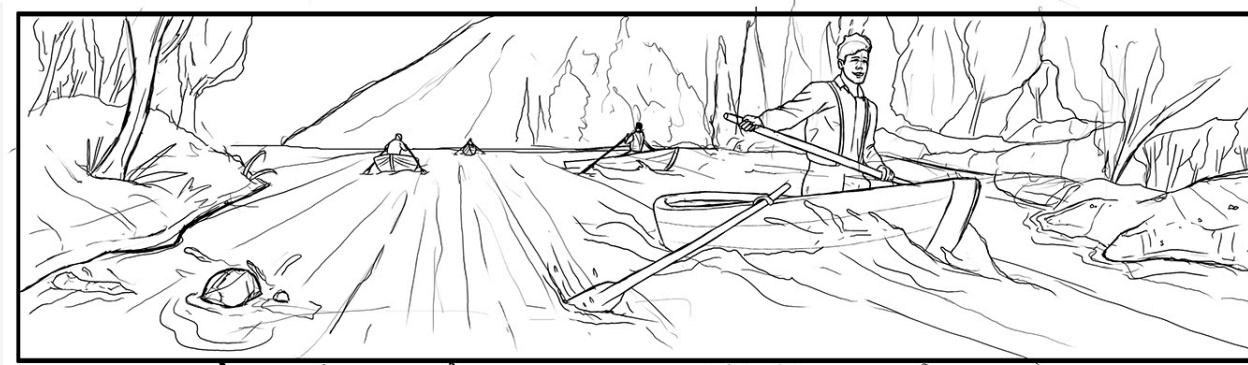
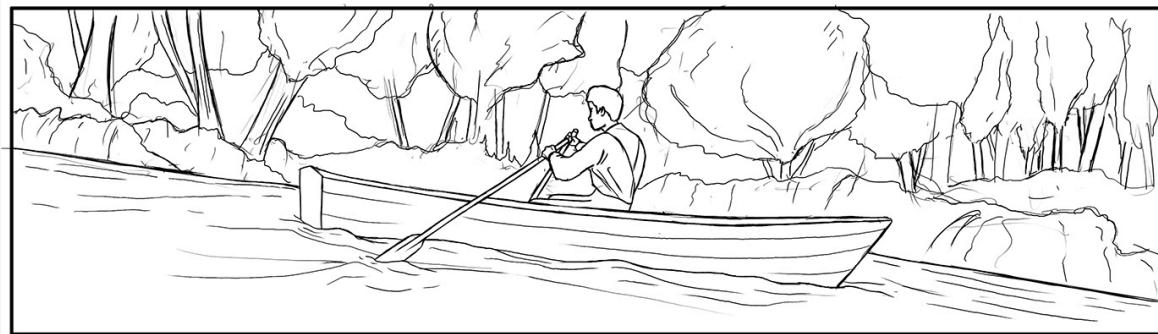


## Unfortunately

- The rowers are too focused on the narrow perspective of their relative speed
- The downstream current is faster than all of them
- They are all going to end up going over the waterfall, even our hero

**But you don't see the waterfall drop ahead**

# An allegory about speed as told through rowboats



# Some additional advice on influencing the business



**Know what motivates  
the business**

**Frame your arguments  
around outcomes**



**Avoid the narrow  
perspective**

**But most important of all...**

# Build a relationship between the Business and Tech

