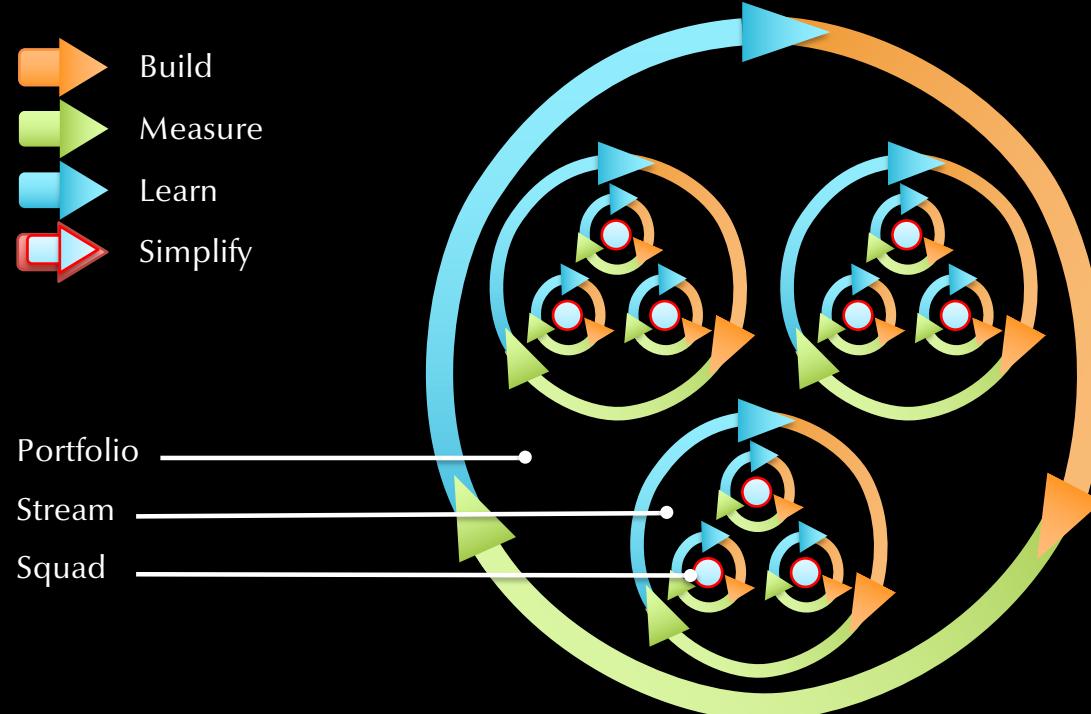
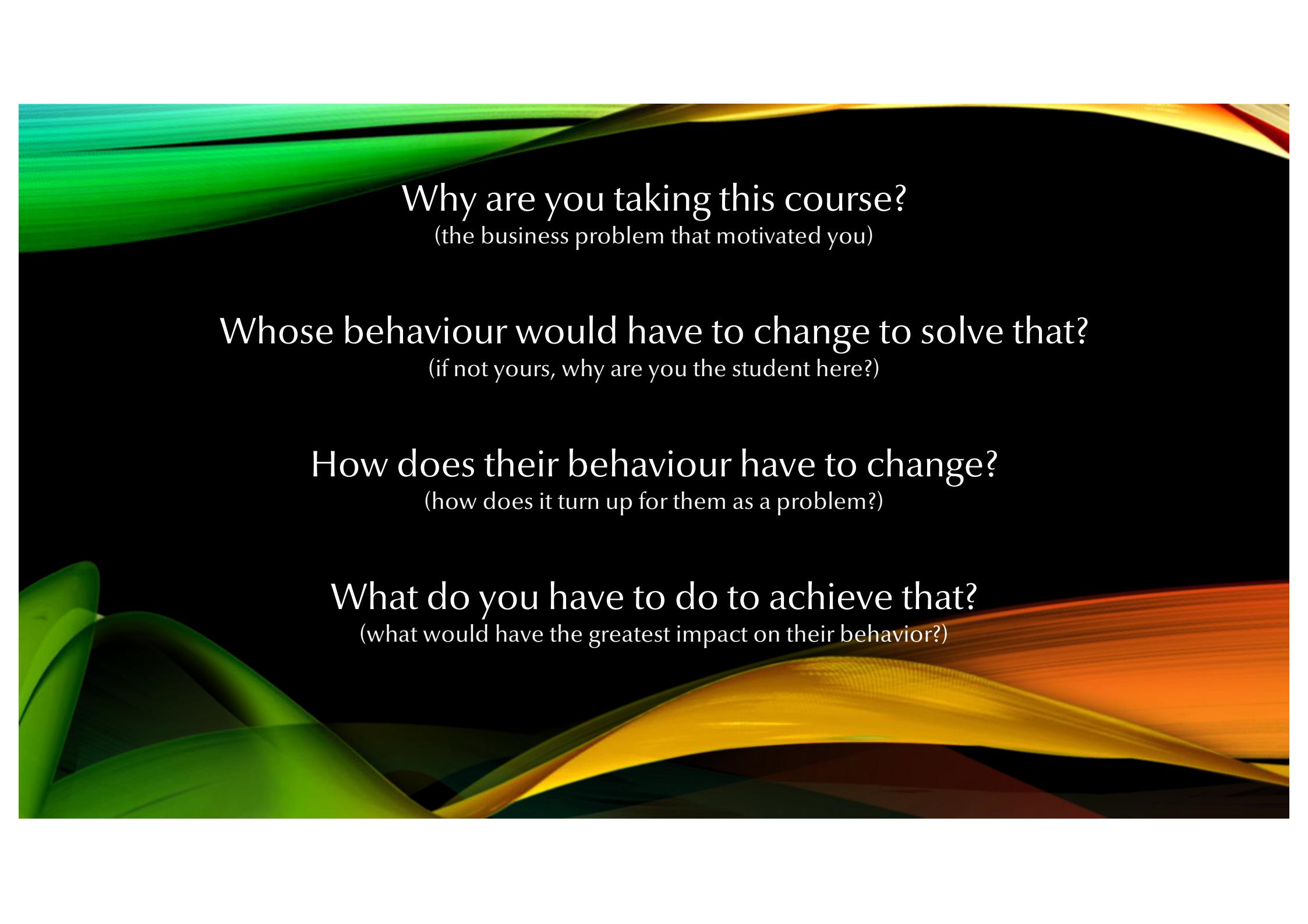




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eXponential
Business
Agility



Why are you taking this course?
(the business problem that motivated you)

Whose behaviour would have to change to solve that?
(if not yours, why are you the student here?)

How does their behaviour have to change?
(how does it turn up for them as a problem?)

What do you have to do to achieve that?
(what would have the greatest impact on their behavior?)

XBA Roadmap

- Why, Who, How & What?
 - The XSCALE Principles Breadth-First
- Exponential Growth
 - Practice: The Exponential Game
- Simple Design
 - Practice: Pirate Canvas
- Continuous Throughput
 - Throughput Diagrams
 - Practice: 3D Kanban
 - Simulation: The Bottleneck Game
- Autonomous Teams / Self-Managing Streams
 - Simulation: A Game Without Thrones
- Triple Loop Learning
 - The Evolution of Trust/Distrust
 - Seven Samurai Kanban: Self-Propagating Change
 - Simulations: Tragedy/Remedy of the PMO
- Ecosystems Thinking
 - 12 Principles derived from Permaculture
 - XPM Overview
 - Learning as a Product / Organization as a Market



The Principles of Business Agility

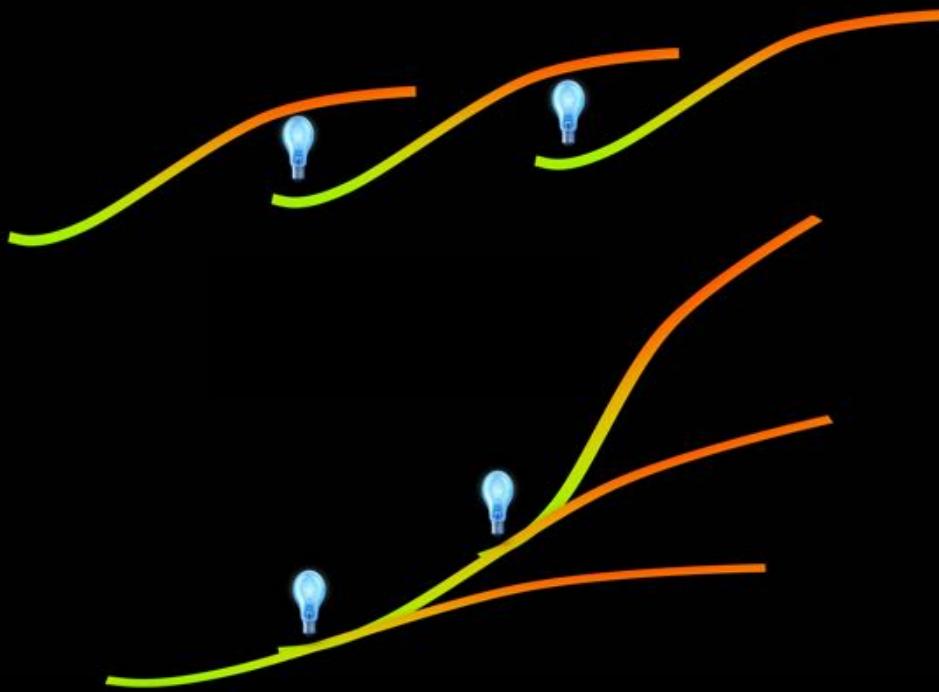


What's the difference between Agile Organization and some other kind?

- › eXponential growth
- › Simple design
- › Continuous optimization
- › Autonomous teams
- › Learning: triple-loop
- › Ecosystems thinking

eXponential growth

- › Products are service ecosystems
- › Product growth curves are sigmoids
- › Don't chain the curves; stack them



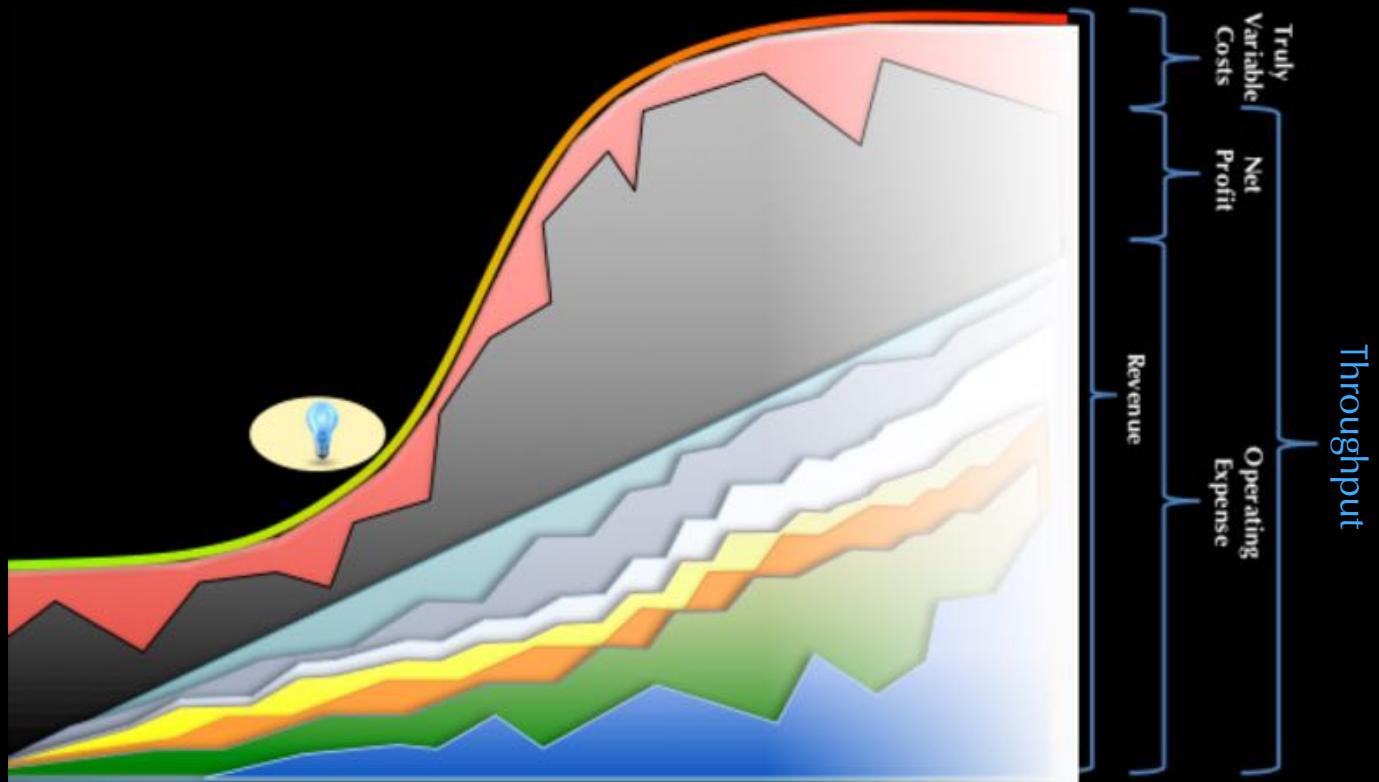
Simple design

- › Design means the elegance of minimum
- › Not look and feel; how an ecosystem works
- › Design, Delivery & Devops hand-in-glove



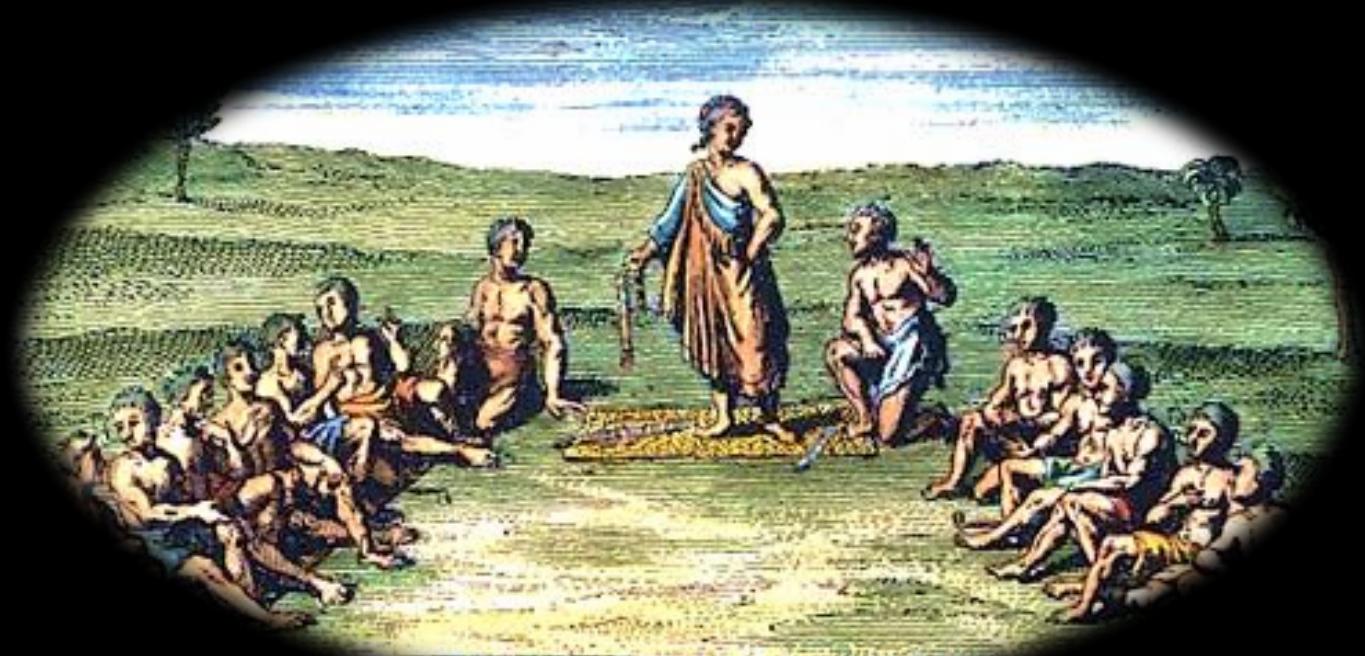
Continuous optimization

- › At one time there's one bottleneck constraint
- › Work on other constraints is premature
- › Because it won't increase Throughput



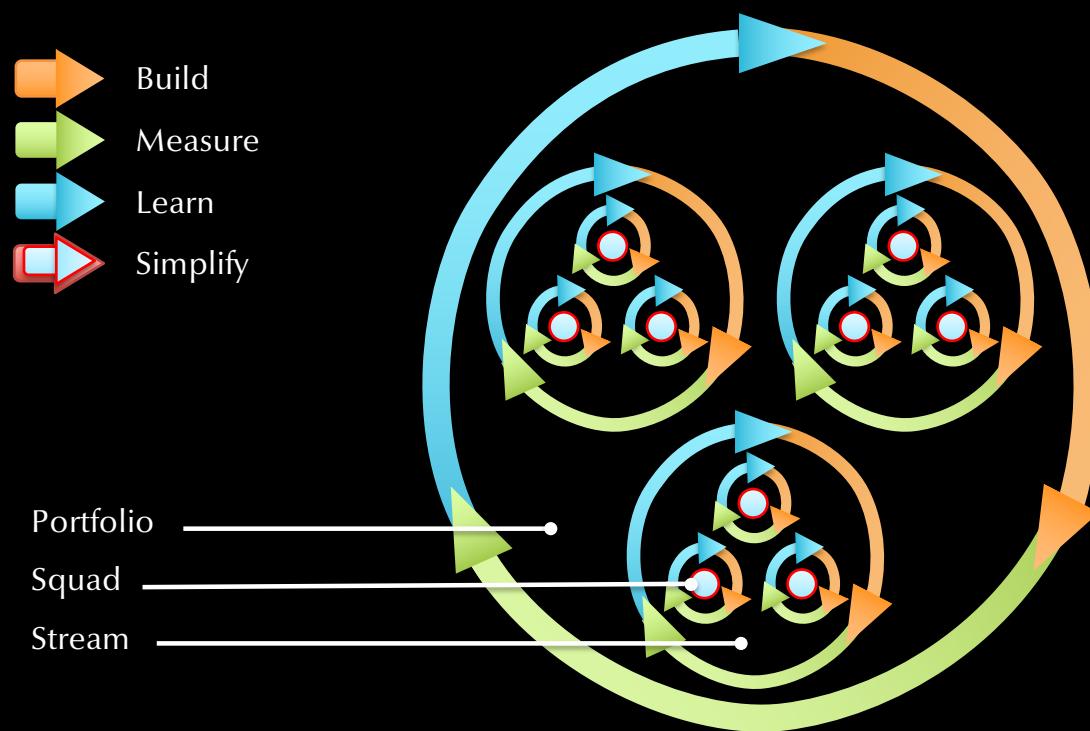
Autonomous Teams

- › Self-organising teams don't have masters
- › Self-managing streams don't have owners
- › Leadership as a Service + Chapters & Councils



triple loop Learning

- › Value flow, work flow, and flow of learning
- › Self-propagating transformation: steel threads
- › Continuous Delivery x Continuous Adaptation

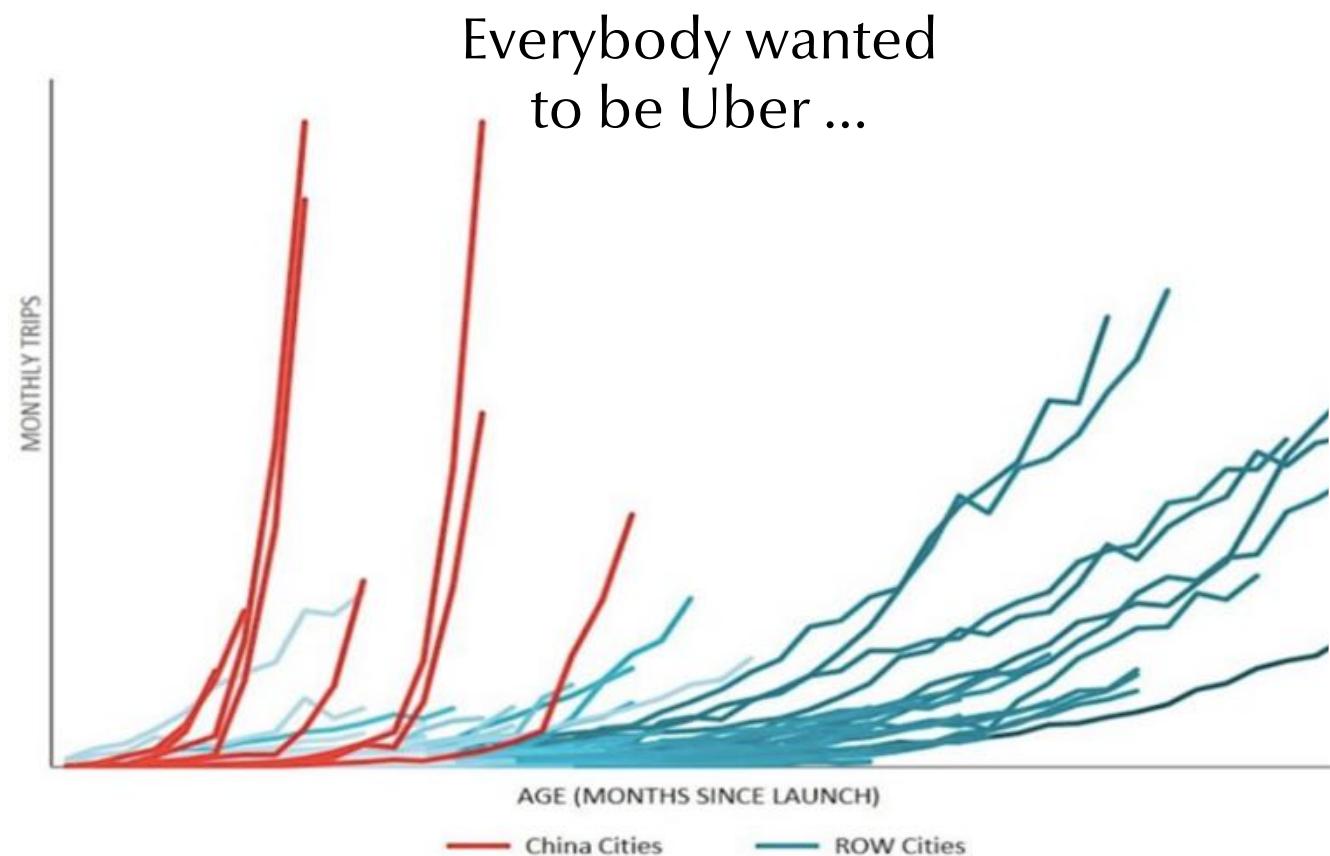


Ecosystems thinking

- › Ecosystems are “networks of mutual benefit”
- › Whole board: think globally, act locally
- › Avoiding hill-climbing: iterative and **reductive**



eXponential



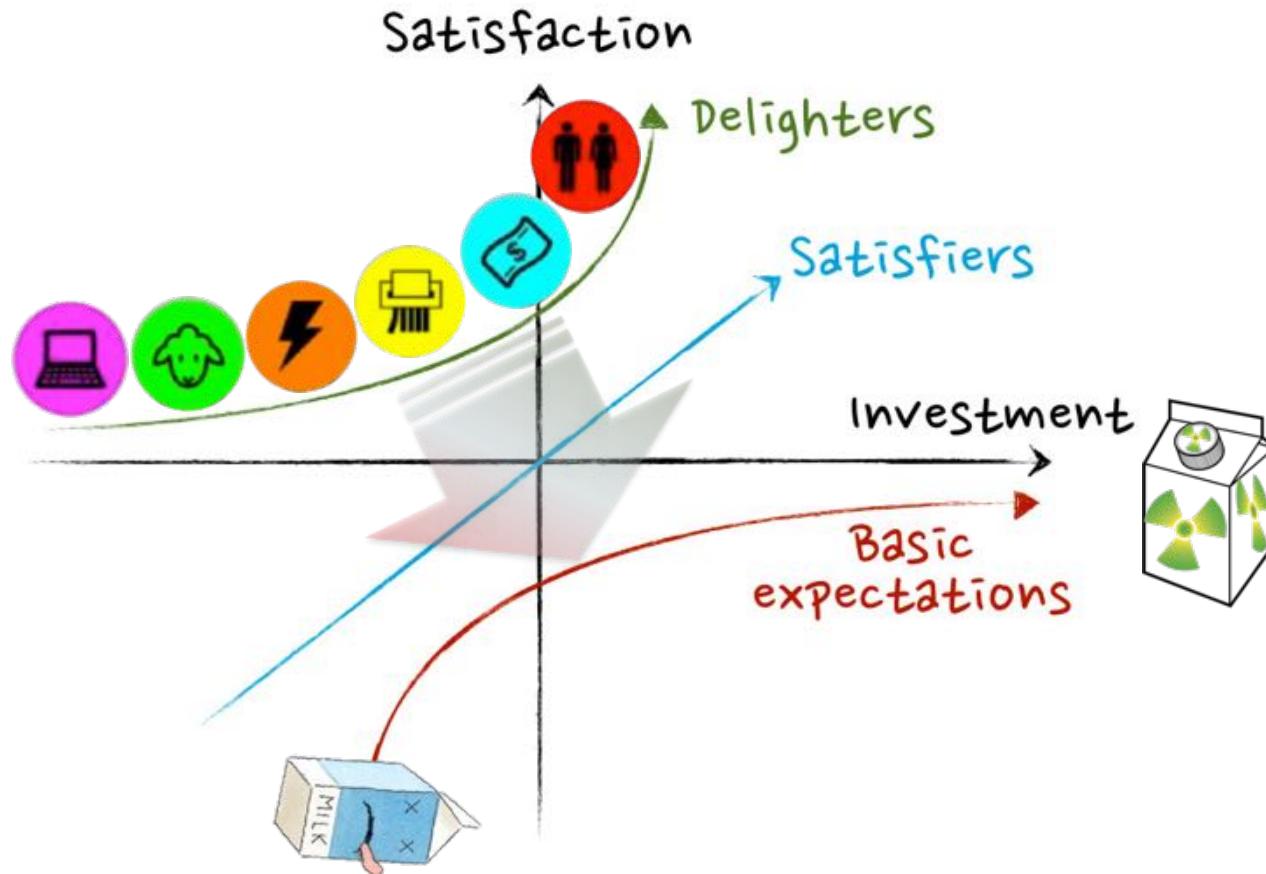
eXponential



eXponential

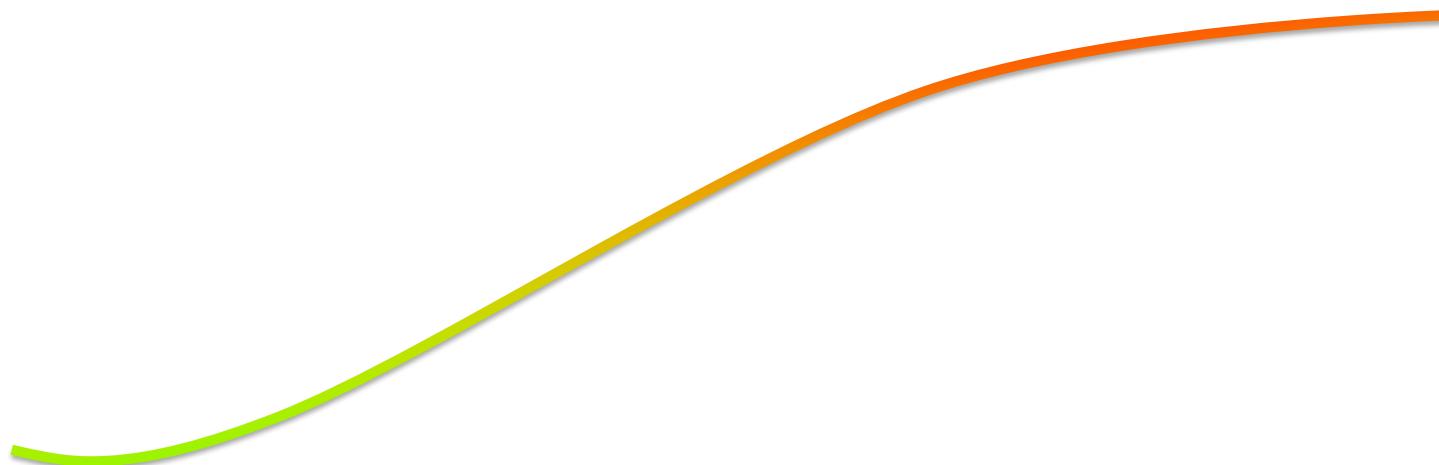


eXponential



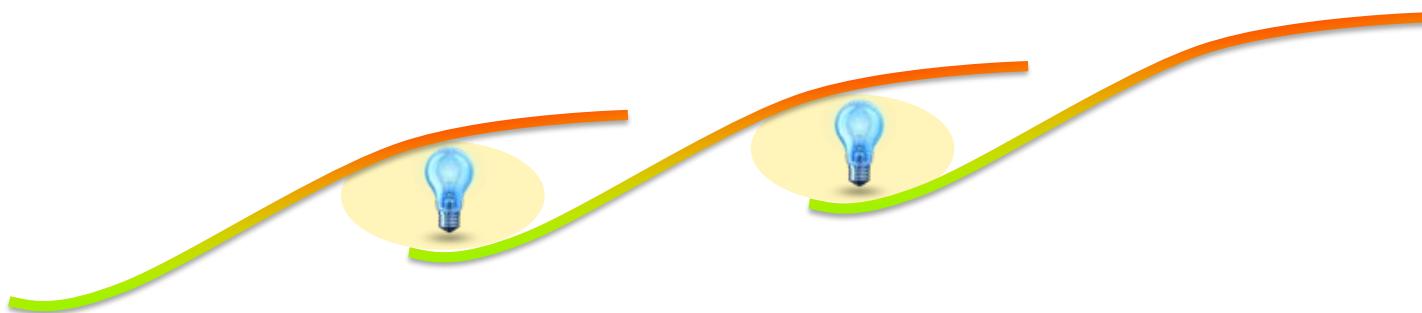
Because Kano.

eXponential



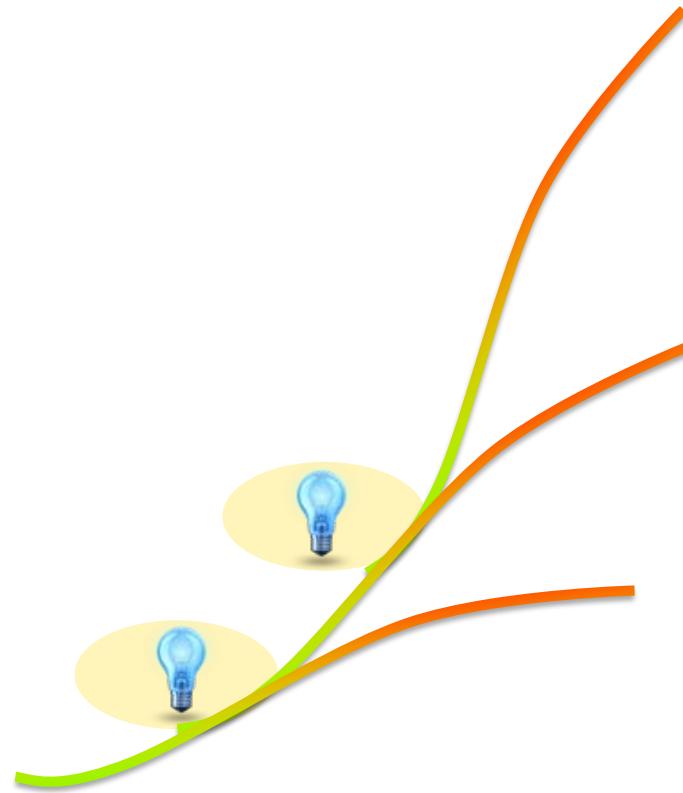
Entropy

eXponential



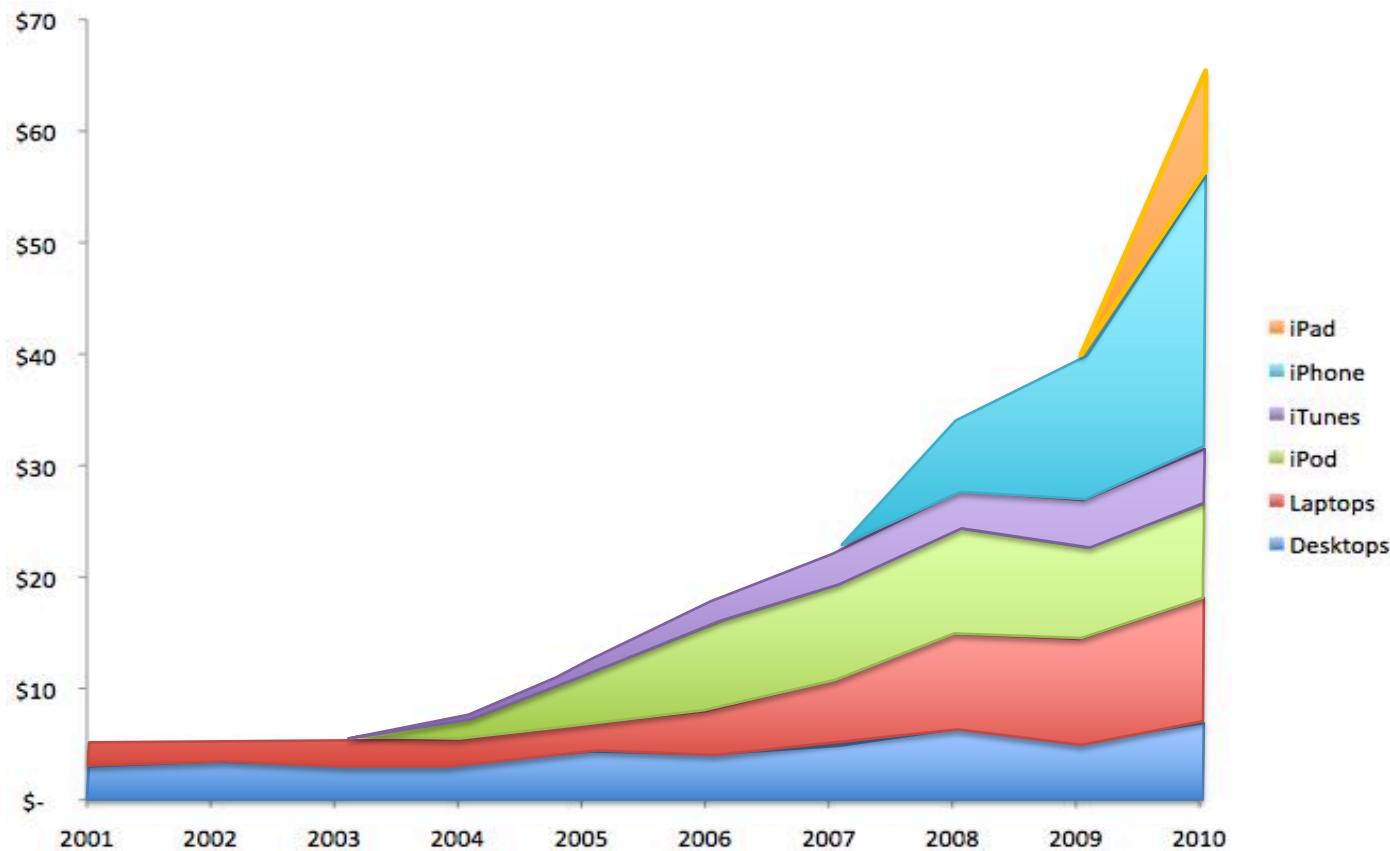
Linear growth

eXponential



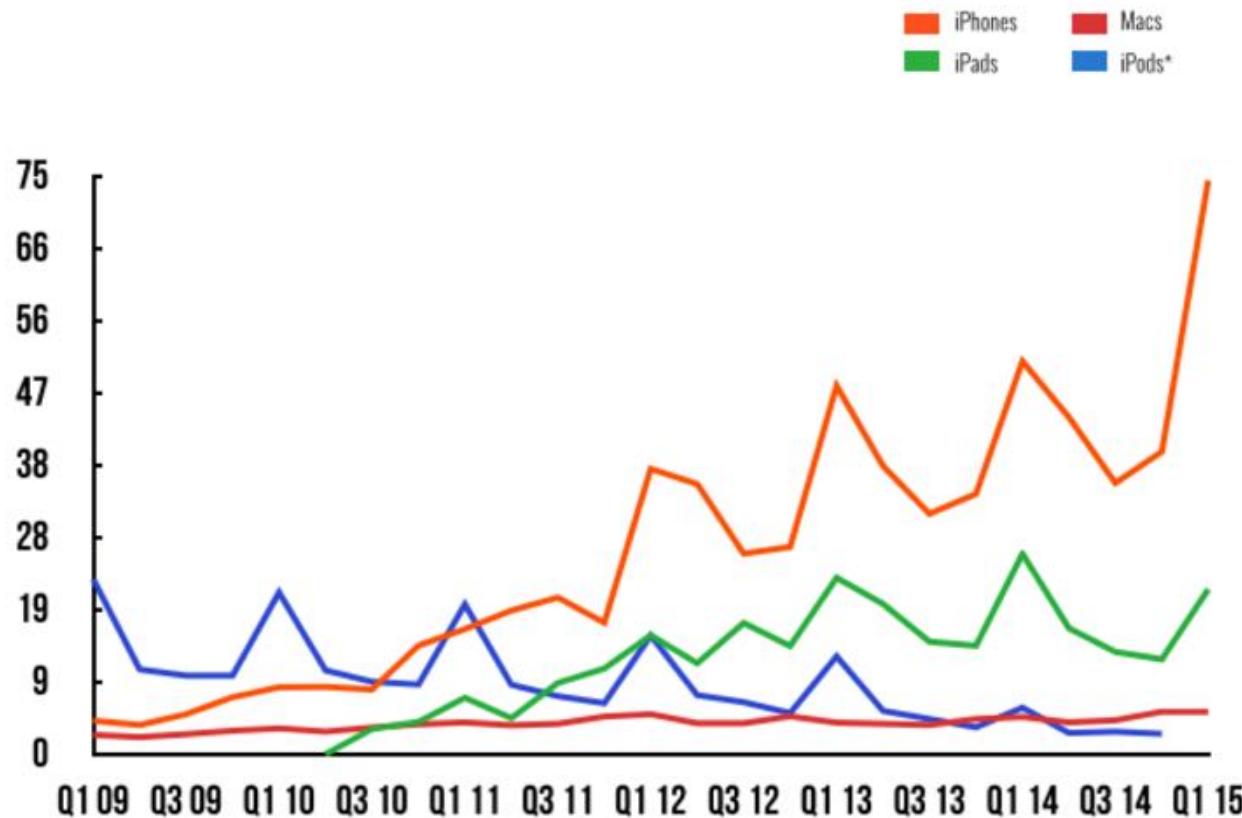
Extropy

eXponential



Extropy

eXponential



By 2015 Apple was worth more than Russia

eXponential



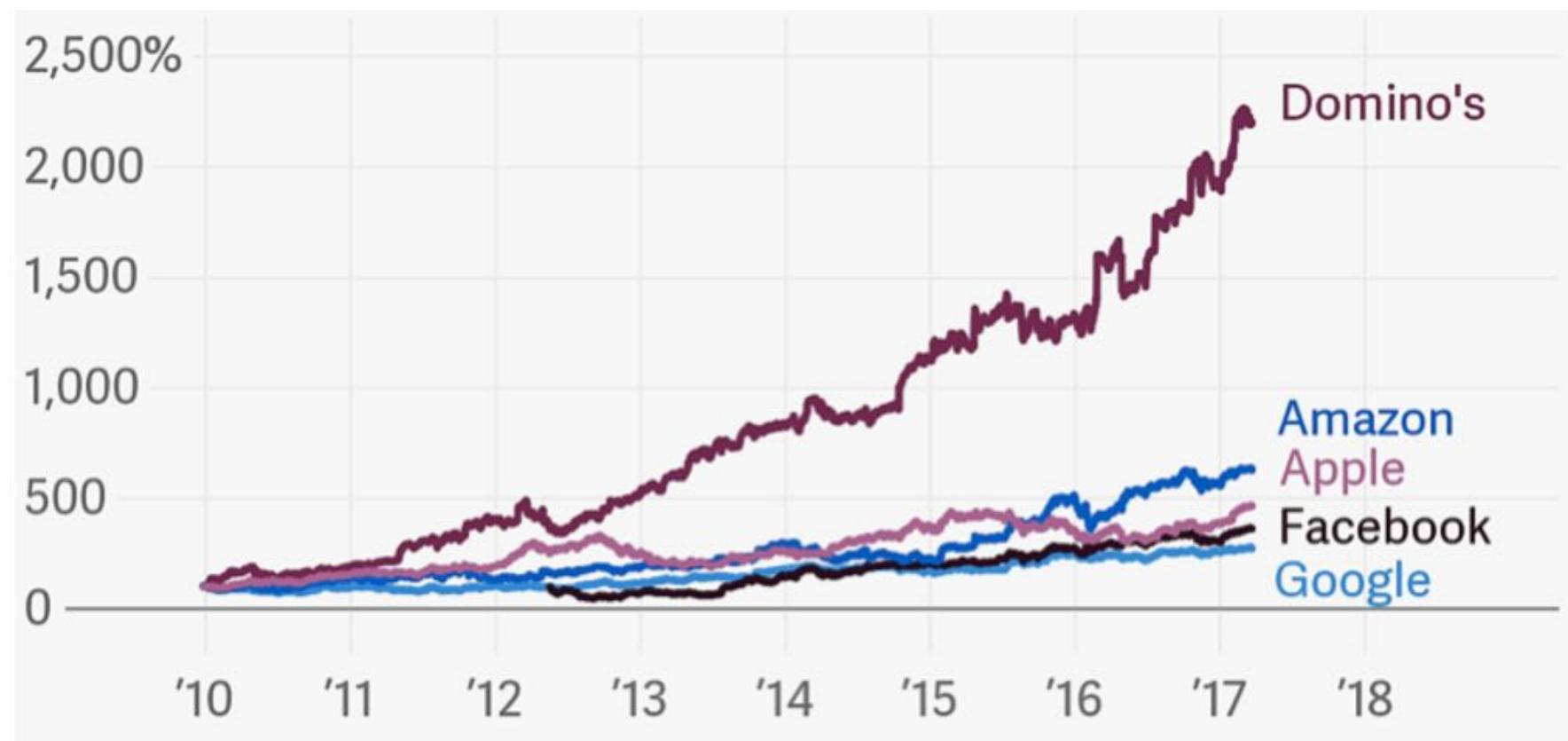
But this isn't a delighter.

eXponential

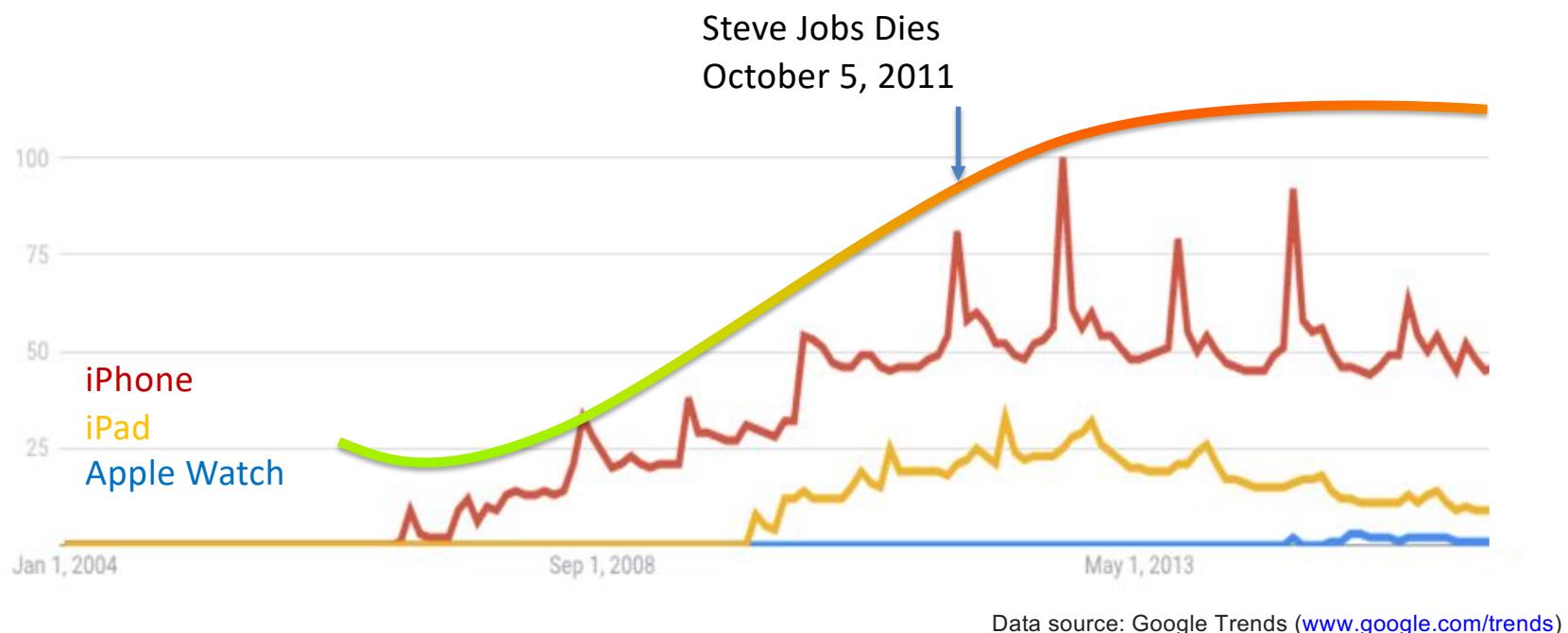


This is a delighter.

eXponential

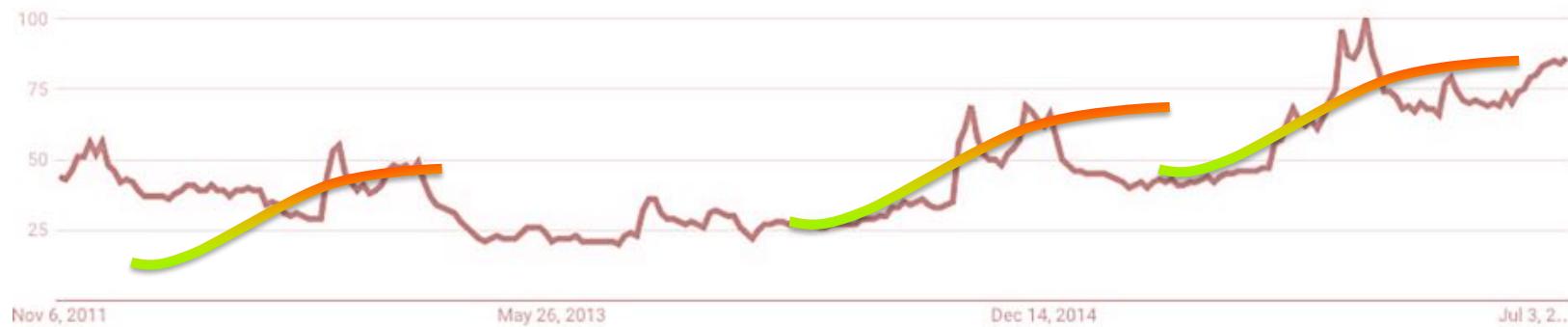


eXponential



post-Jobs Apple goes entropic

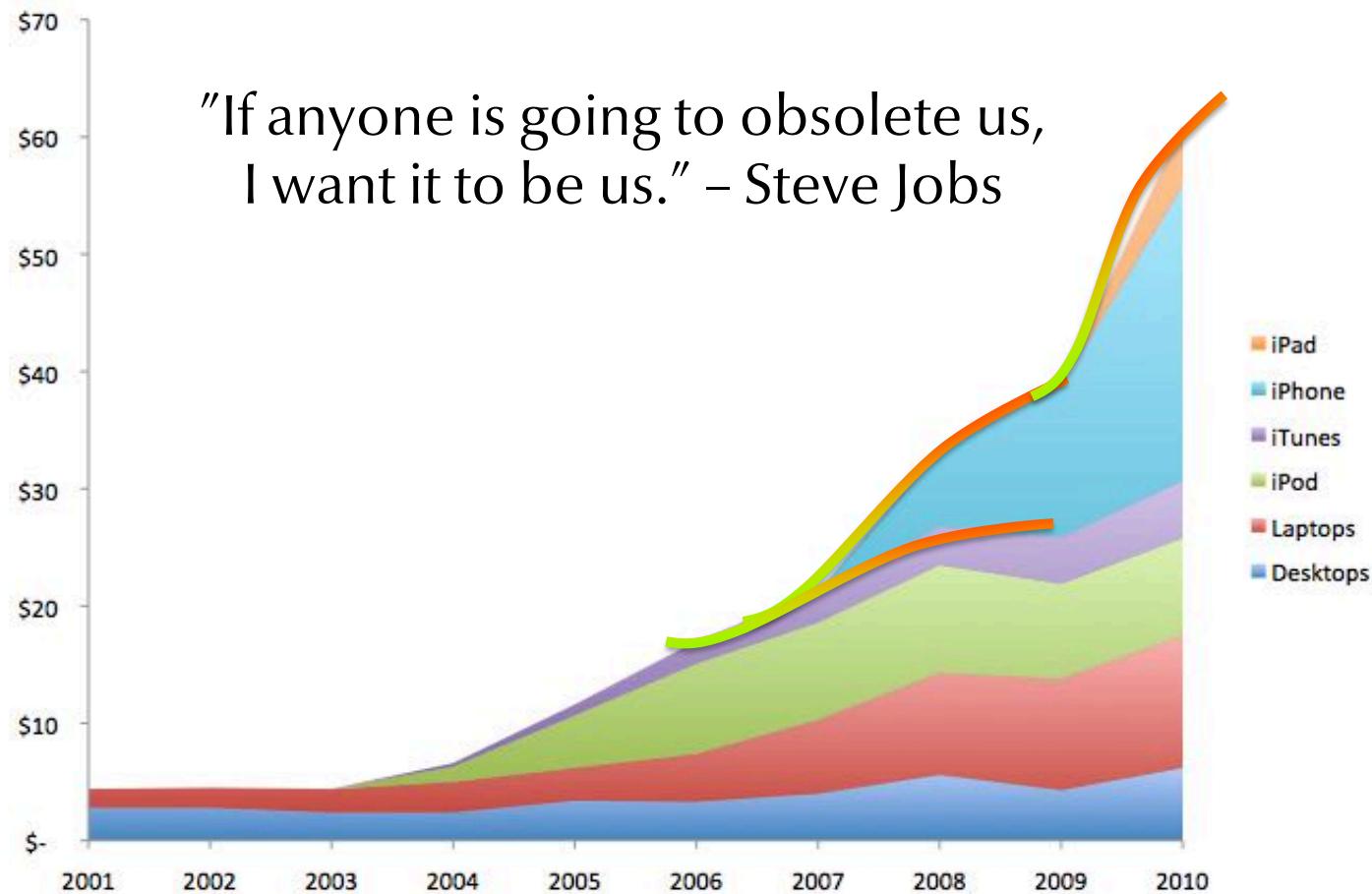
eXponential



Data source: Google Trends (www.google.com/trends)

iPhone sales growth went linear... and in 2018 Apple stopped publishing it.

eXponential



Extropy begins with a Business-Agile mindset.



An Exponential Game



Ceremonies
Two Minute Sprints.
One minute Retros.
Estimate & Chart Throughput.

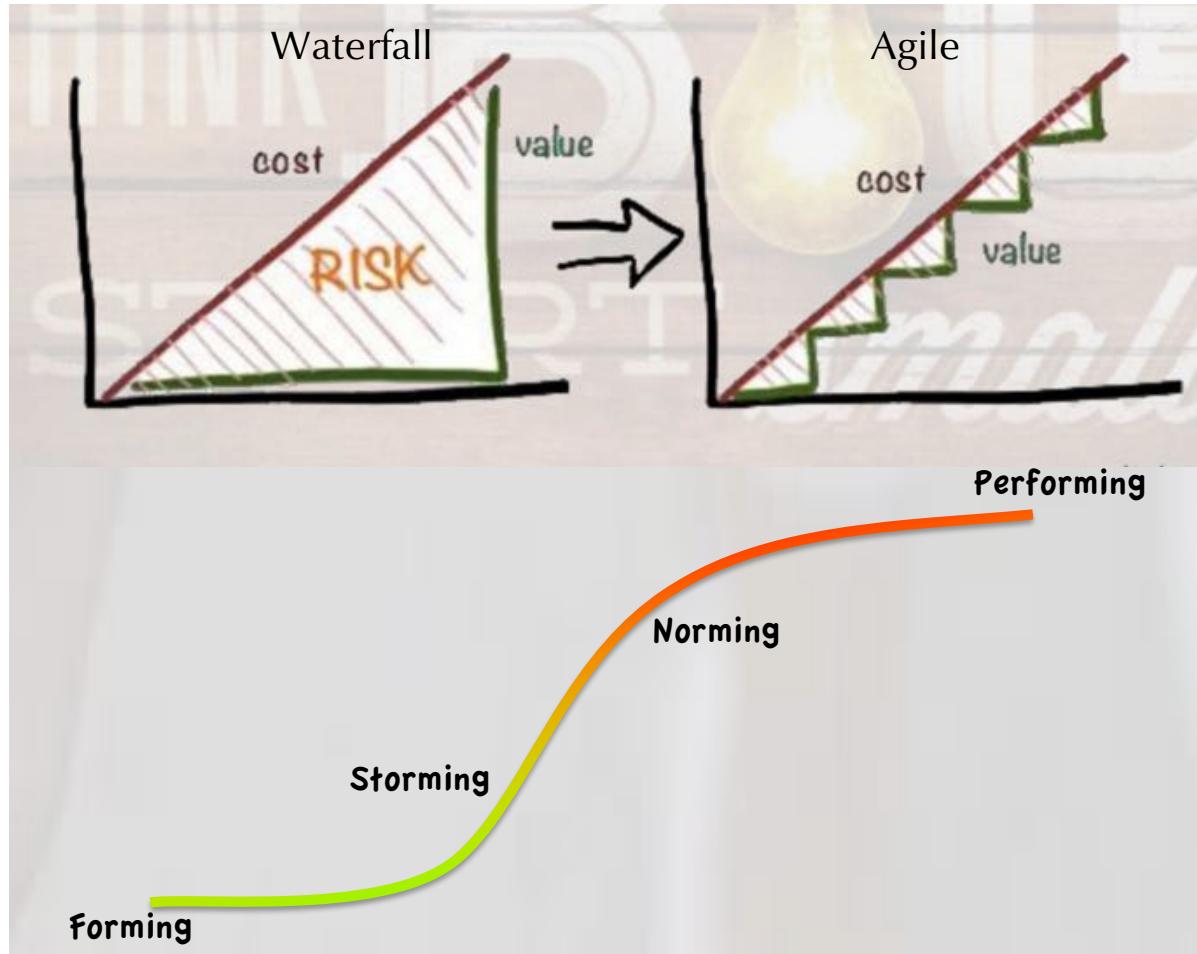
Solution Constraints
Air-time! No containers!
Minties stop where they start!
Don't pass left<->right!



Questions

Who was the Most Productive?
Who was the Manager?
Who was the Architect?

Did we see exponential ROI?
What would be a sustainable pace?
Can a whole organization work this way?



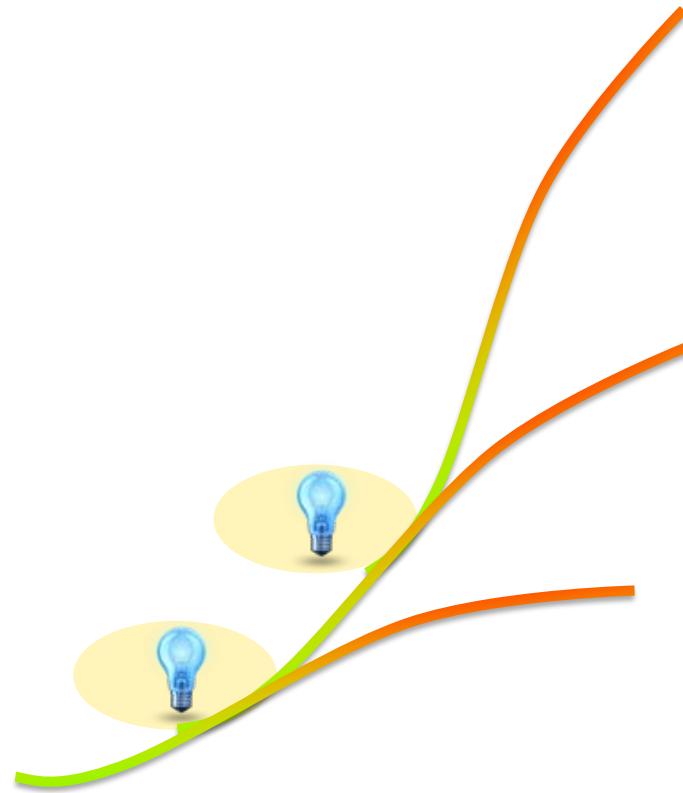
How do we open the bottleneck?

Simple design

- › Design means the elegance of minimum
- › Not look and feel; how the ecosystem works
- › Design, Delivery & Devops -> hand-in-glove

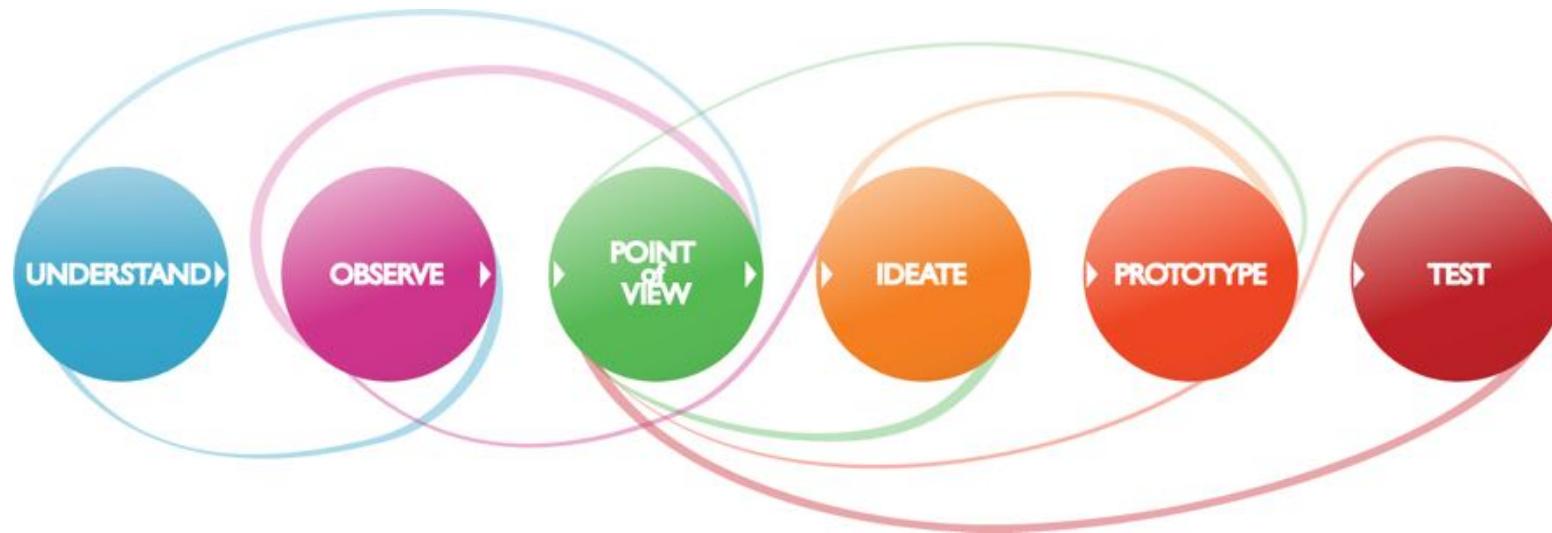


eXponential



Extropy

Simple



Design Thinking isn't about simple

Simple



2003 Nokia N-Gage. "The Taco Phone". Apps. Internet. MP3s. Everything iPhone did ... 4 years before iPhone.

Simple



2004 Nokia N-Gage QD. Design Thinking by IDEO.
Improved look and feel. Sank like a stone.

Simple



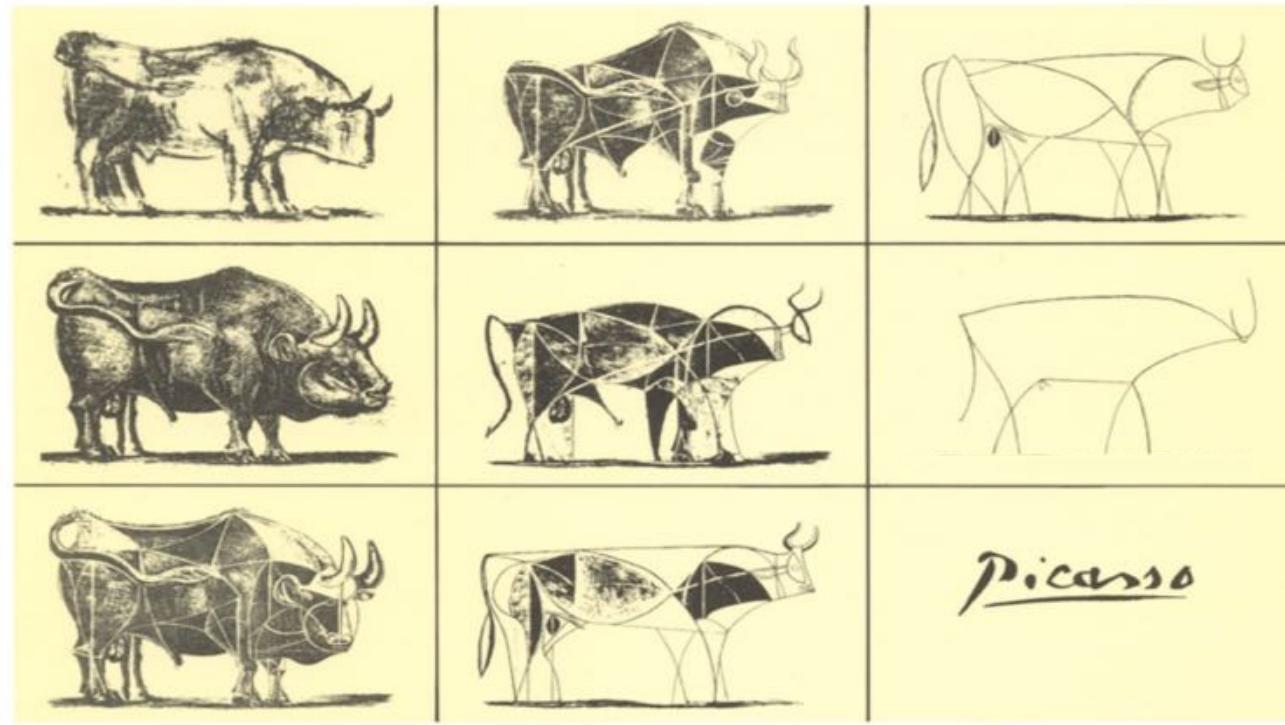
2008 Nokia N-Gage Next Gen. Design Thinking by IDEO.
An app store for Nokia phones. Discontinued 2009.

Simple



iPhone 2007 threw Design Thinking out the window.
“People don't know what they want till you show them.”.

Simple

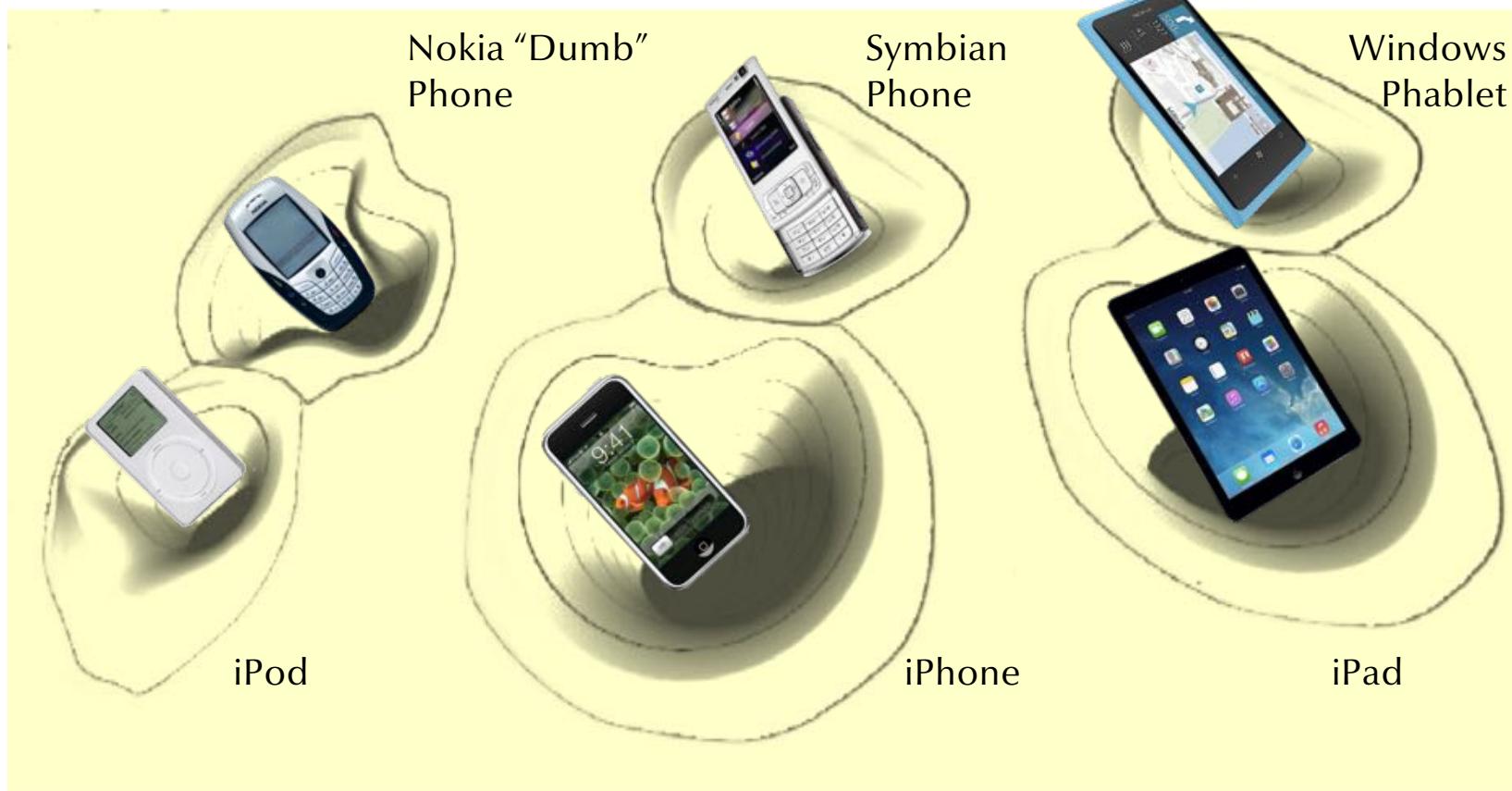


“Design means the elegance of minimum.
It isn’t look and feel. It’s how it works.” -- Jobs

Simple

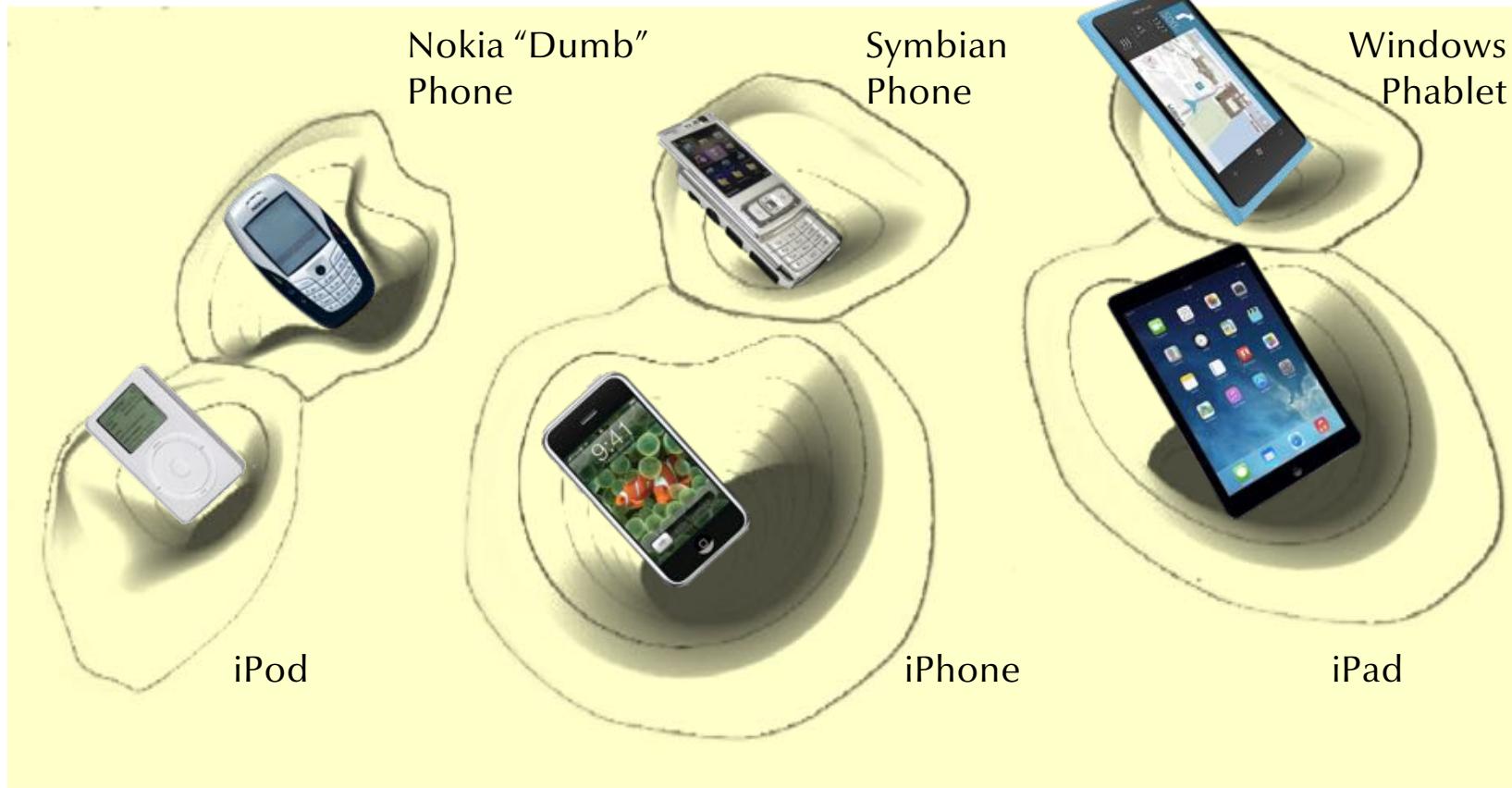


Simple



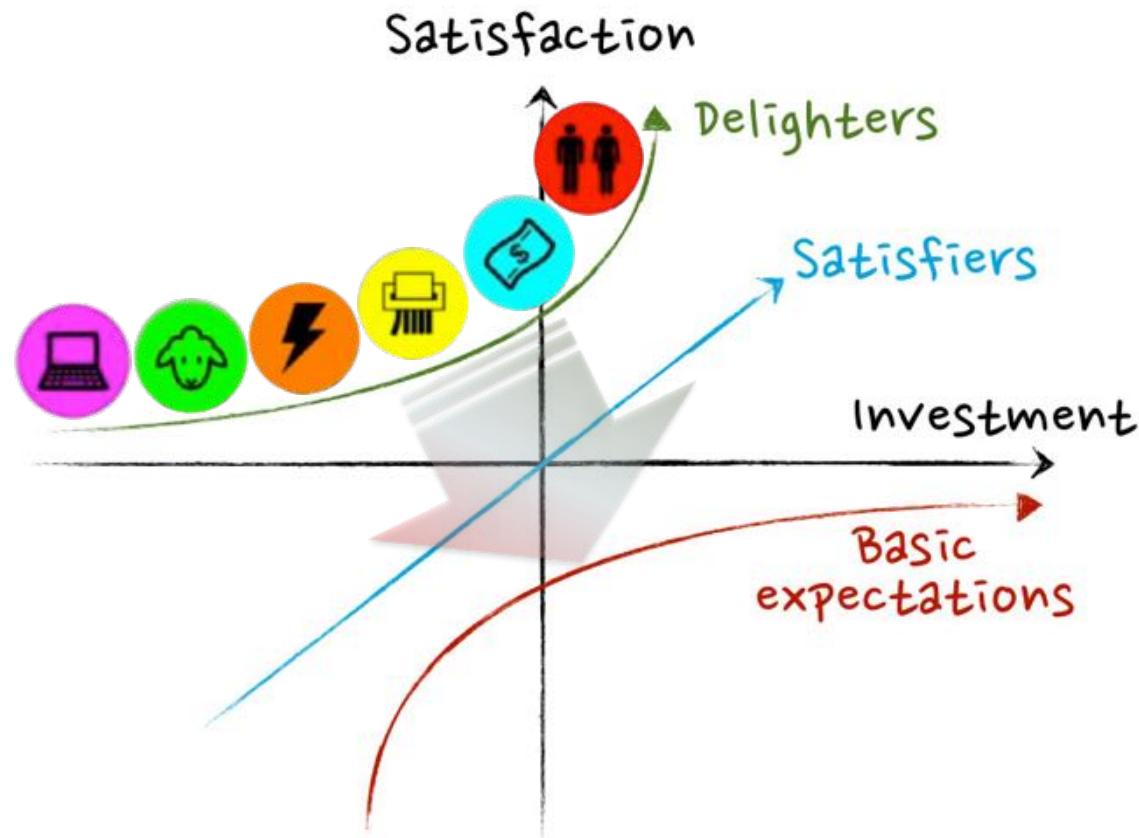
Products aren't devices. Devices only represent products.
Products are “how it works”. They're service ecosystems.

Simple



Design Space isn't flat. It's curved and dynamic.
Like spacetime.

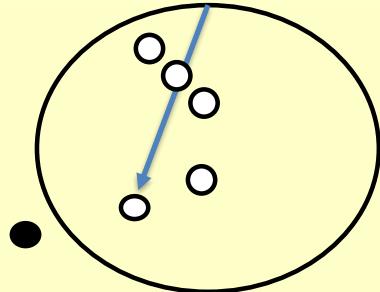
Simple



Kano explains why.

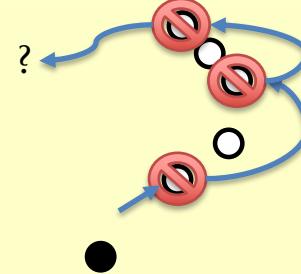
Ecosystem

Deductive Reasoning



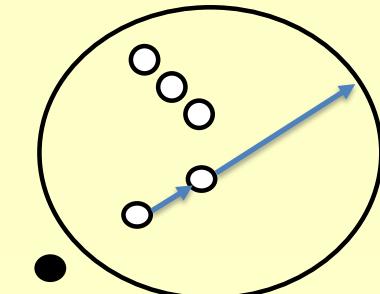
All swans are white.
I have a swan.
My swan is white.

Abductive Reasoning



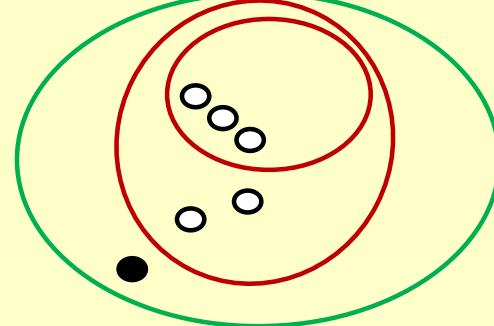
Is it a white swan? No but Warm ...
Is it a duck? Getting Colder ...
A chicken? Colder ...

Inductive Reasoning



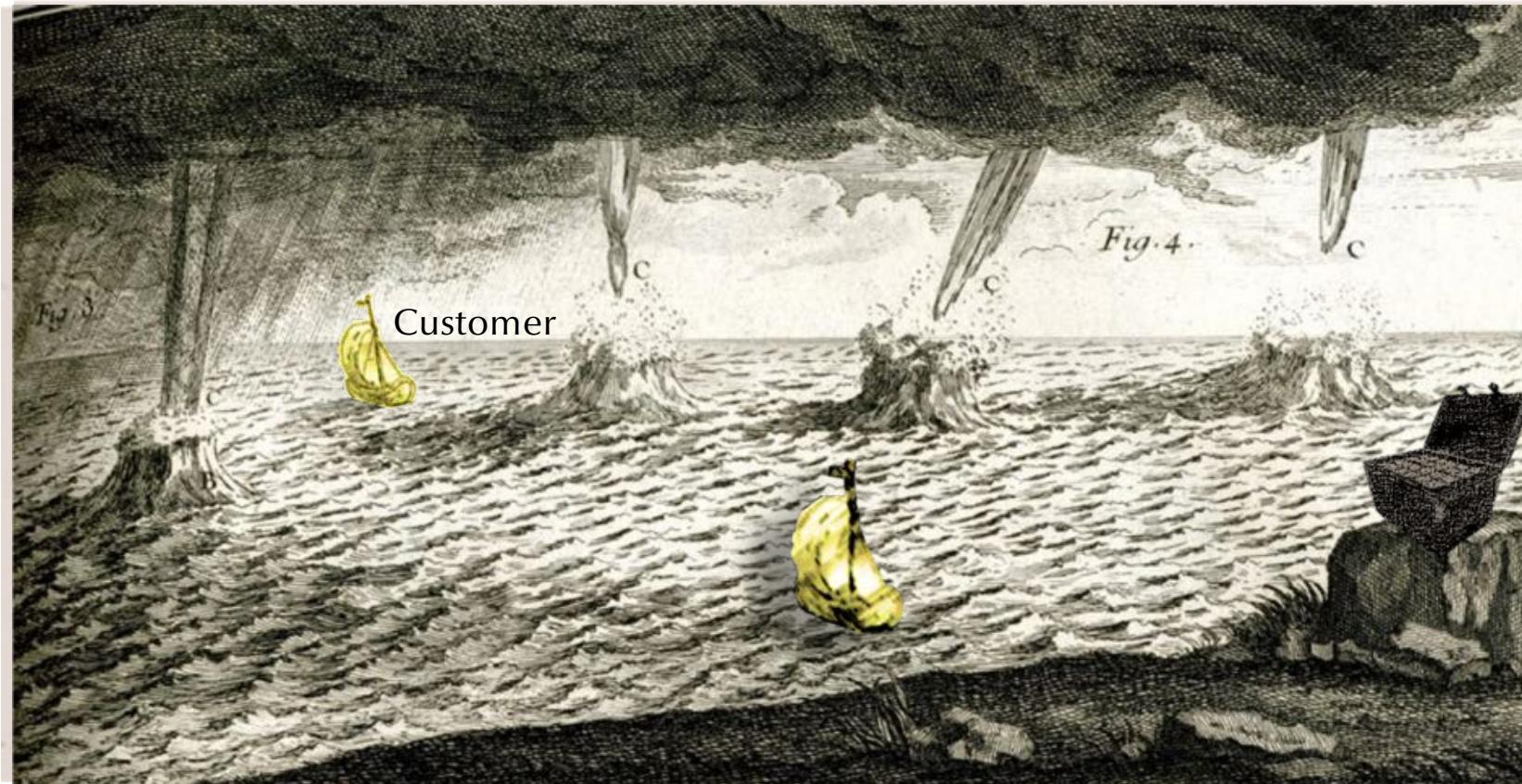
Grandpa swan is white.
Mama swan is white.
All swans are white.

Reductive Reasoning



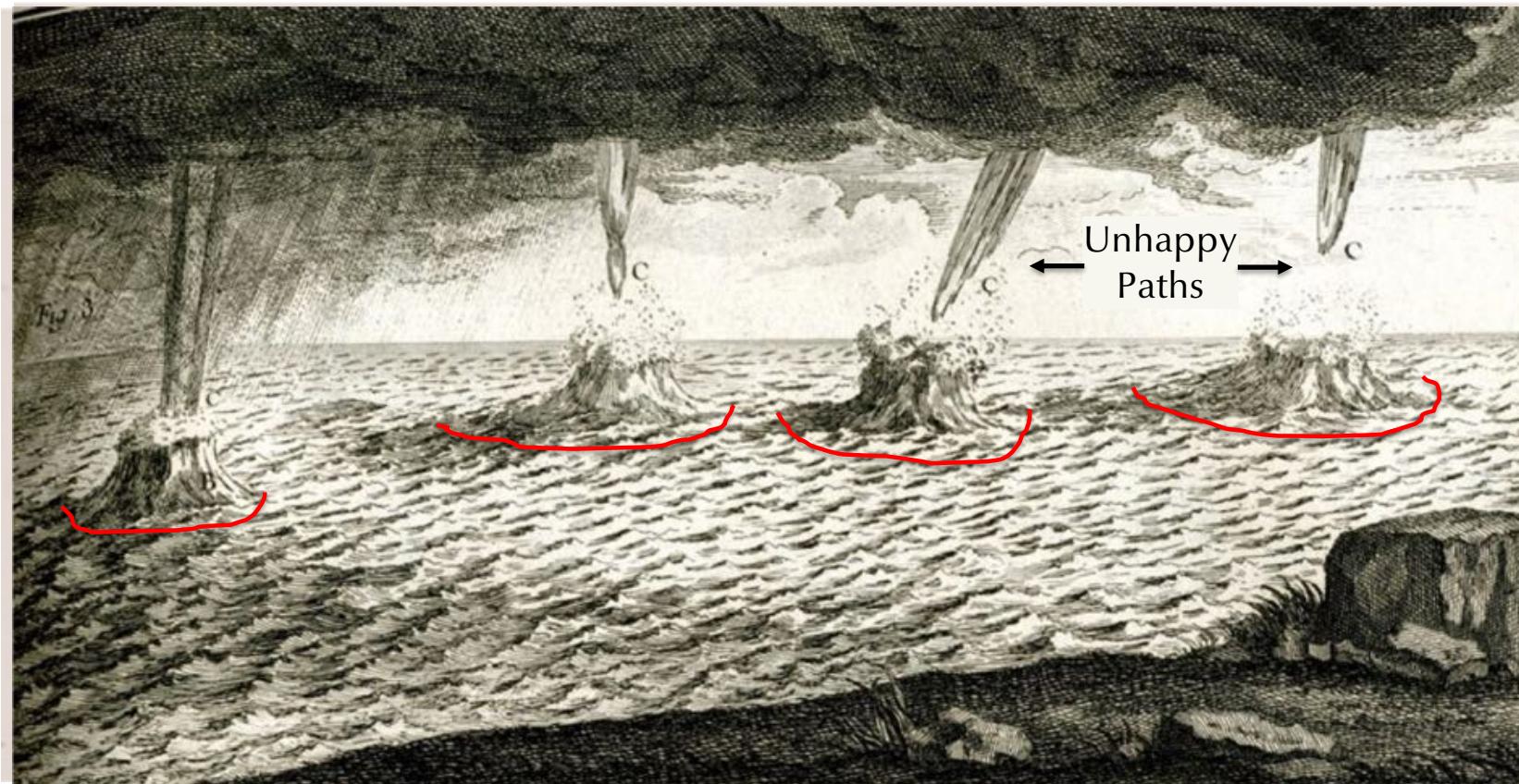
Can it swim? Yes ...
Size of a duck? No ...
Is it white? No ...

Simple



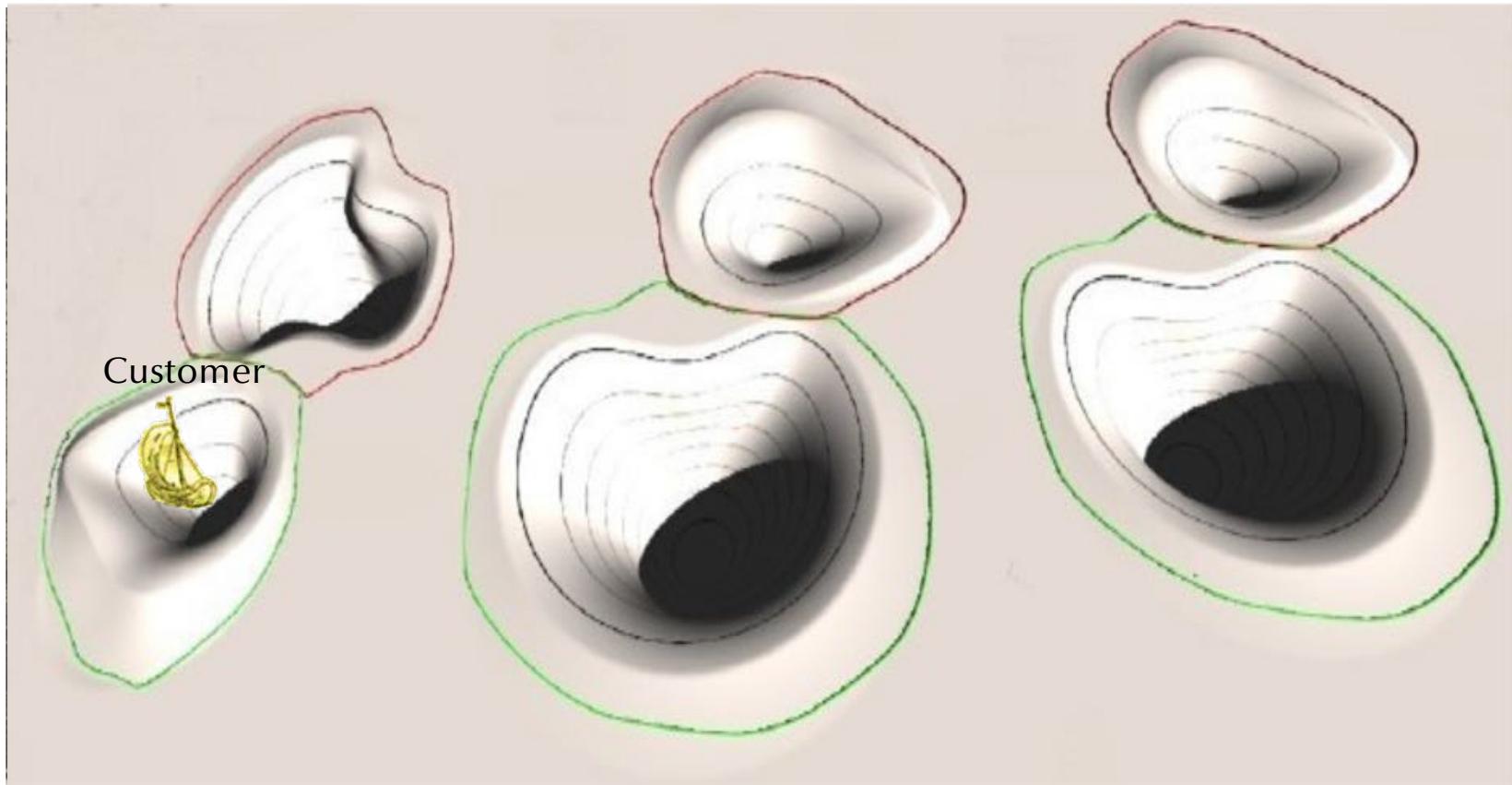
Service ecosystems are defined by their “Pirate Metrics”.
Acquisition. Activation. Retention. Referral. Return.

Simple



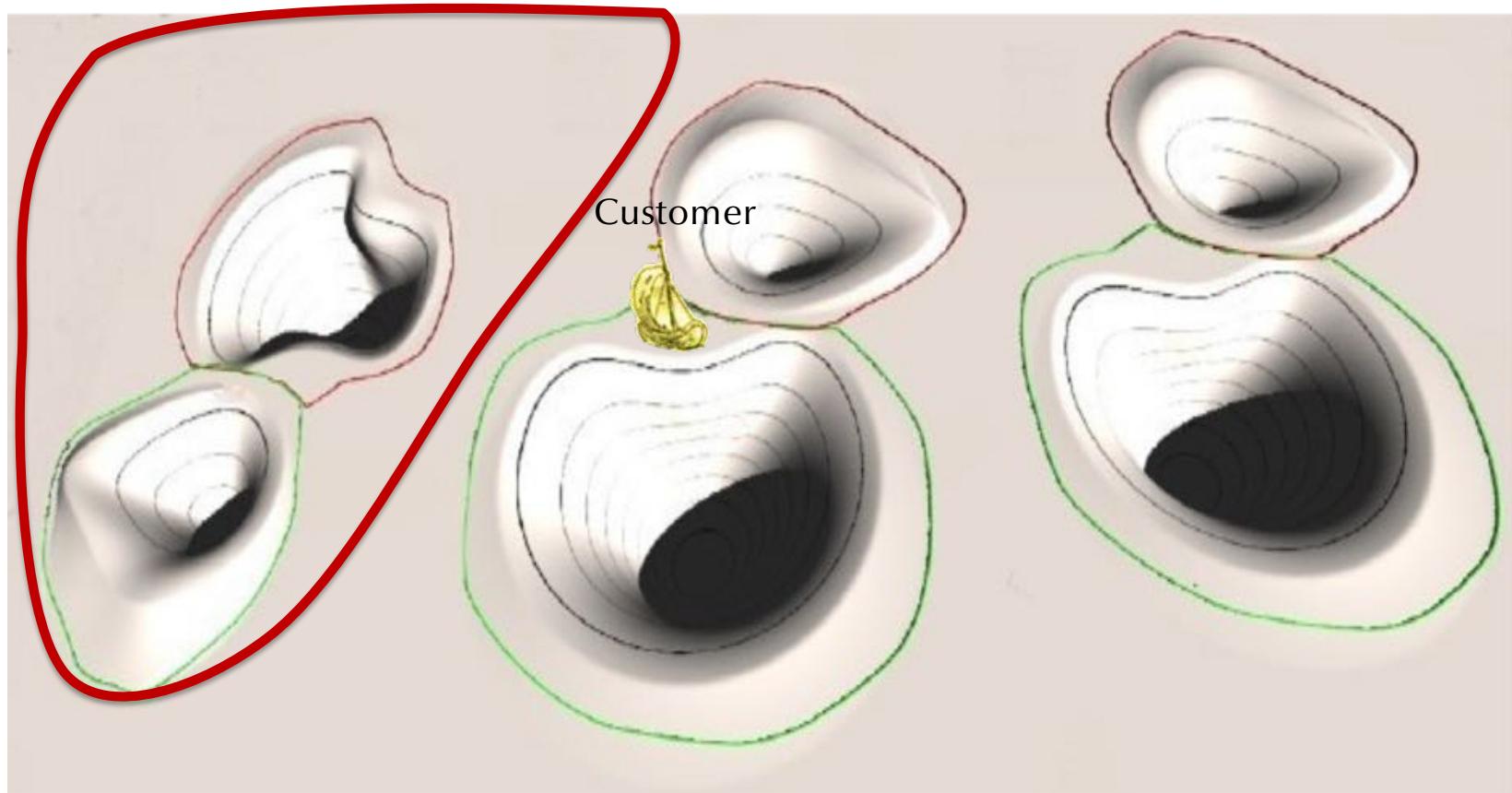
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Acquisition. Activation. Retention. Referral. Return.

Simple

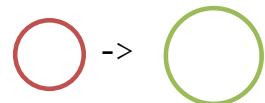


Designing iPhone ...

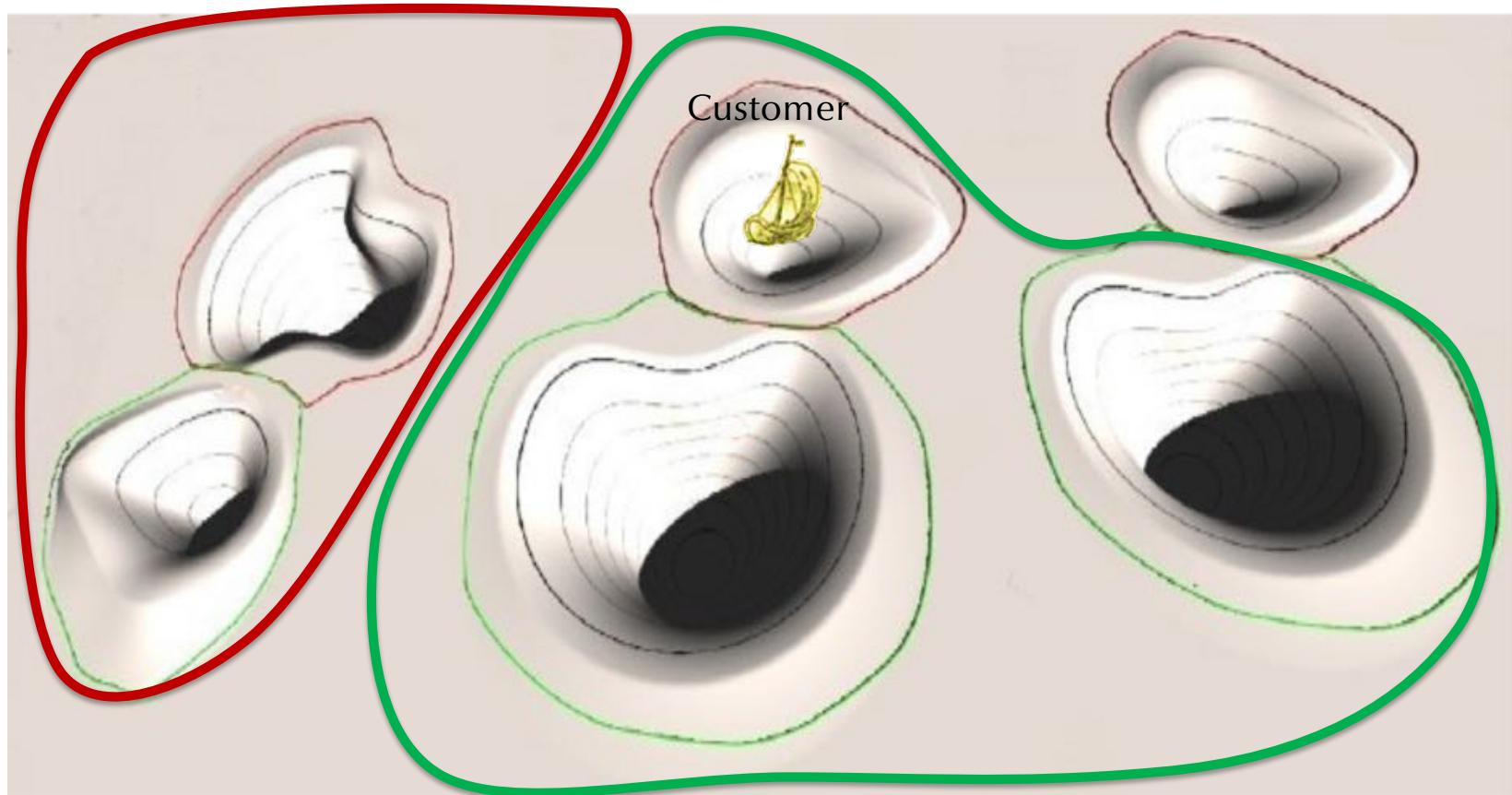
Simple



Acquisition: take the product out of the big box stores.



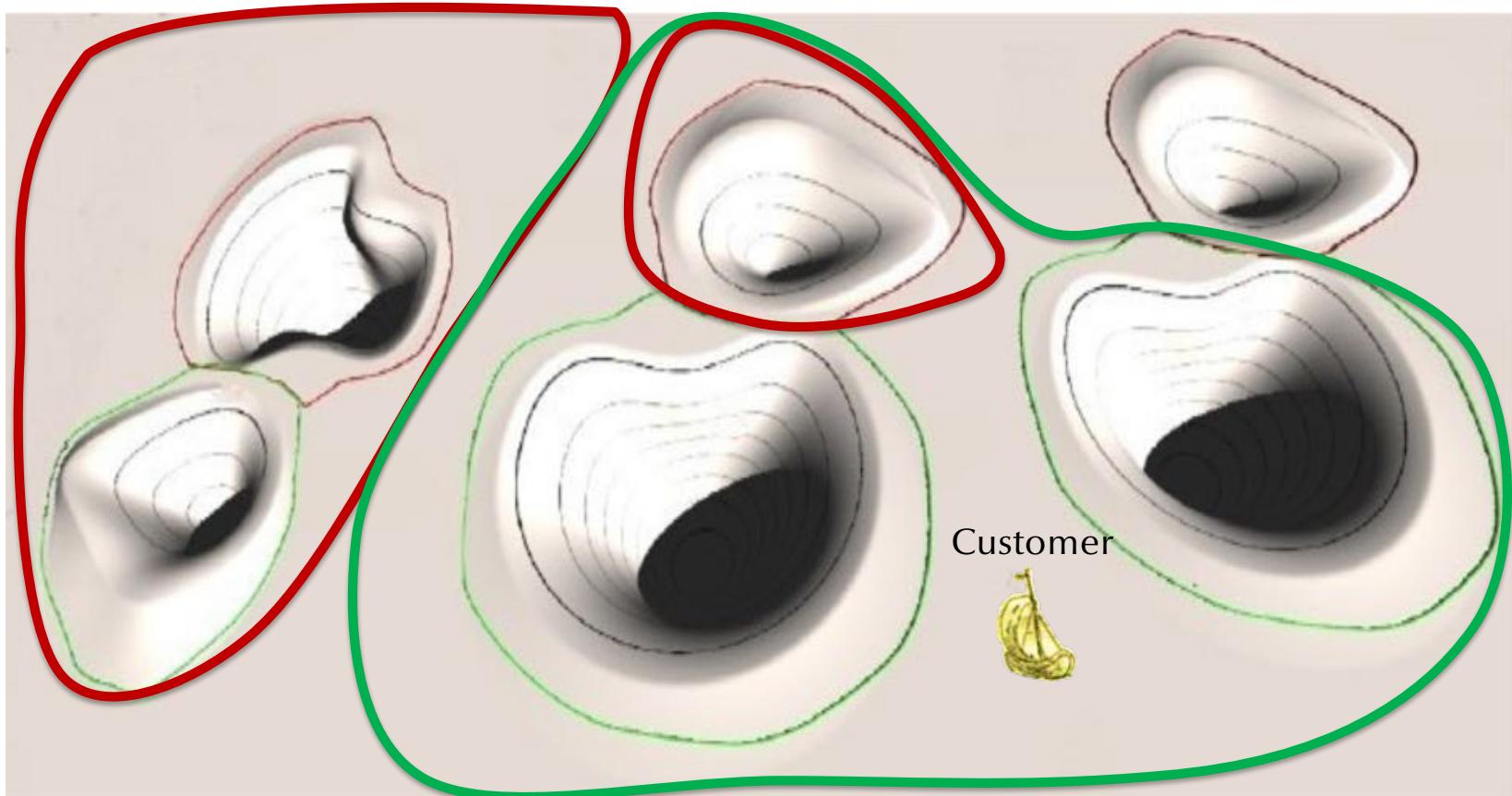
Simple



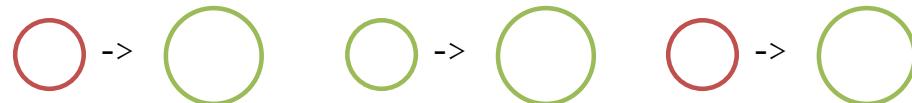
Activation: migrate iTunes accounts and media to iPhone



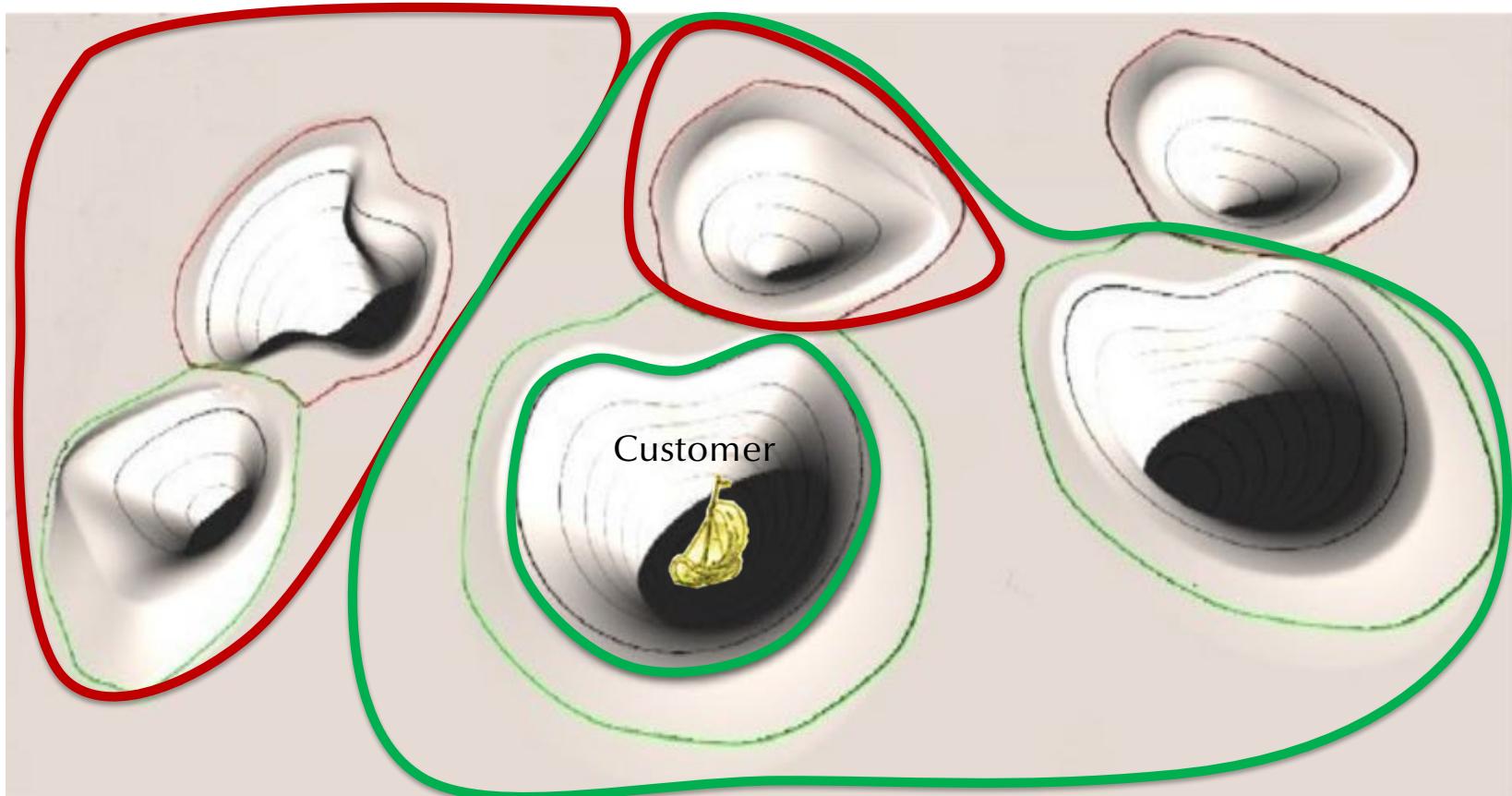
Simple



Retention: multi-touch UX obsoletes all hard-button phones.



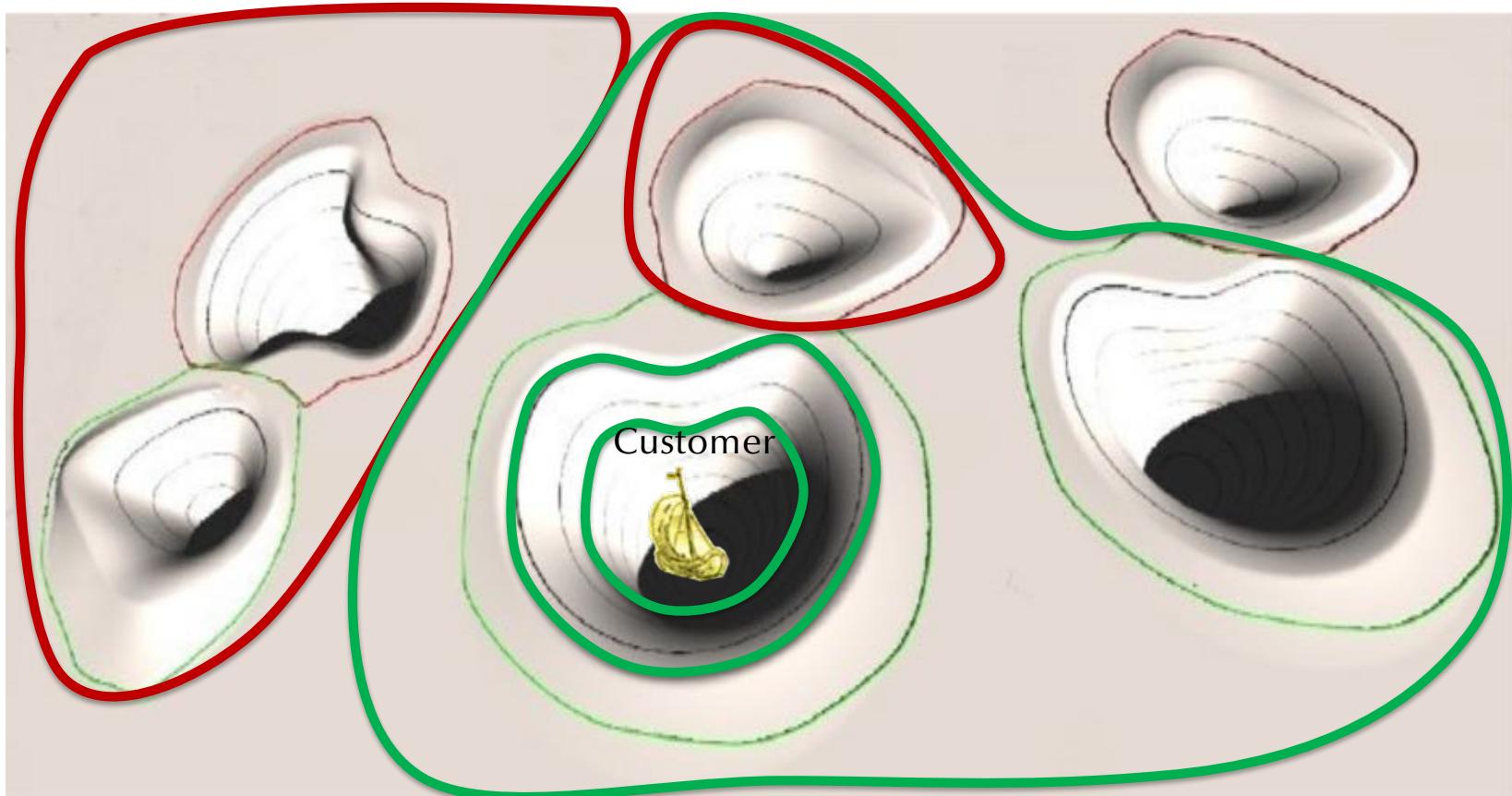
Simple



Referral: iMessage provides free SMS – but only to iOS users.



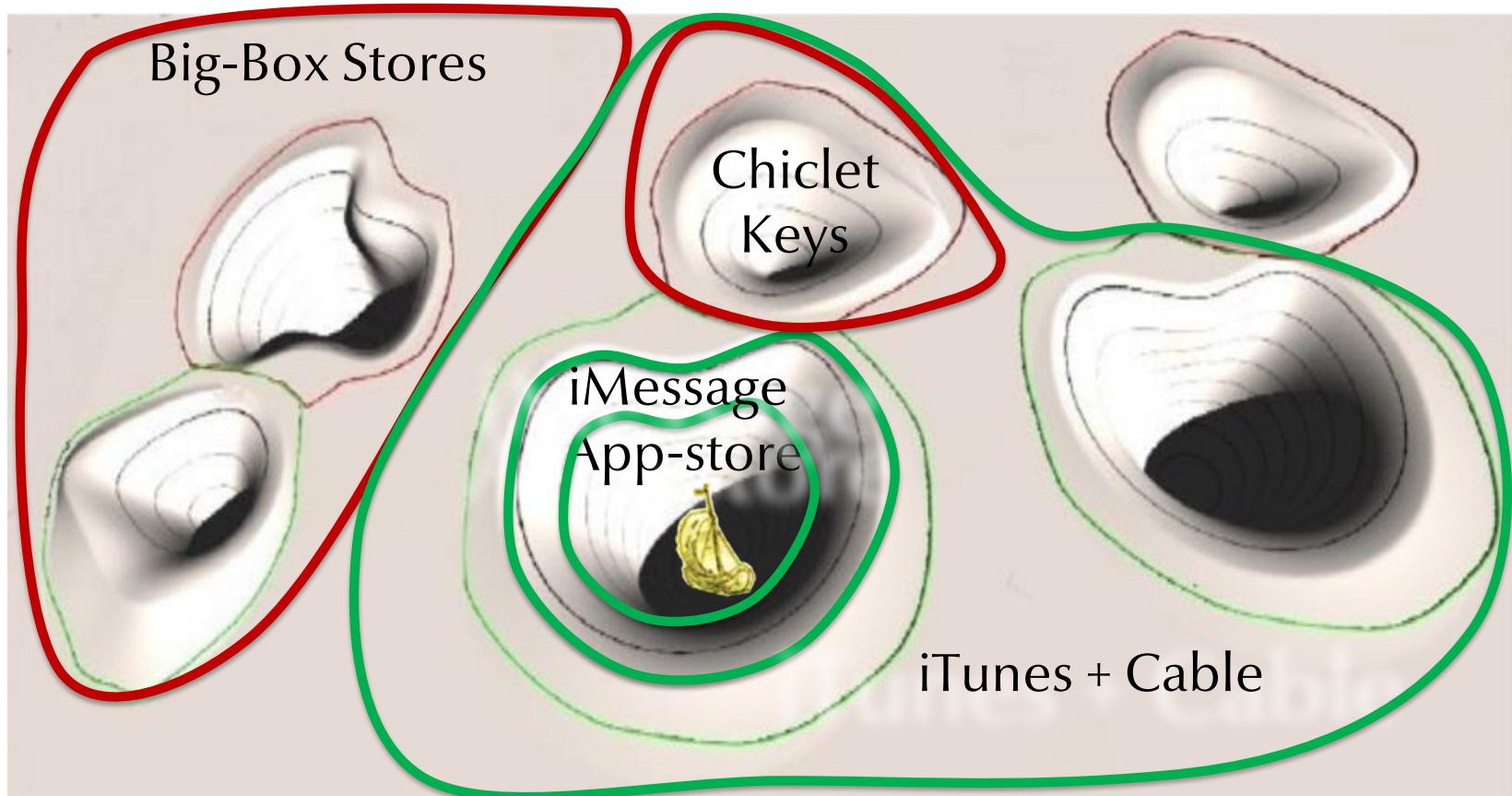
Simple



Return: App Store obsoletes the software retailing industry.



Simple



Acquisition



Activation



Retention



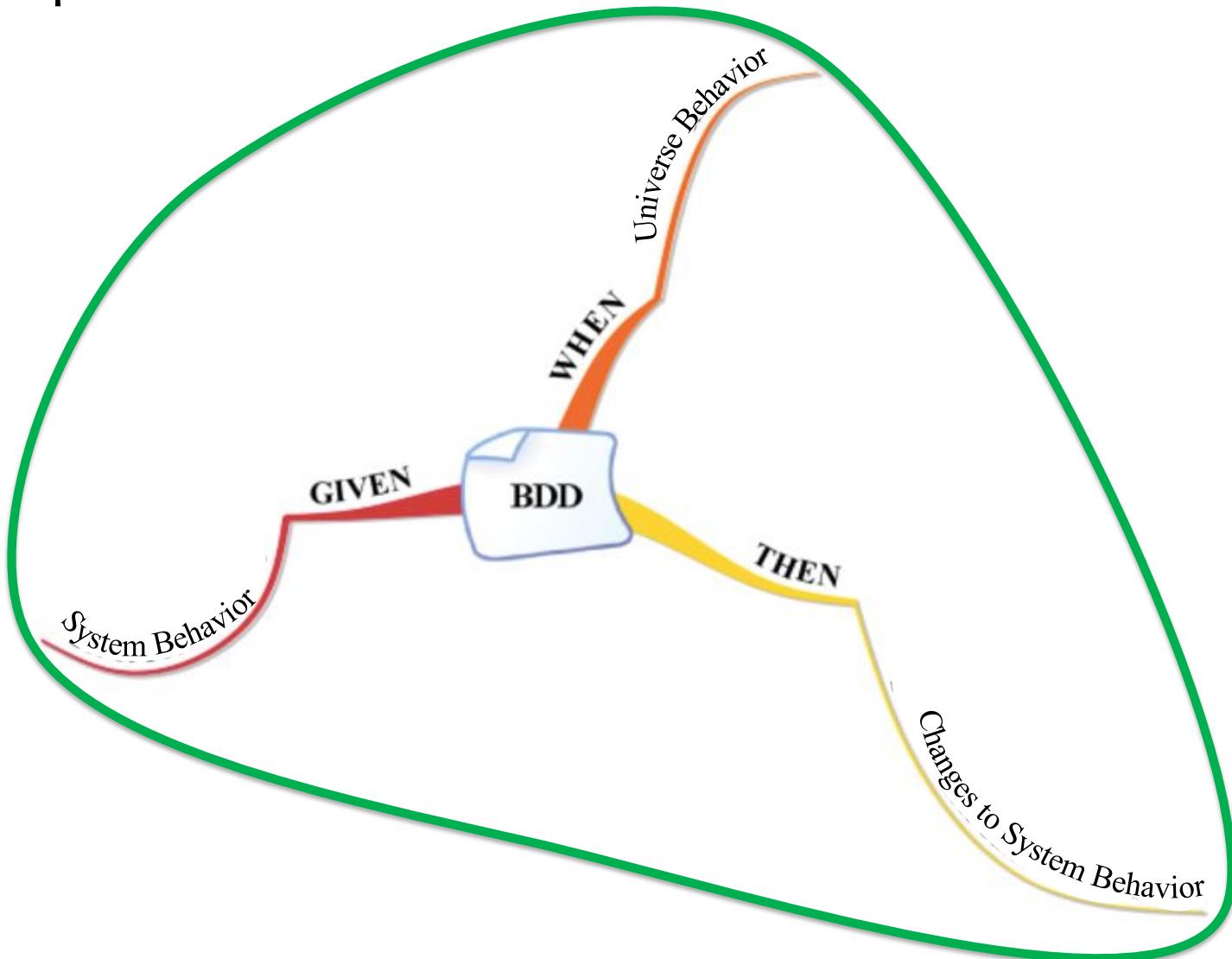
Referral



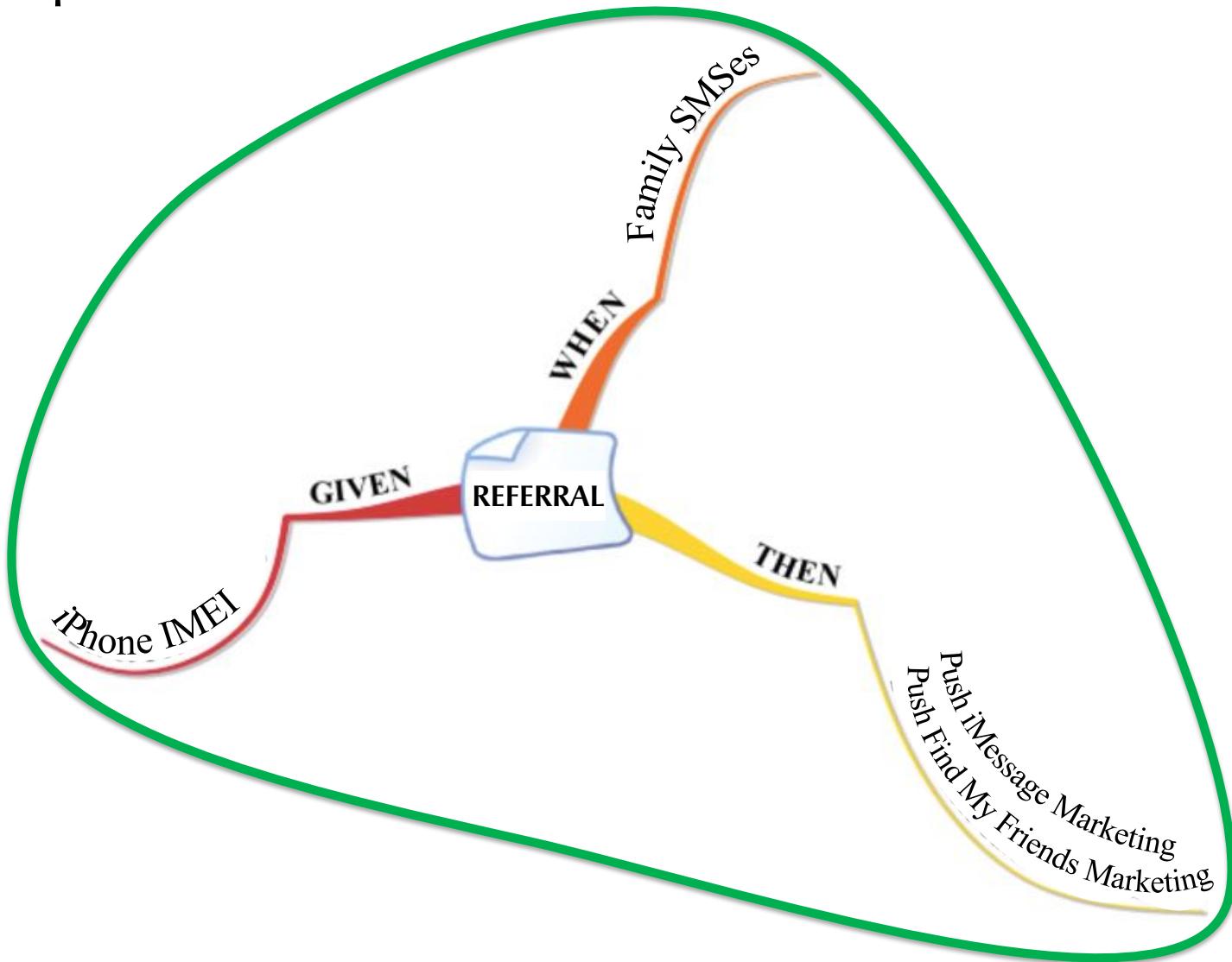
Return



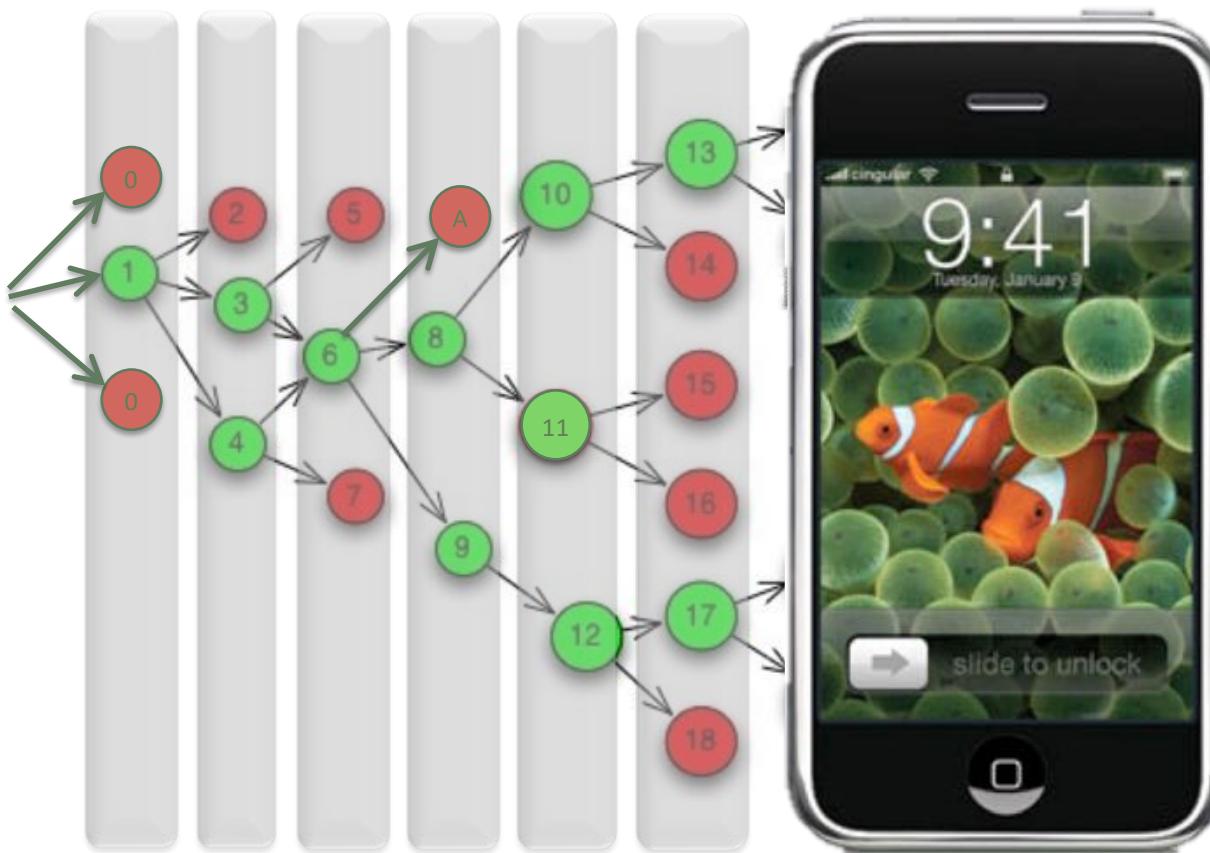
Simple



Simple

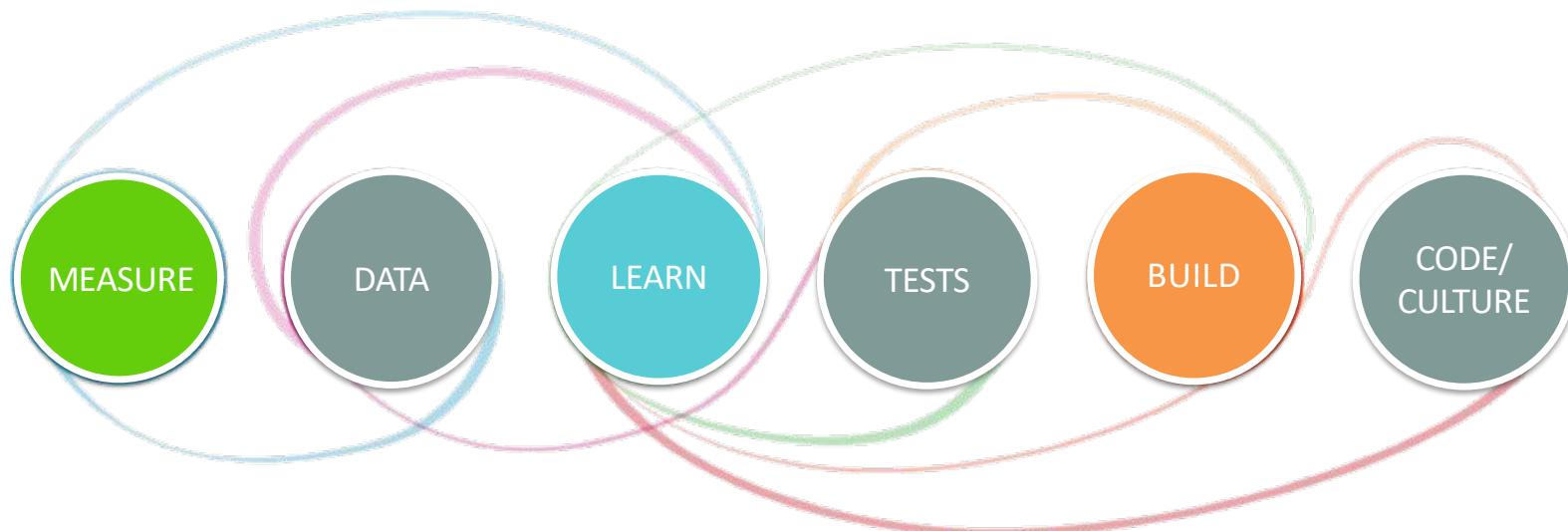


Simple



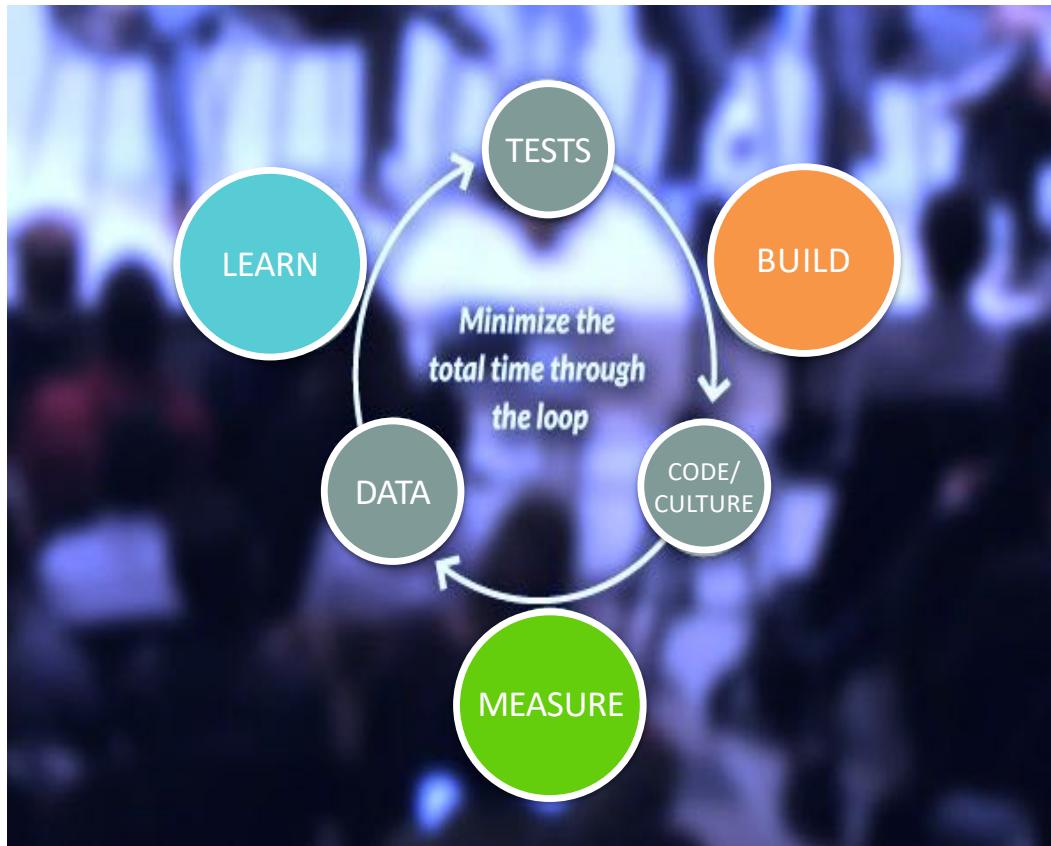
"Spikes" build, measure and learn by a process of elimination.
Prioritized, breadth-first, parallel, "set-based" design.

Simple



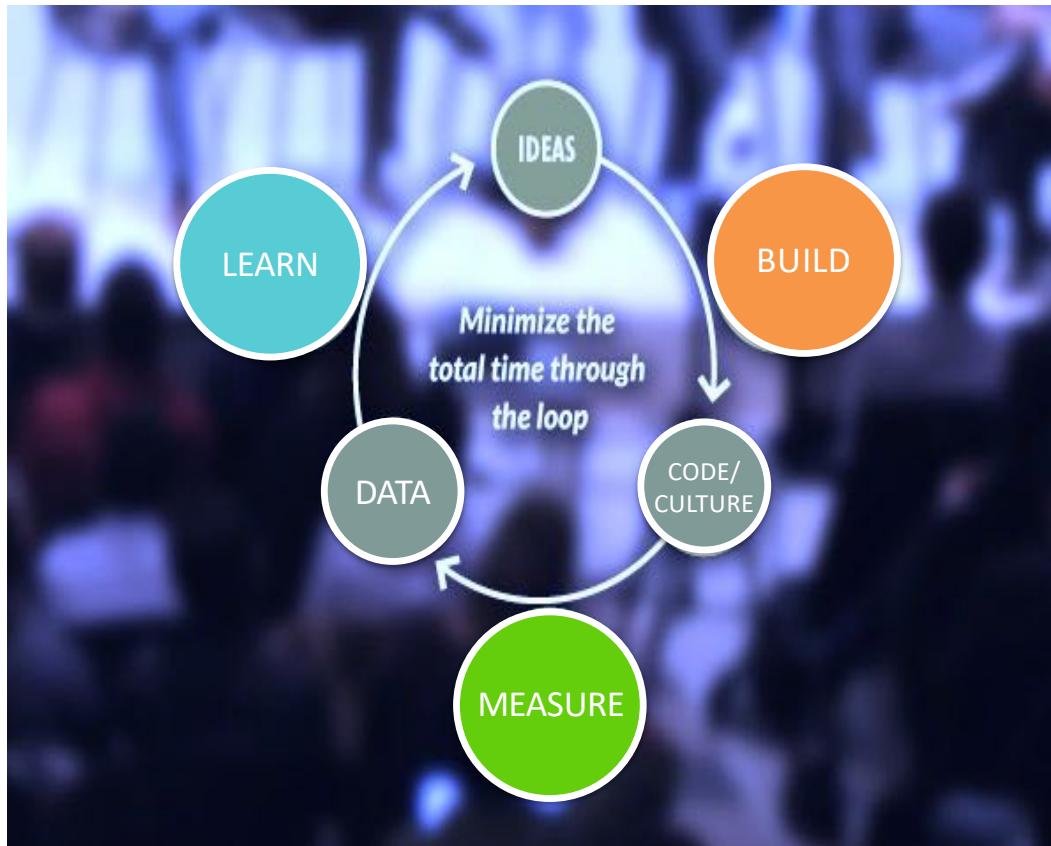
How to refactor all this into
Jobs' "elegance of minimal"?

Simple



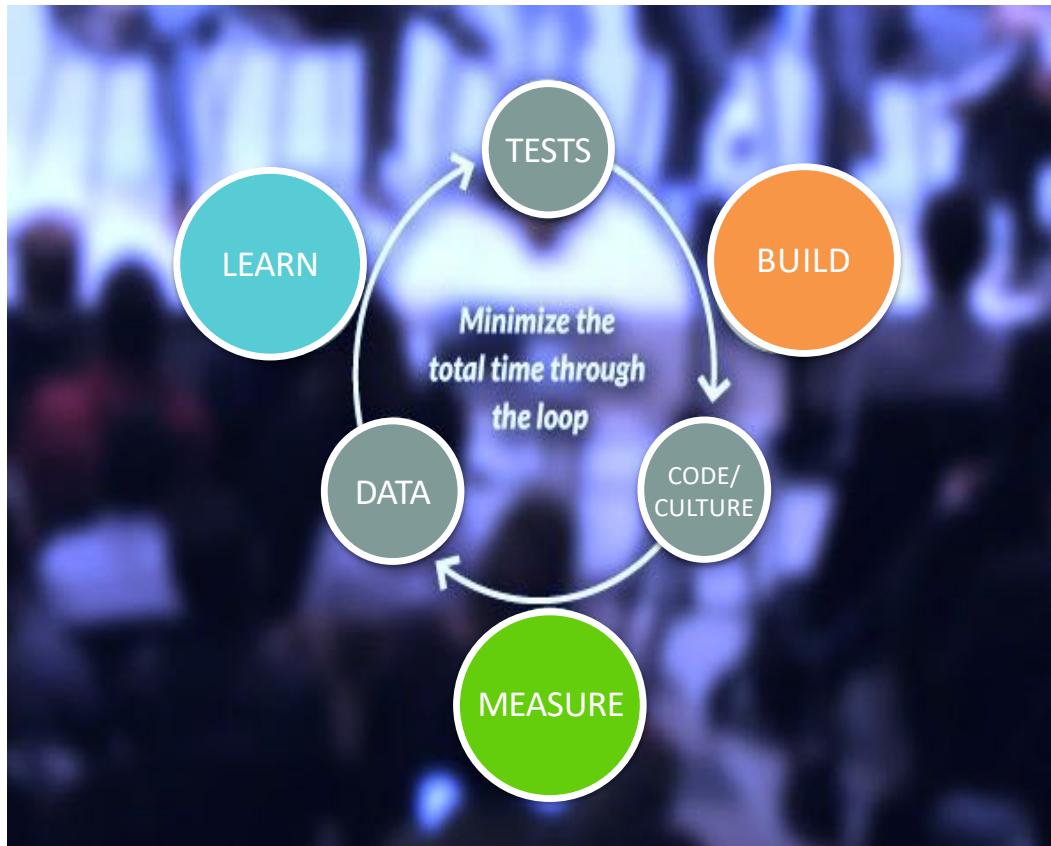
Lean Startup?

Simple



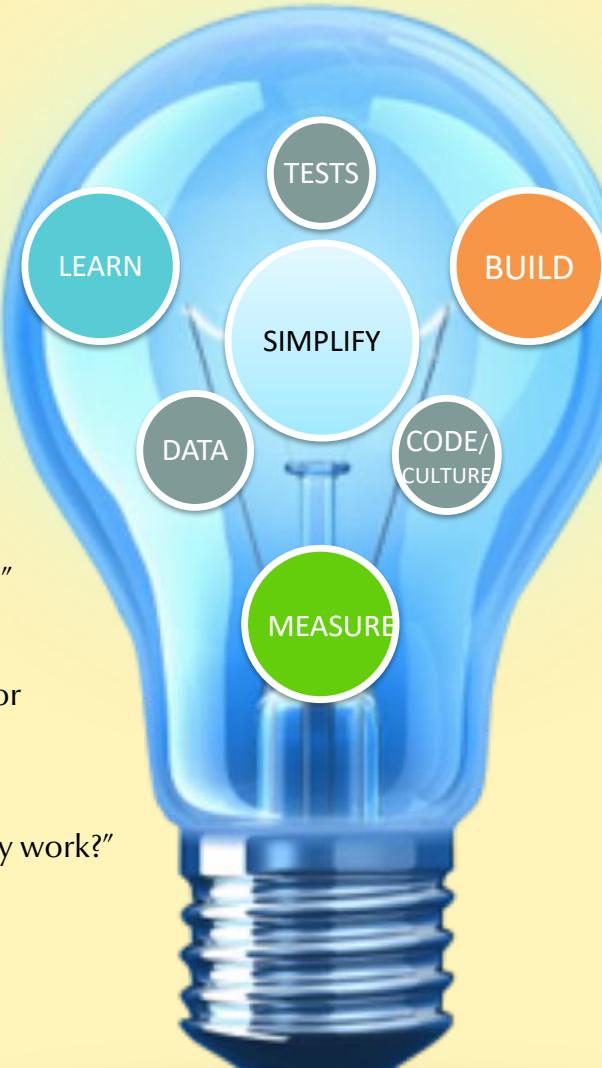
Lean Startup

Simple



Lean Startup + BDD

Simple Design



"Add value by removing that without."
-- Ron Jeffries

"Each and every declaration of behavior
should appear once and only once."
-- Kent Beck

"What's the simplest thing that could possibly work?"
-- Ward Cunningham

Simple Design





Roll your own Pirate Canvas

Why
Who
How
What

Acquisition Activation Retention Referral Revenue

The Pirate Canvas

Start With What Sucks

Taxis Suck	Acquisition	Activation	Retention	Referral	Return
Why	undersupply	Waiting	Poor Service	Centralization	On-road costs
Who	Drivers	Drivers	Passengers	Dispatchers	Industry Regulators
How	More at peak	Share location	Rate rides	Automation	No special insurance
What	Surge Pricing	GPS Sharing	5-star feedback	Locale Pub/Sub	Lobbying Workflow



Roll your own Pirate Canvas

Squads of 10 + Leadership as a Service. Start by agreeing on what sucks.

Two people per metric work breadth-first.

Work in 5 minute sprints interspersed with showcases.

Roll your own Pirate Canvas



Ask Why this pirate metric sucks: for the ecosystem as a whole.

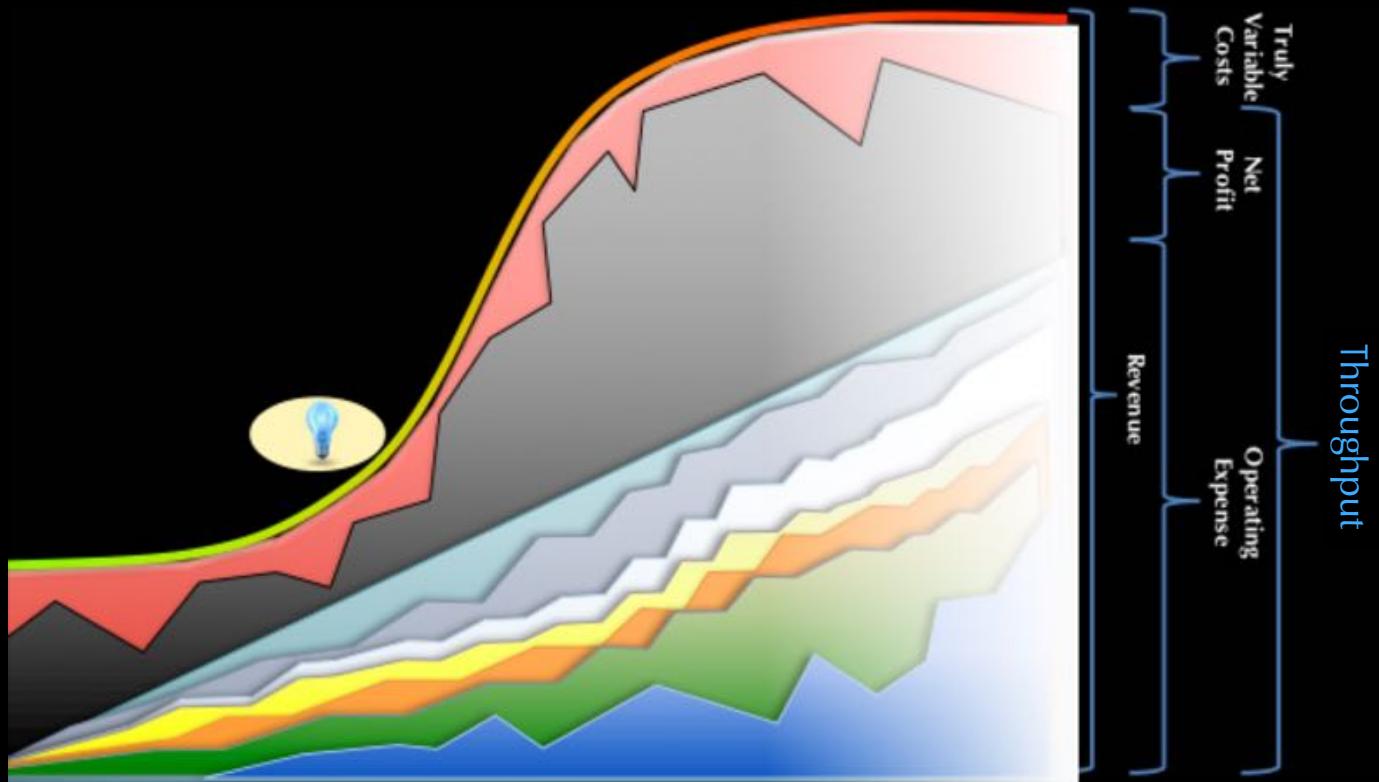
Whose behavior would have to change to fix it? Market segments?

How would their behavior have to change? By what analytics?

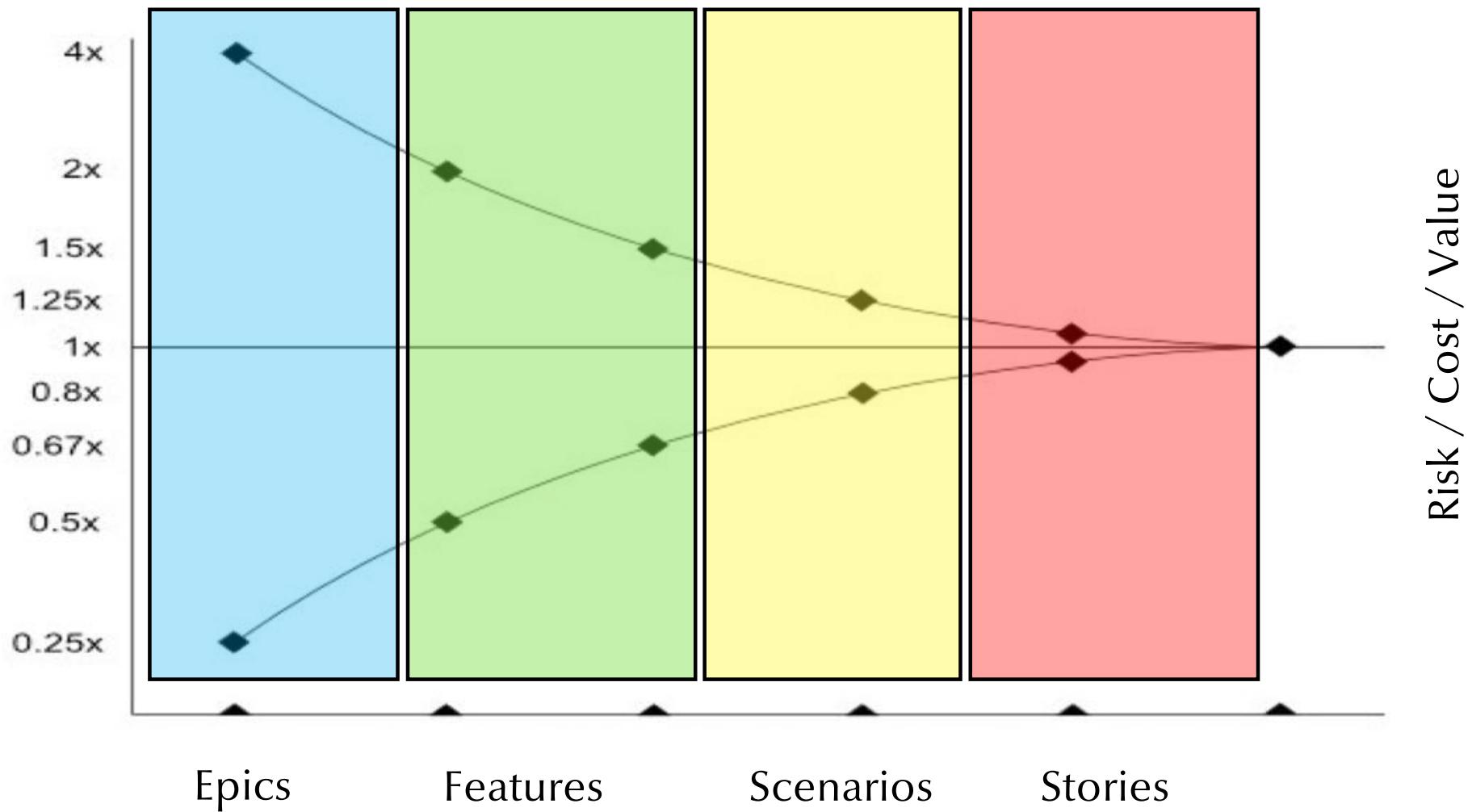
What do we have to build to cause this change? Key features?

Continuous optimization

- › At any time there's one bottleneck constraint
- › Work on other constraints is premature
- › Because it won't increase Throughput



Continuous Breadth-first Analysis



Continuous Depth-first Delivery: Features, not Components.

Not like this....



1



2



3



4



Henrik Kniberg



2



3



4



5



3

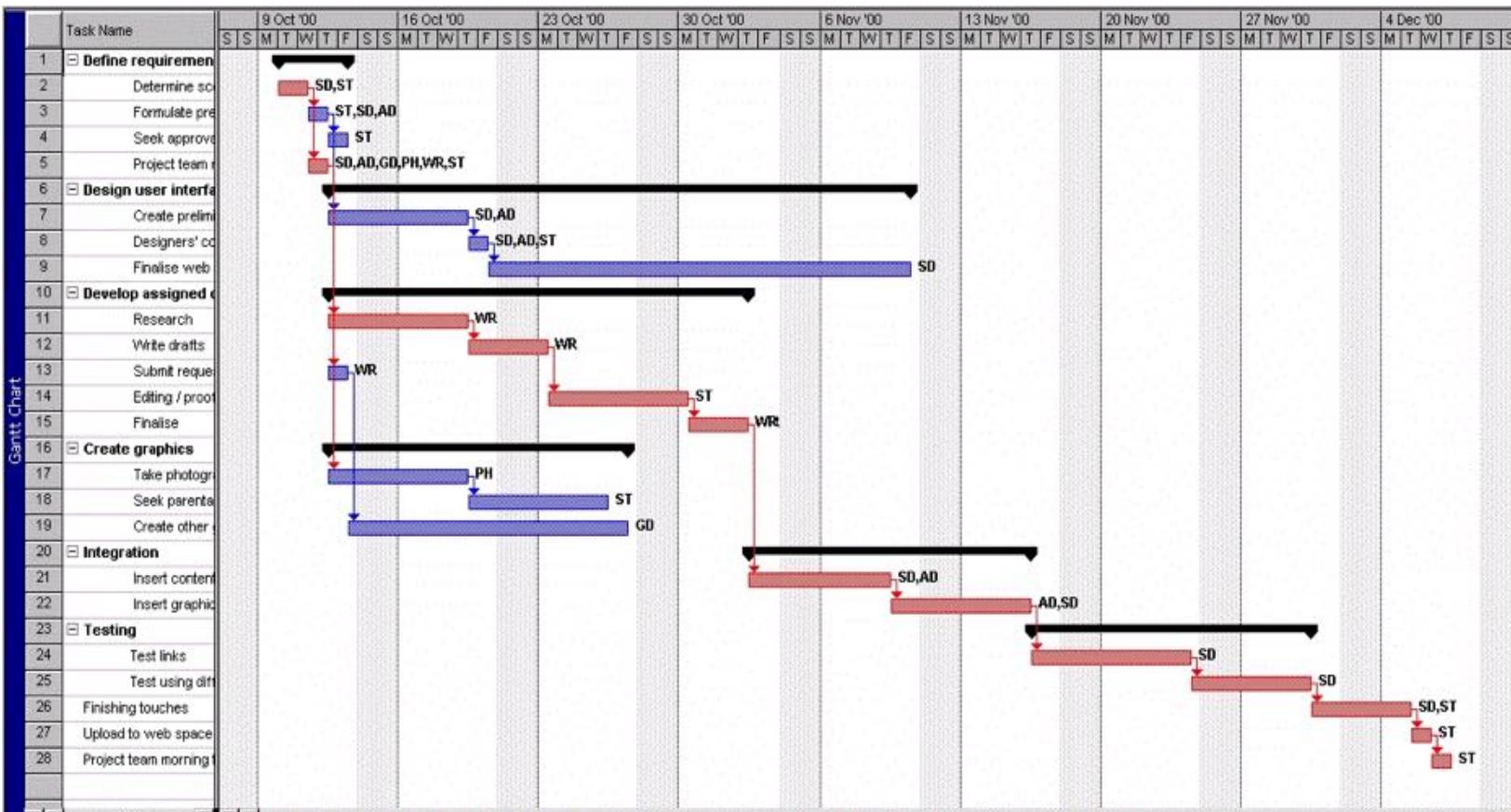


4



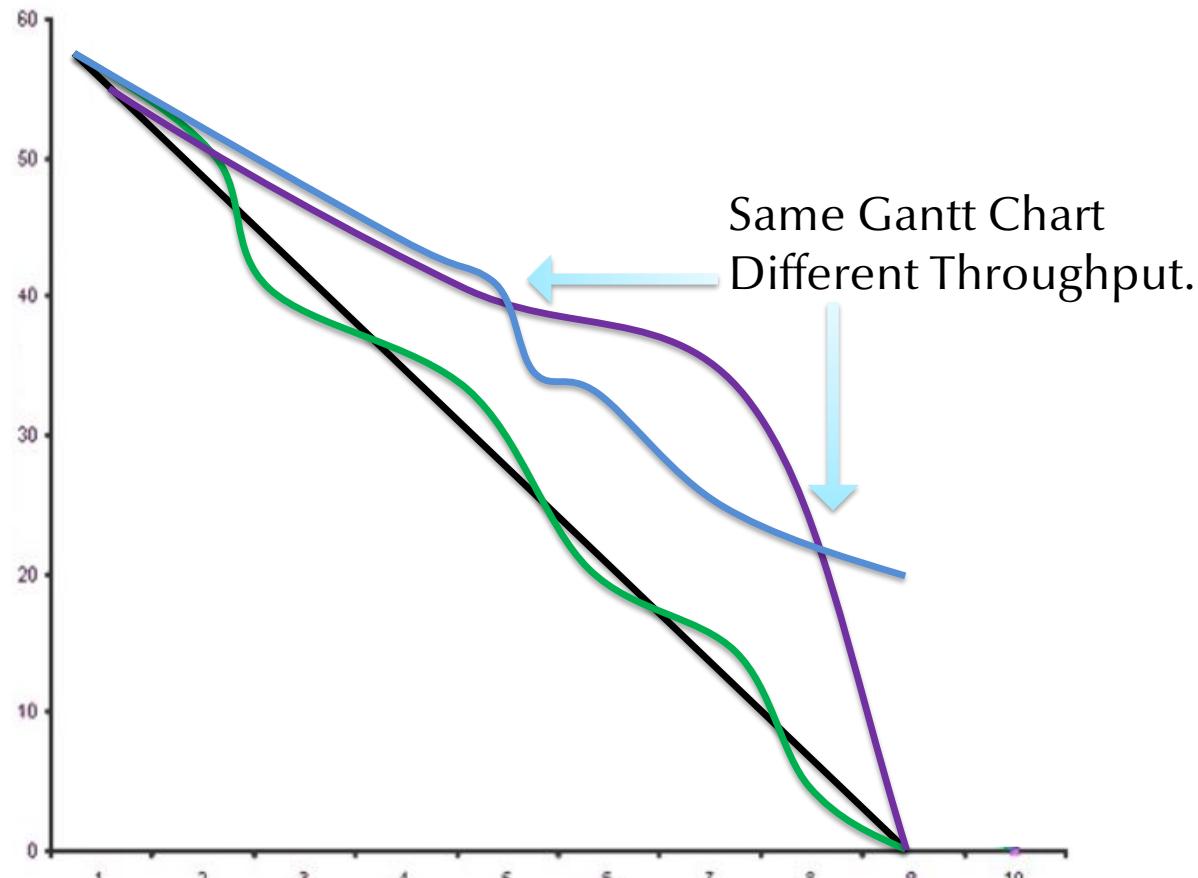
5

Continuous



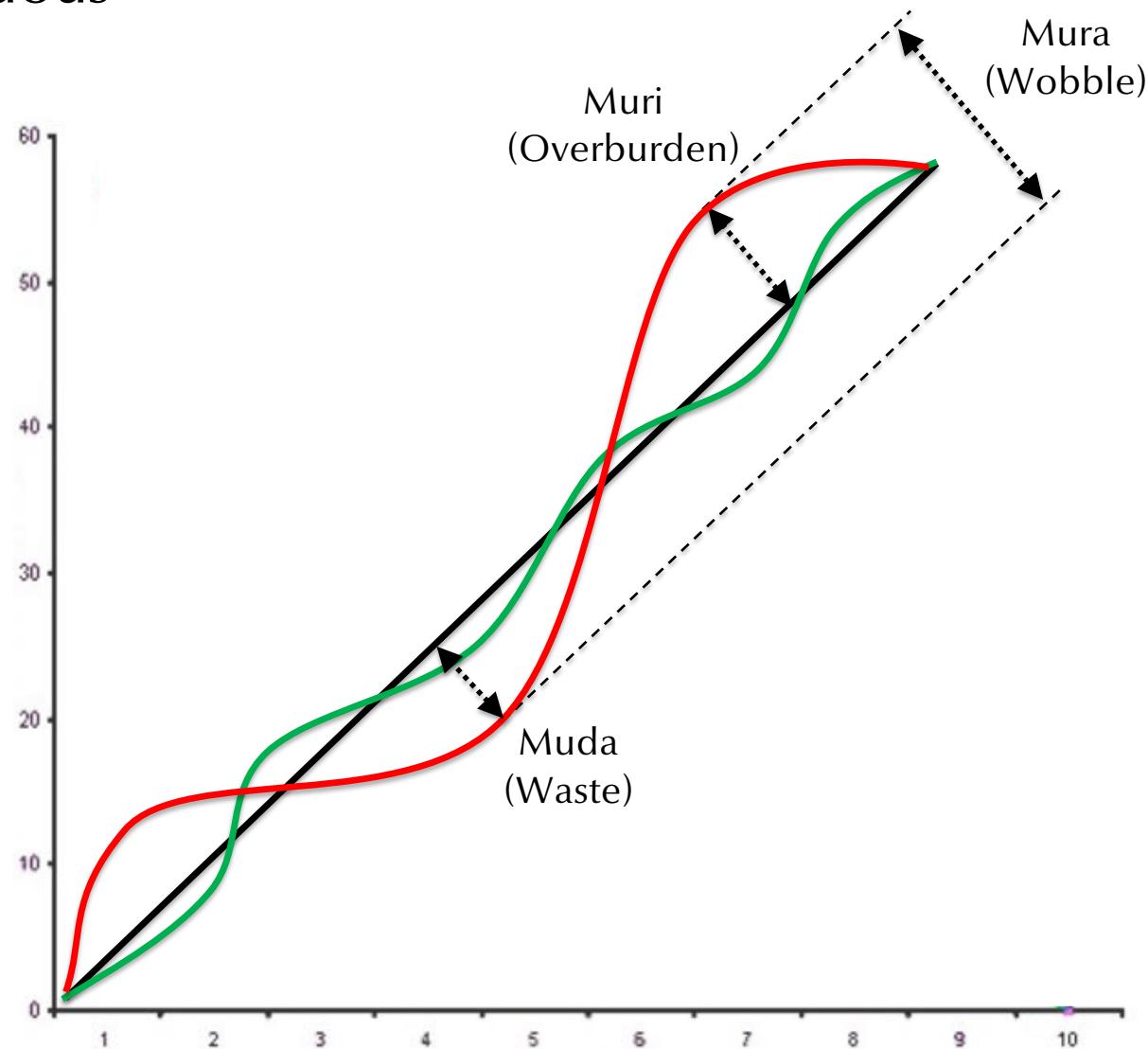
“Tell me how you measure me and I will tell you how I will behave. If you measure me in an illogical way do not complain about illogical behavior.” – Eli Goldratt

Continuous

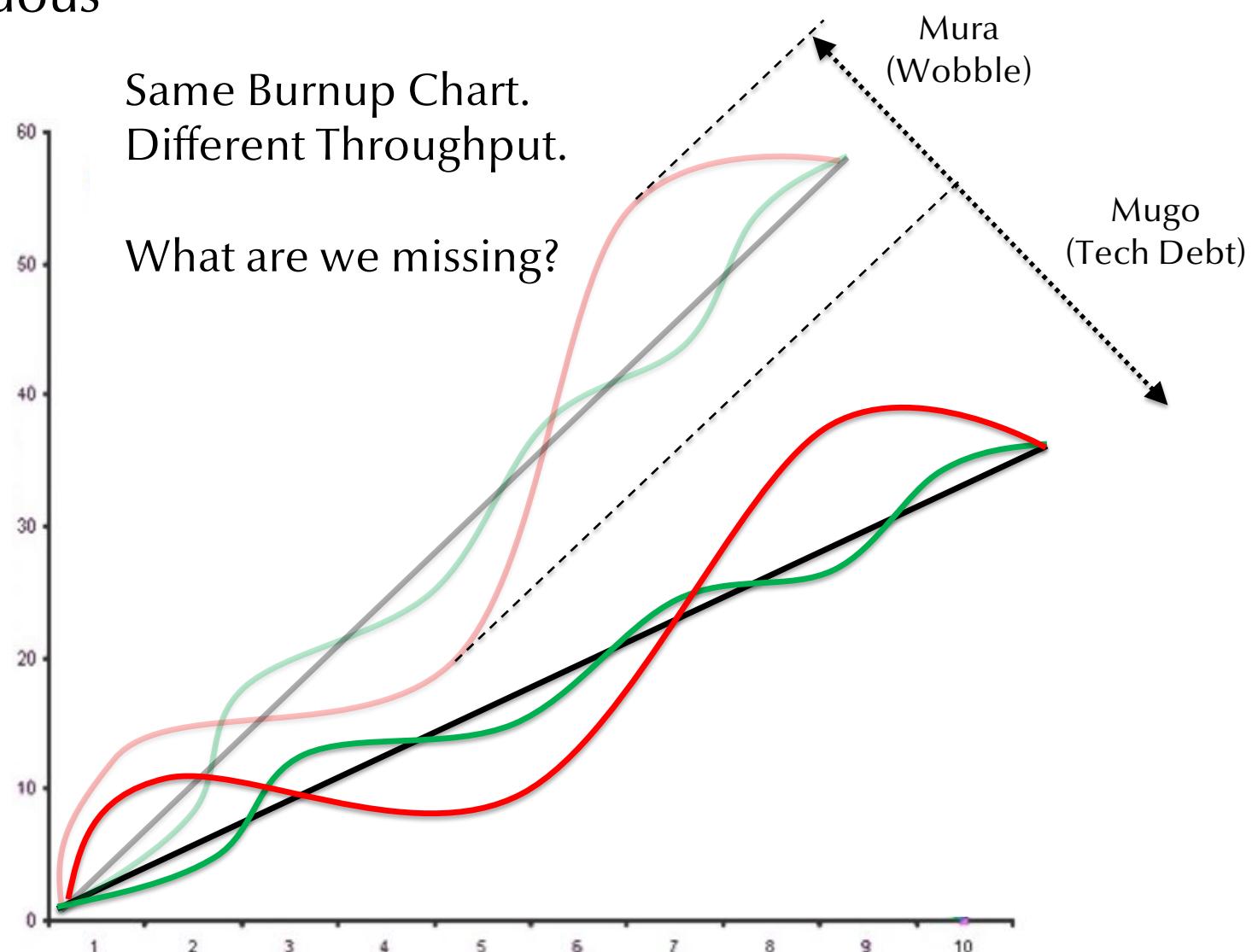


Continuous optimization of throughput
prevents illogical behavior.

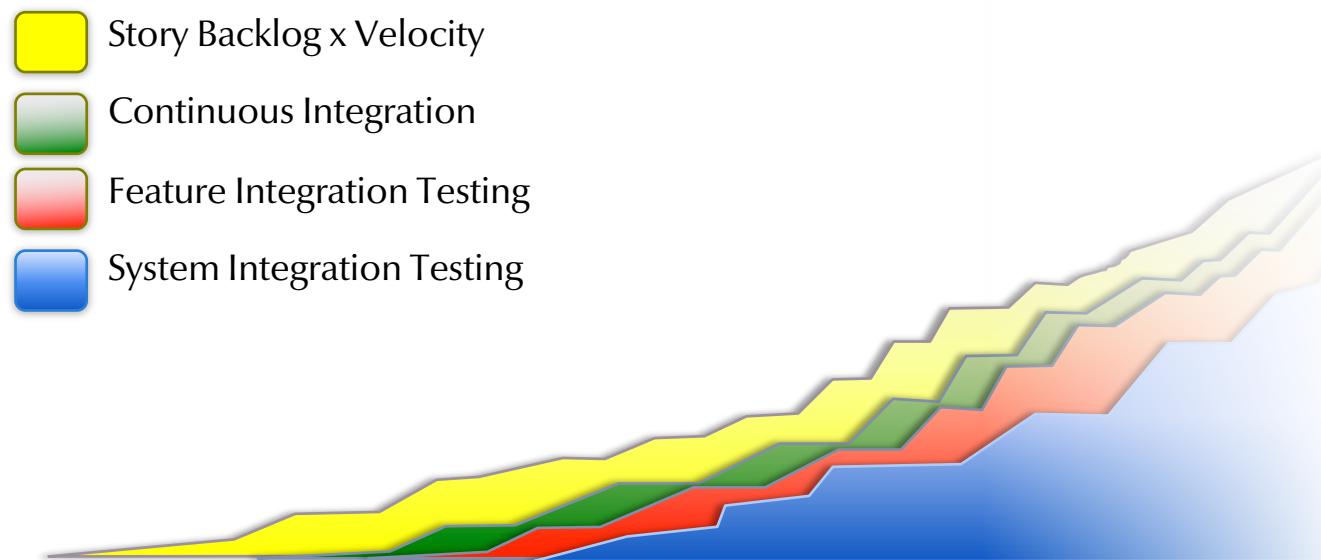
Continuous



Continuous

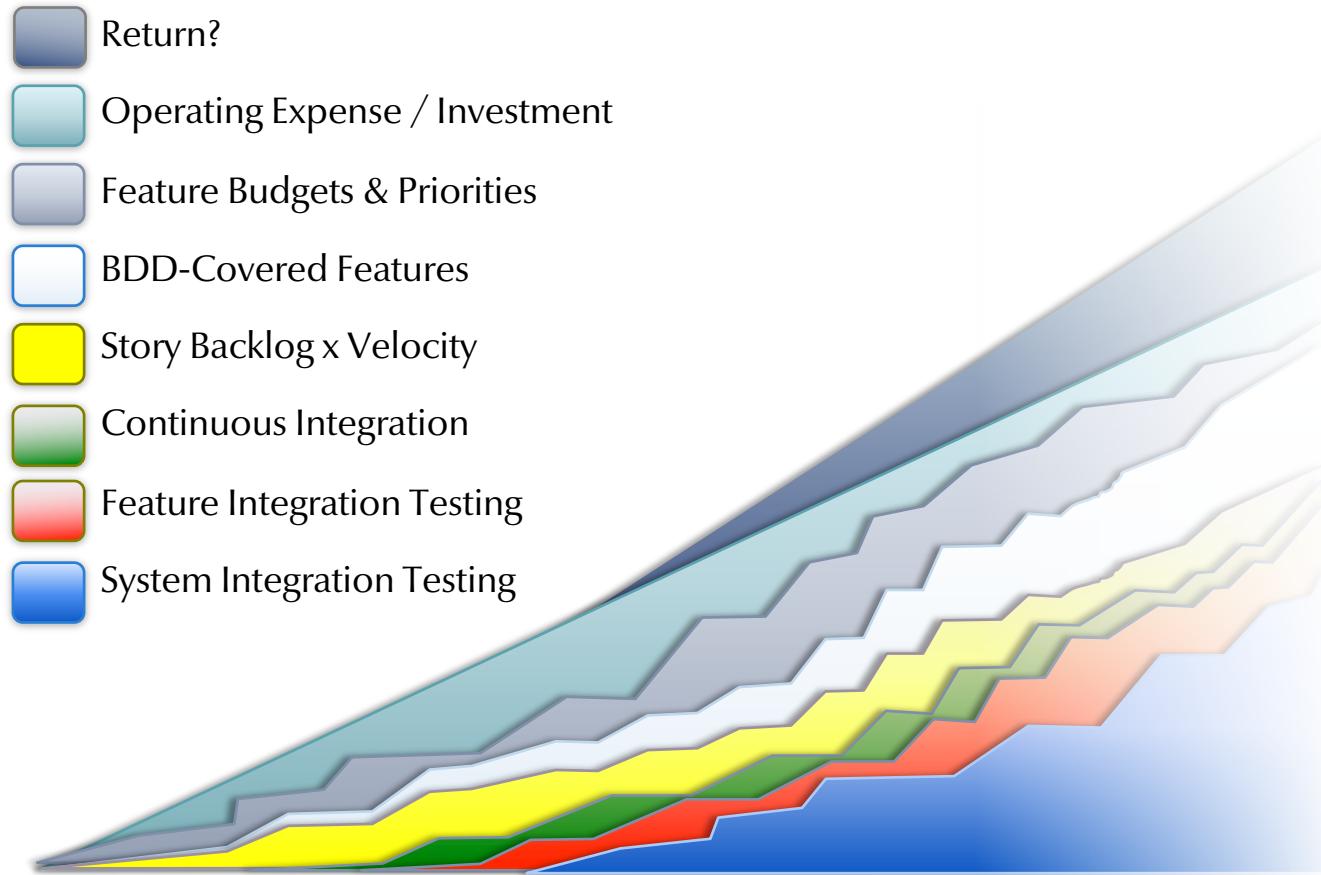


Continuous



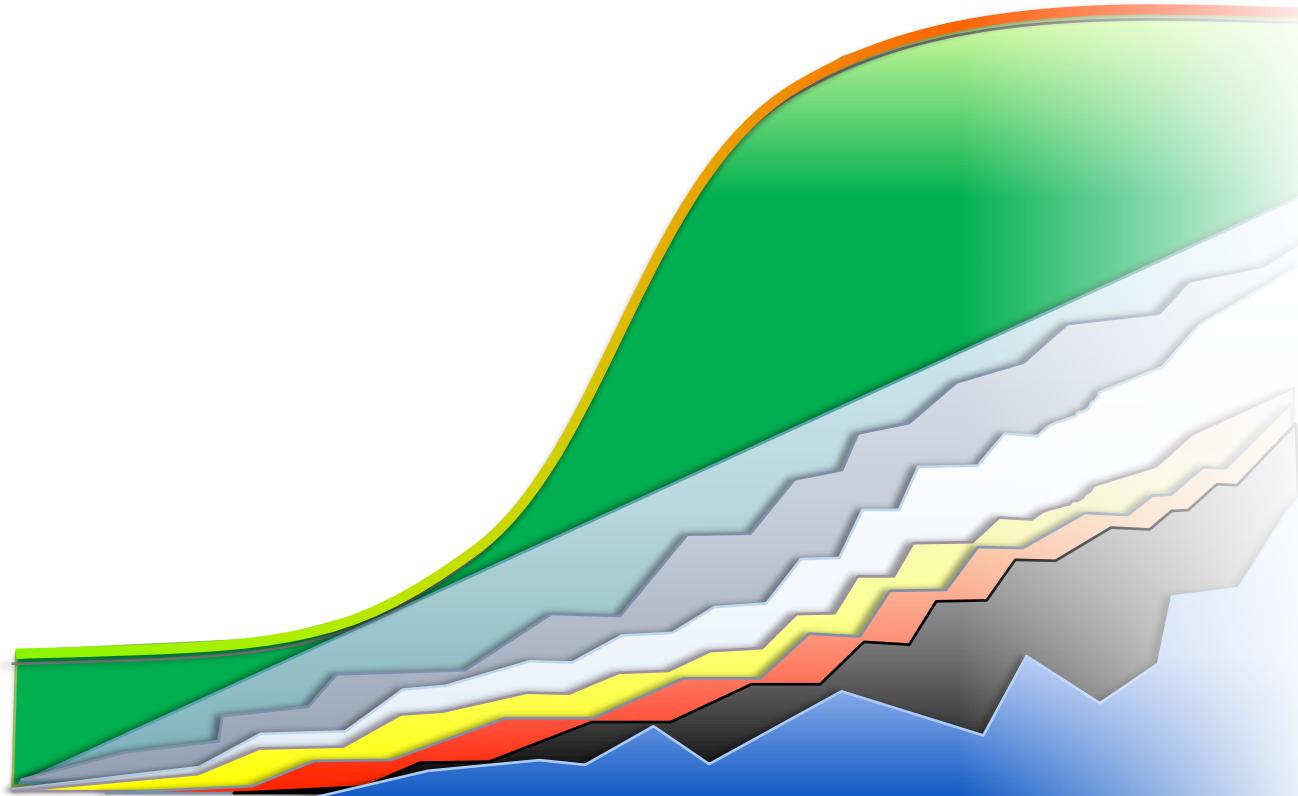
Which one of these curves is Throughput?

Continuous



By themselves, stories don't generate throughput. Features do.

Continuous



There is no fixed cost per unit of return

Metric	Criterion	Rate	Return
Acquisition	Starts App / Clicks Past 1 st Page	100%	\$1.00
Acquisition	Views 2+ Screens for 10+ Secs	90%	\$1.10
Activation	Email/FB/Google Signup	80%	\$1.30
Activation	Adds Profile Data	70%	\$1.50
Retention	3+ Visits in 1 st 30 Days	60%	\$1.75
Retention	Email/RSS Subscription	50%	\$2.00
Referral	Shares Contacts	40%	\$2.50
Referral	Refers 1+ Users Who Activate	30%	\$3.00
Revenue	One-Off Purchase	20%	\$5.00
Revenue	Billing Subscription	10%	\$10.00

Metric	Criterion	Rate	Return
Acquisition	Starts App / Clicks Past 1 st Page	50%	\$0.50
Acquisition	Views 2+ Screens for 10+ Secs	45%	\$0.60
Activation	Email/FB/Google Signup	80%	\$1.30
Activation	Adds Profile Data	70%	\$1.50
Retention	3+ Visits in 1 st 30 Days	60%	\$1.75
Retention	Email/RSS Subscription	50%	\$2.00
Referral	Shares Contacts	40%	\$2.50
Referral	Refers 1+ Users Who Activate	30%	\$3.00
Revenue	One-Off Purchase	20%	\$5.00
Revenue	Billing Subscription	10%	\$10.00

Metric	Criterion	Rate	Return
Acquisition	Starts App / Clicks Past 1 st Page	50%	\$0.50
Acquisition	Views 2+ Screens for 10+ Secs	45%	\$0.60
Activation	Email/FB/Google Signup	40%	\$0.70
Activation	Adds Profile Data	35%	\$0.80
Retention	3+ Visits in 1 st 30 Days	30%	\$0.90
Retention	Email/RSS Subscription	25%	\$1.00
Referral	shares Contacts	20%	\$1.25
Referral	Refers +1 Users Who Activate	15%	\$1.50
Revenue	One-Off Purchase	10%	\$2.50
Revenue	Billing Subscription	5%	\$5.00

Metric	Criterion	Rate	Return
Acquisition	Starts App / Clicks Past 1 st Page	100%	\$1.00
Acquisition	Views 2+ Screens for 10+ Secs	90%	\$1.10
Activation	Email/FB/Google Signup	80%	\$1.30
Activation	Adds Profile Data	70%	\$1.50
Retention	3+ Visits in 1 st 30 Days	60%	\$1.75
Retention	Email/RSS Subscription	50%	\$2.00
Referral	Shares Contacts	40%	\$2.50
Referral	Refers 1+ Users Who Activate	30%	\$3.00
Revenue	One-Off Purchase	20%	\$5.00
Revenue	Billing Subscription	10%	\$10.00

Metric	Criterion	Rate	Return
Acquisition	Starts App / Clicks Past 1 st Page	100%	\$1.00
Acquisition	Views 2+ Screens for 10+ Secs	90%	\$1.10
Activation	Email/FB/Google Signup	40%	\$0.70
Activation	Adds Profile Data	35%	\$0.80
Retention	3+ Visits in 1 st 30 Days	60%	\$1.75
Retention	Email/RSS Subscription	50%	\$2.00
Referral	Shares Contacts	40%	\$2.50
Referral	Refers 4+ Users Who Activate	30%	\$3.00
Revenue	One-Off Purchase	20%	\$5.00
Revenue	Billing Subscription	10%	\$10.00

Metric	Criterion	Rate	Return
Acquisition	Starts App / Clicks Past 1 st Page	100%	\$1.00
Acquisition	Views 2+ Screens for 10+ Secs	90%	\$1.10
Activation	Email/FB/Google Signup	40%	\$0.70
Activation	Adds Profile Data	35%	\$0.80
Retention	3+ Visits in 1 st 30 Days	30%	\$0.90
Retention	Email/RSS Subscription	25%	\$1.00
Referral	Shares Contacts	20%	\$1.25
Referral	Refers +1 Users Who Activate	15%	\$1.50
Revenue	One-Off Purchase	10%	\$2.50
Revenue	Billing Subscription	5%	\$5.00

Metric	Criterion	Rate	Return
Acquisition	Starts App / Clicks Past 1 st Page	100%	\$1.00
Acquisition	Views 2+ Screens for 10+ Secs	90%	\$1.10
Activation	Email/FB/Google Signup	80%	\$1.30
Activation	Adds Profile Data	70%	\$1.50
Retention	3+ Visits in 1 st 30 Days	60%	\$1.75
Retention	Email/RSS Subscription	50%	\$2.00
Referral	Shares Contacts	40%	\$2.50
Referral	Refers 1+ Users Who Activate	30%	\$3.00
Revenue	One-Off Purchase	20%	\$5.00
Revenue	Billing Subscription	10%	\$10.00

Metric	Criterion	Rate	Return
Acquisition	Starts App / Clicks Past 1 st Page	100%	\$1.00
Acquisition	Views 2+ Screens for 10+ Secs	90%	\$1.10
Activation	Email/FB/Google Signup	80%	\$1.30
Activation	Adds Profile Data	70%	\$1.50
Retention	3+ Visits in 1 st 30 Days	30%	\$0.90
Retention	Email/RSS Subscription	25%	\$1.00
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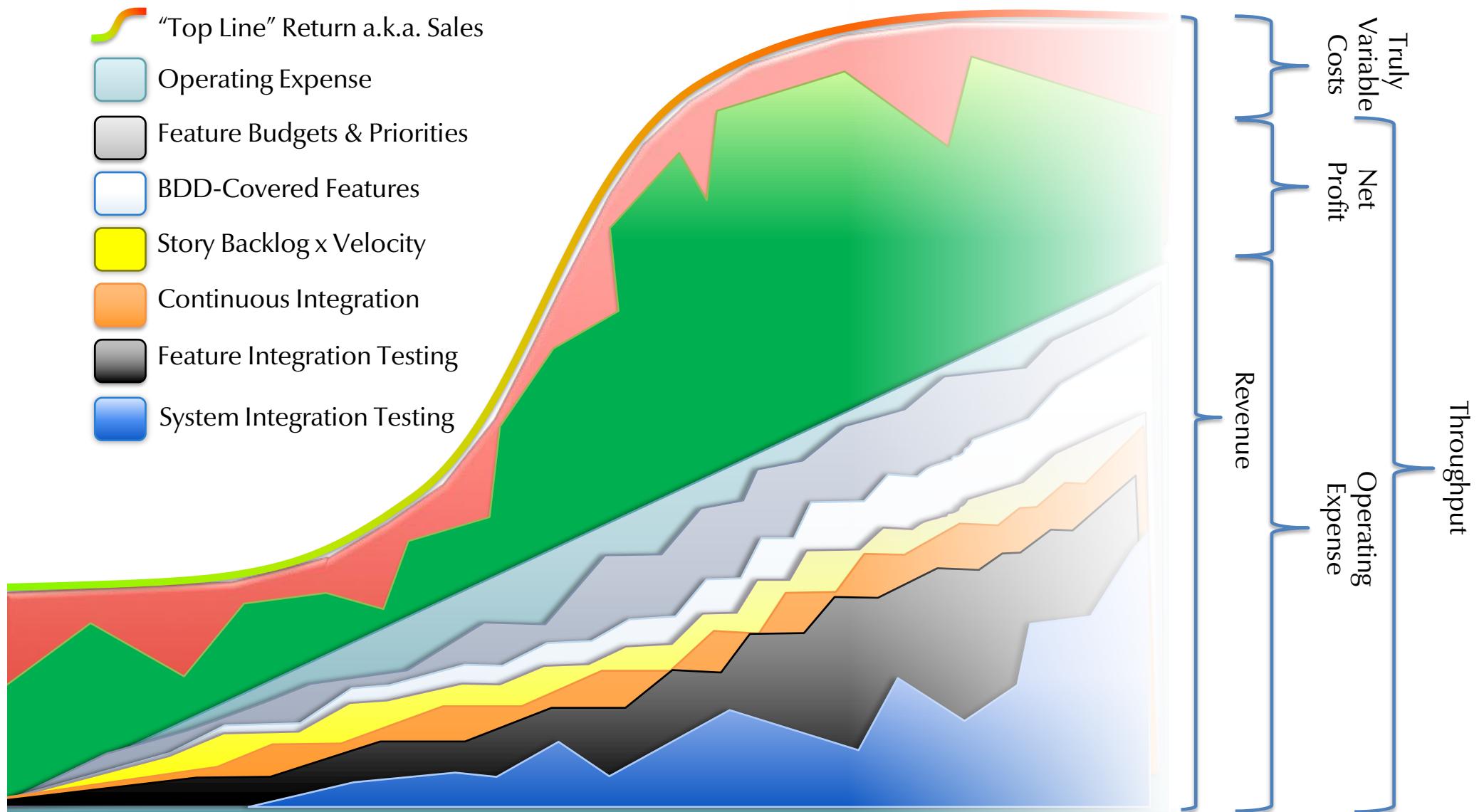
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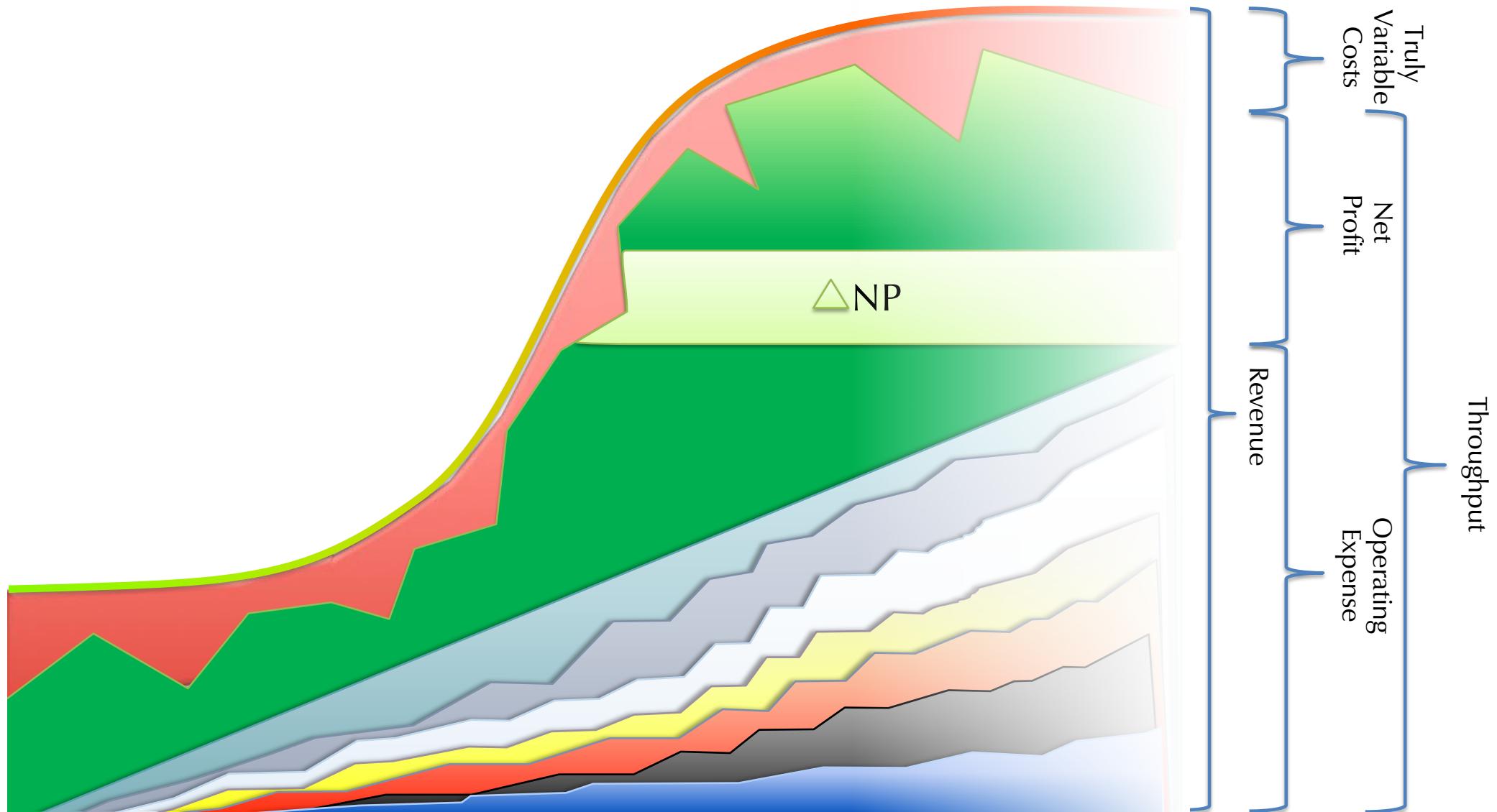
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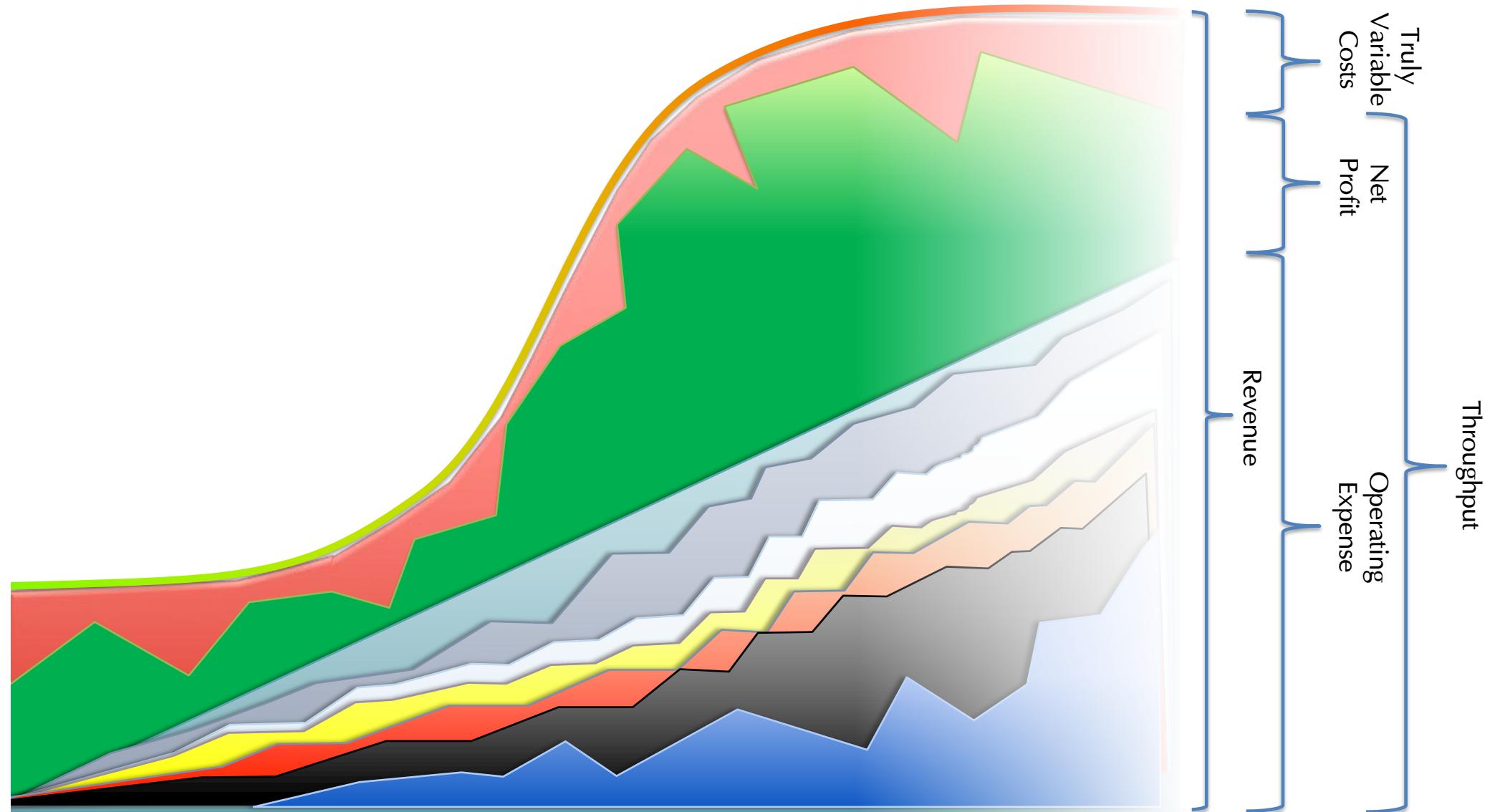
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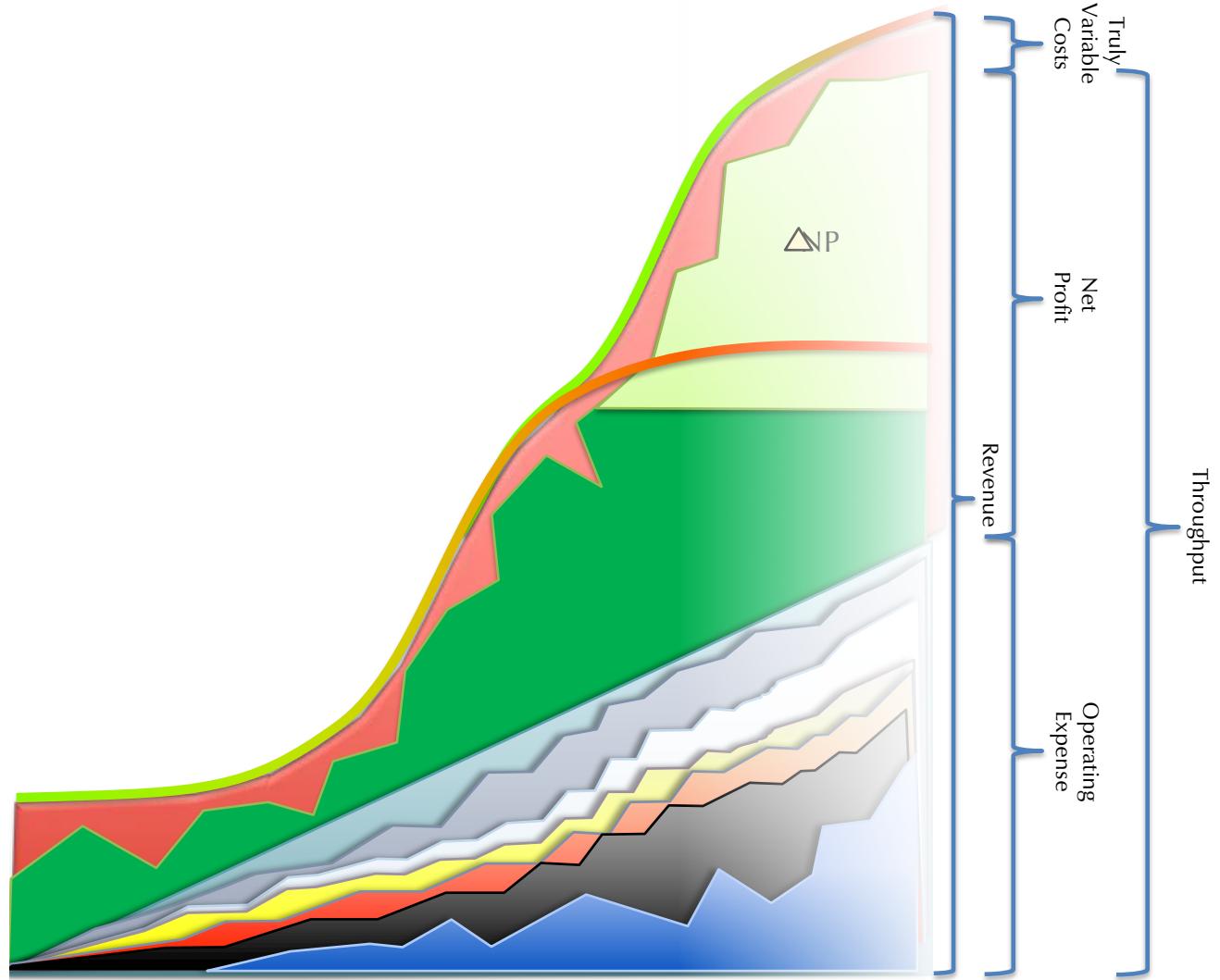
Continuous



Continuous



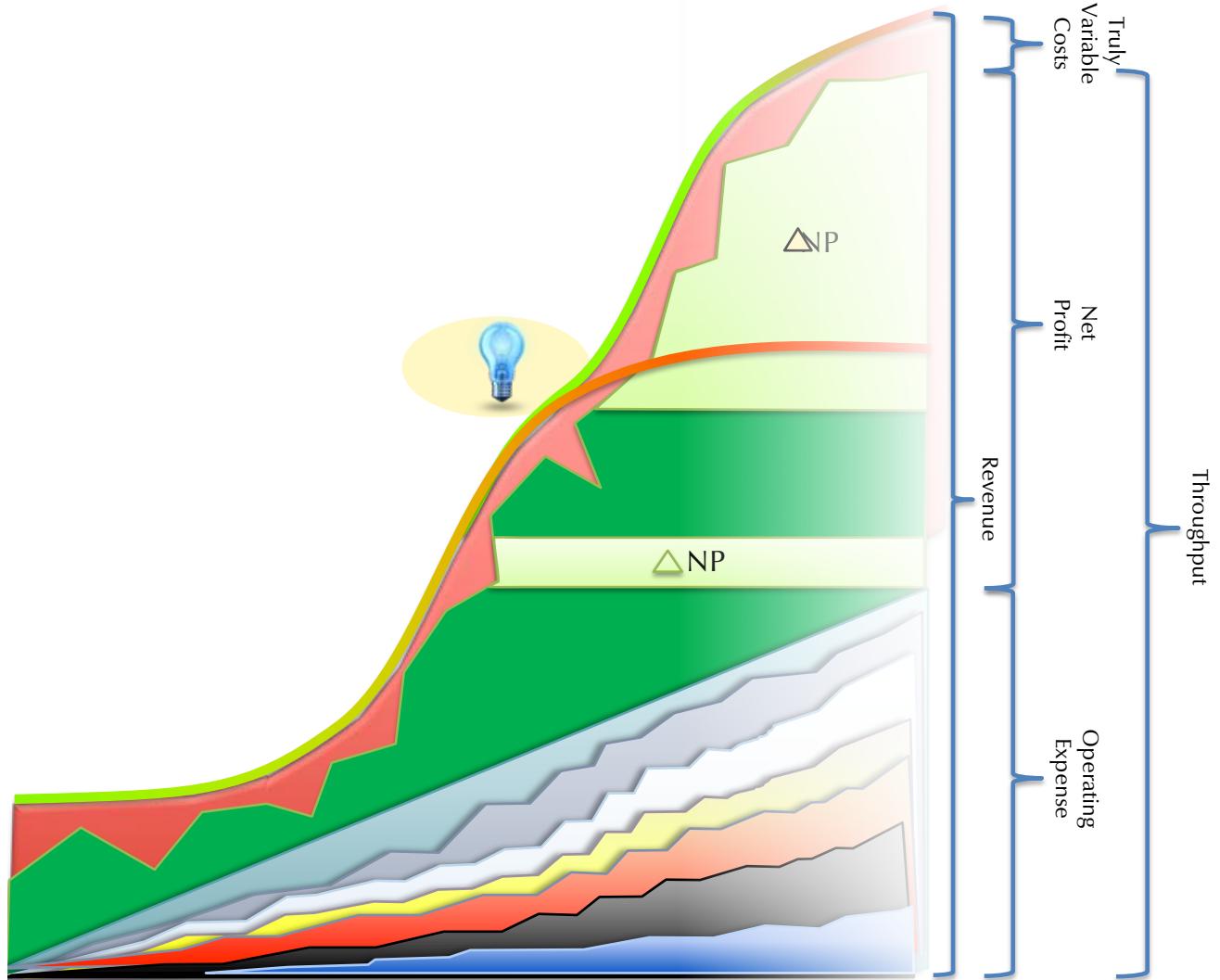
Continuous



Continuously Prioritize Design to Open the Bottleneck

- Lift a pirate constraint

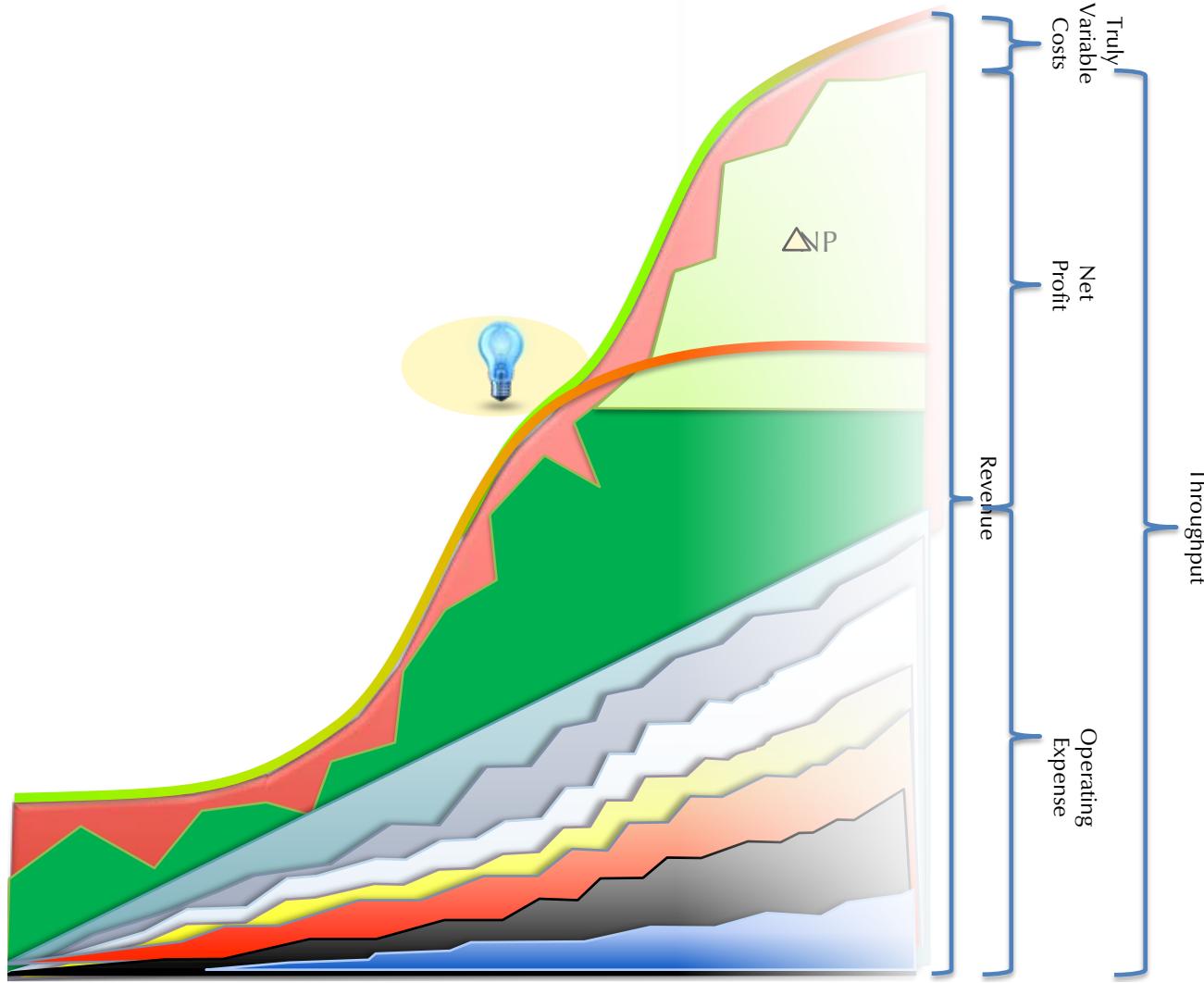
Continuous



Continuously Prioritize Design to Open the Bottleneck

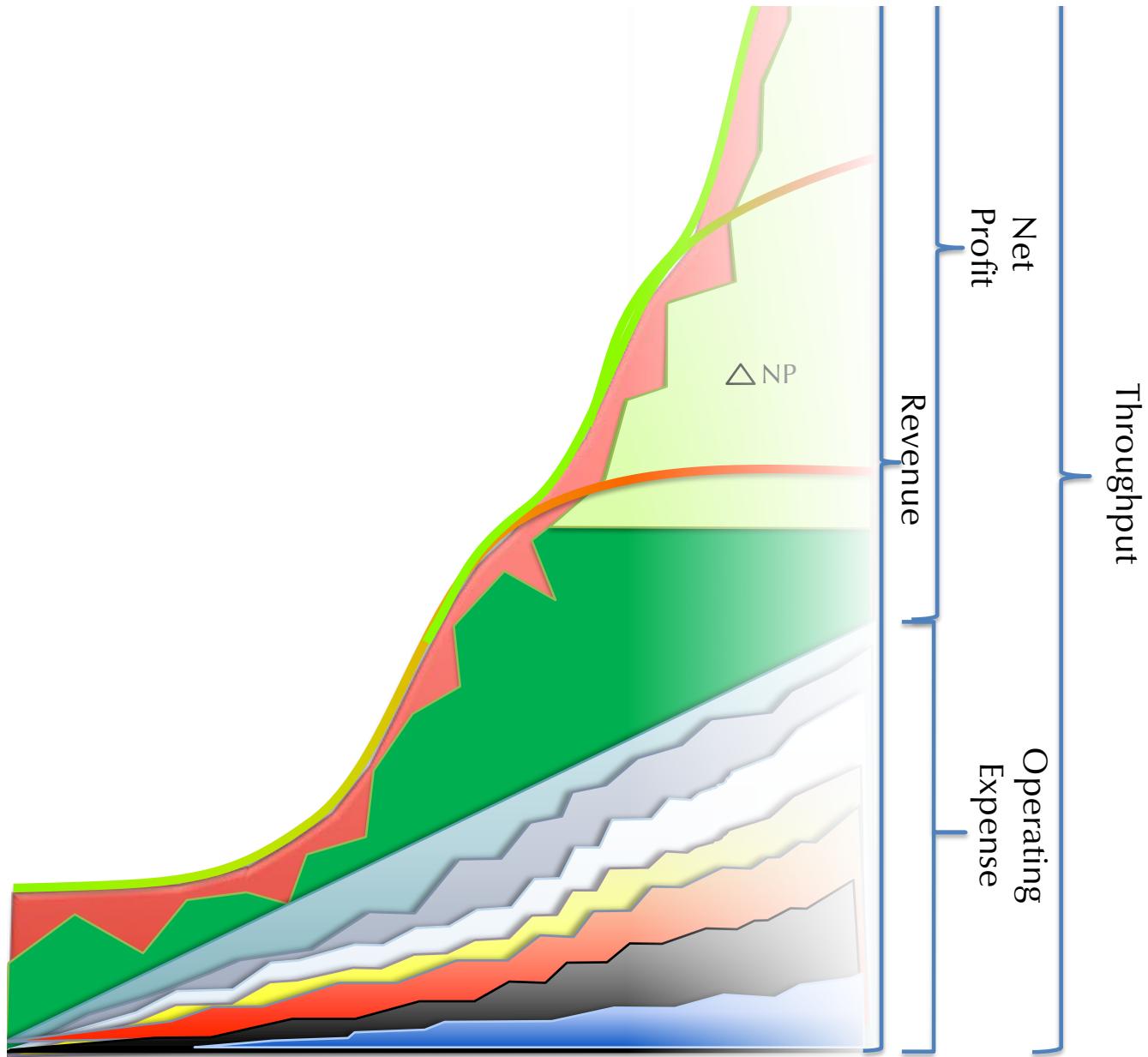
- Lift a pirate constraint
- Cut Operating Expense

Continuous



Continuously Prioritize Design to Open the Bottleneck

- Lift a pirate constraint
- ~~Cut Operating Expense~~
- Lift Effectiveness



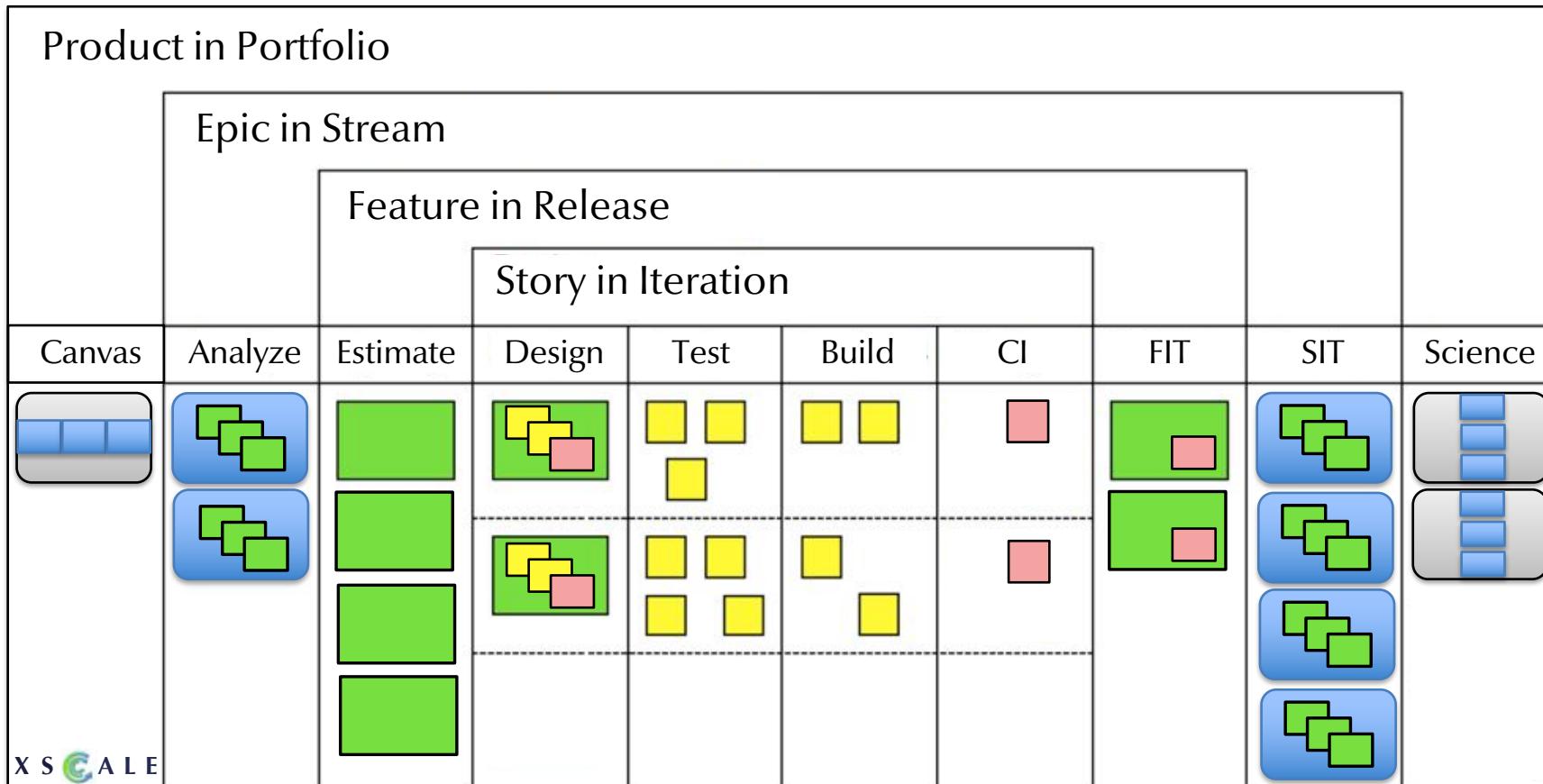
Continuously Prioritize Design to Open the Bottleneck

- Lift a pirate constraint
- ~~Cut operating expense~~
- Lift Effectiveness
- Capture a new market
- Open a new ecosystem

Learning

3D Kanban

◻ Product Epic Feature Scenario Story





Throughput & Batch Size



Minty Machine 1: form teams of 2-5 people

Each to process a batch of 10 Minties.

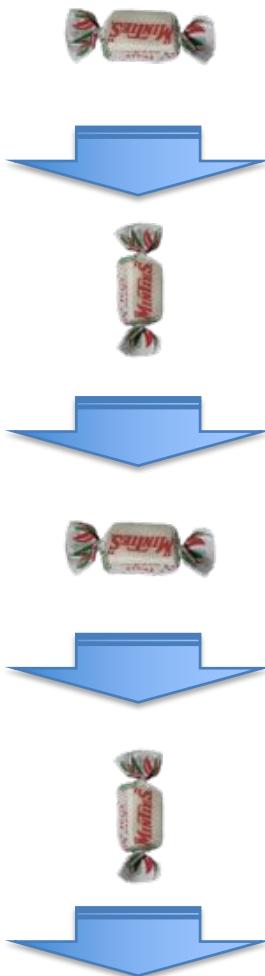
Each flips all 10 Minties before passing.

No air time & each player can use both hands.

Count out loud to time each person.

Record who's best and how long end to end.





Minty Machine 2: same teams

Handicap - use only one hand.

Also more passes - pass as each is flipped.

Coordinator to call out seconds.

Each person to time themselves.

Record who's best and how long end to end.

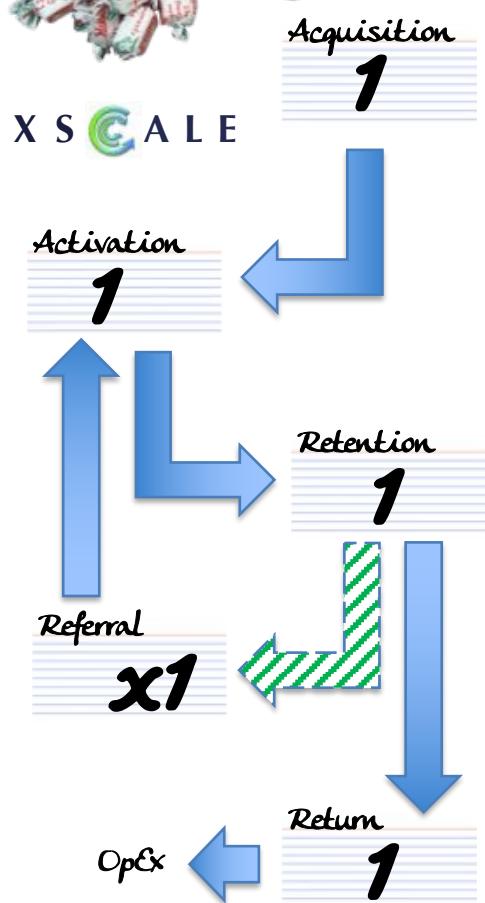
Was that faster end to end? Why?



Throughput Accounting 101:
The Bottleneck Game



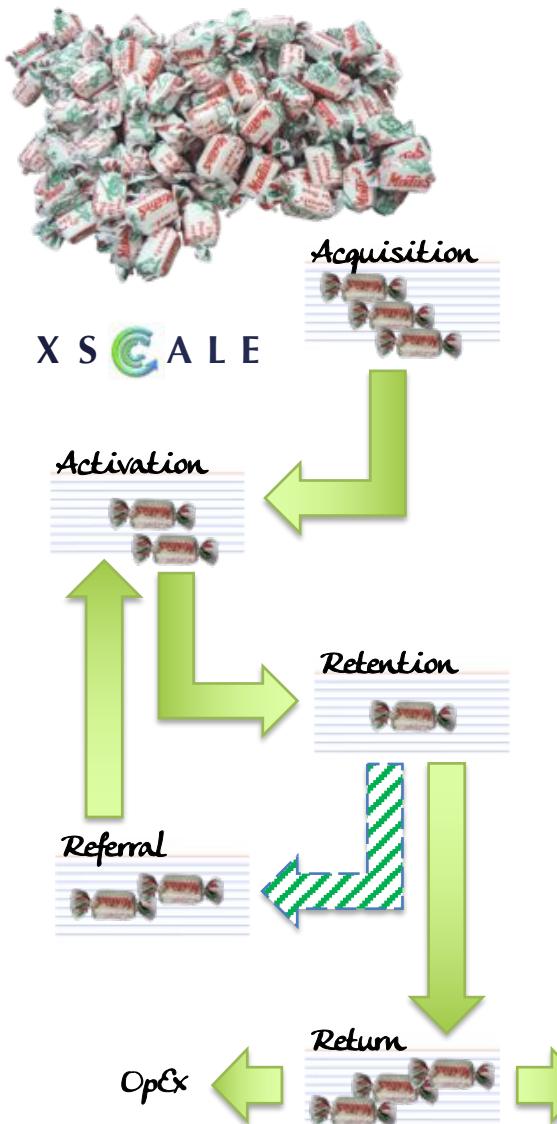
Let's form a Value Stream of 5 people. Each person has a card representing a Pirate Metric.



The number on each card represents a throughput constraint. Each card's constraint starts at 1. Except ...

Referral is a multiplier on any Minties that get through Retention. And it's bottlenecked by Activation.

Each turn, any end to end throughput can be spent as OpEx to open any constraint. Or eaten as Net Profit.



Questions:

If this stream creates exponential throughput,
what's its doubling period?

What if we go “Lean” and minimize all OpEx? Just bank maximum Net Profit every turn? Or just one turn?

What if we ignore the analytics and just pre-allocate some budget of OpEx to every constraint every turn?

What happens if we have more than one stream?

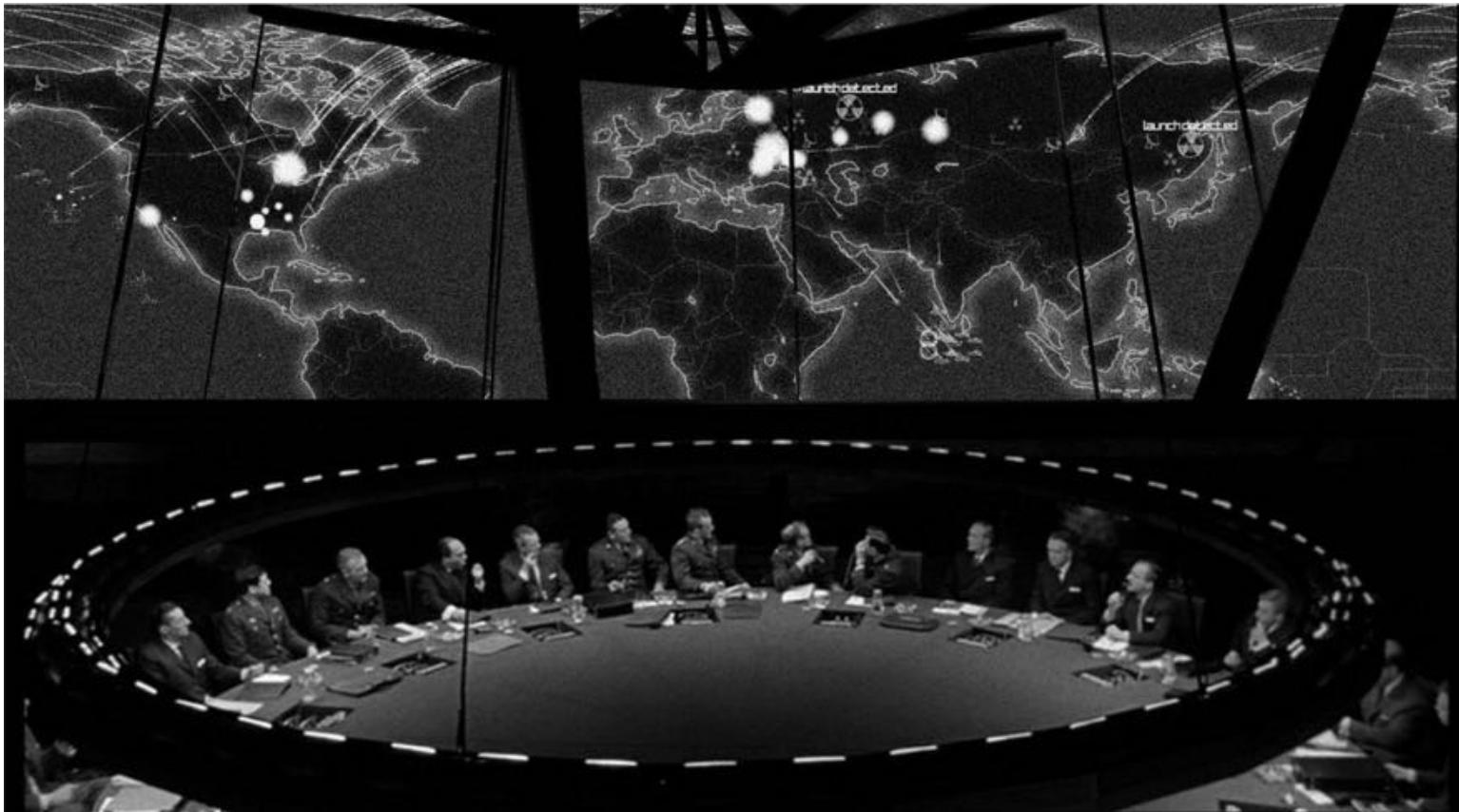
Autonomous Teams

- › Self-organizing teams don't have masters
- › Self-managing streams don't have owners
- › Leadership as a Service + Chapter Meetings





Mission Command



Picture a system out of control.
No plan survives contact with the enemy.

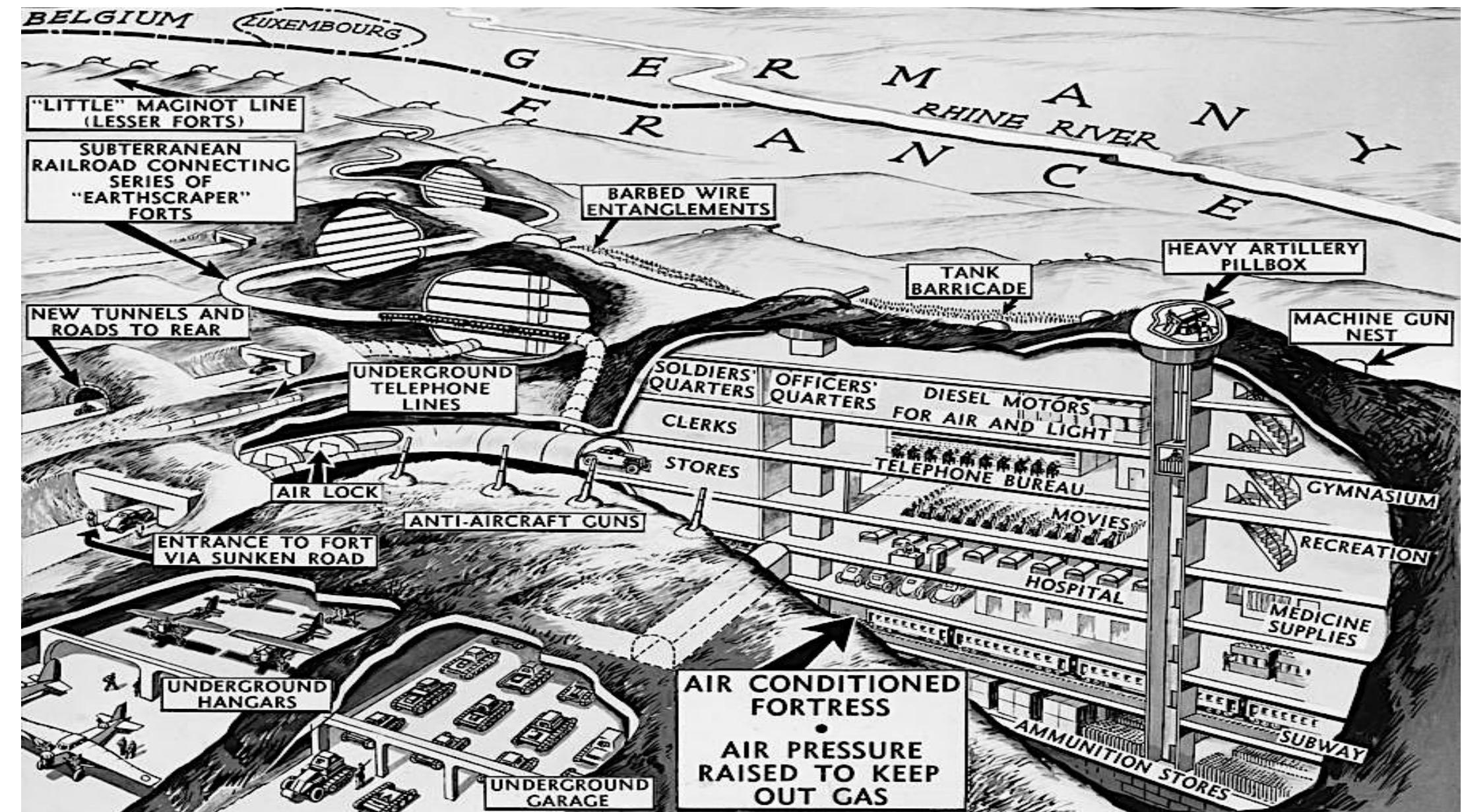
- Von Moltke

Mission Command

"No plan survives contact with the enemy.
Each officer acts on the basis of his own
view of the situation. Productive action is
controlled by the superior framework of intent."

-- Field Marshal Helmut Von Moltke, Chief
General of the Prussian Army 1857-1888





Autonomous

Mission Command “Auftragstaktik” overcame the Maginot Line in just 5 days.



Autonomous

The Royal Navy used huge convoys to guard against lone submarines.

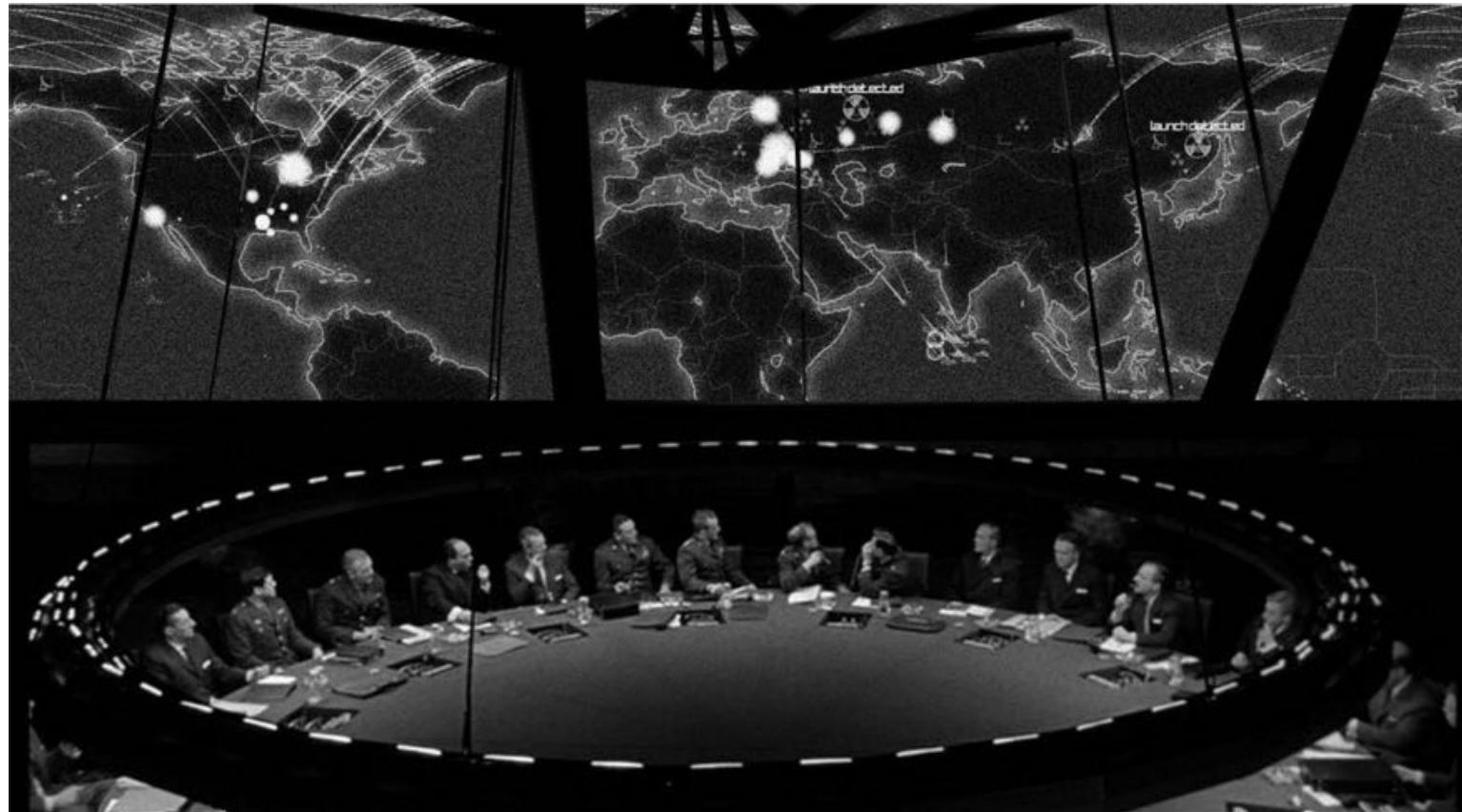


Autonomous

"Auftragstaktik" U-Boats sank 60% of the British supply fleet in the first year.



Autonomous



What else is wrong with this picture?

1. Too many people in the room.
2. Terrible Delegation/Collaboration Ratio.

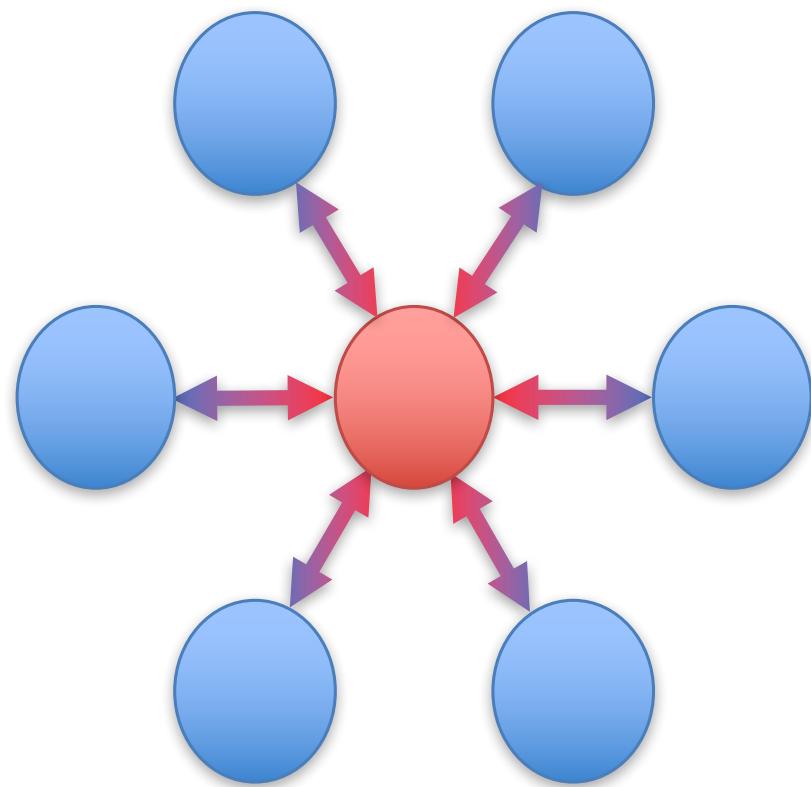


Descaling Metrics



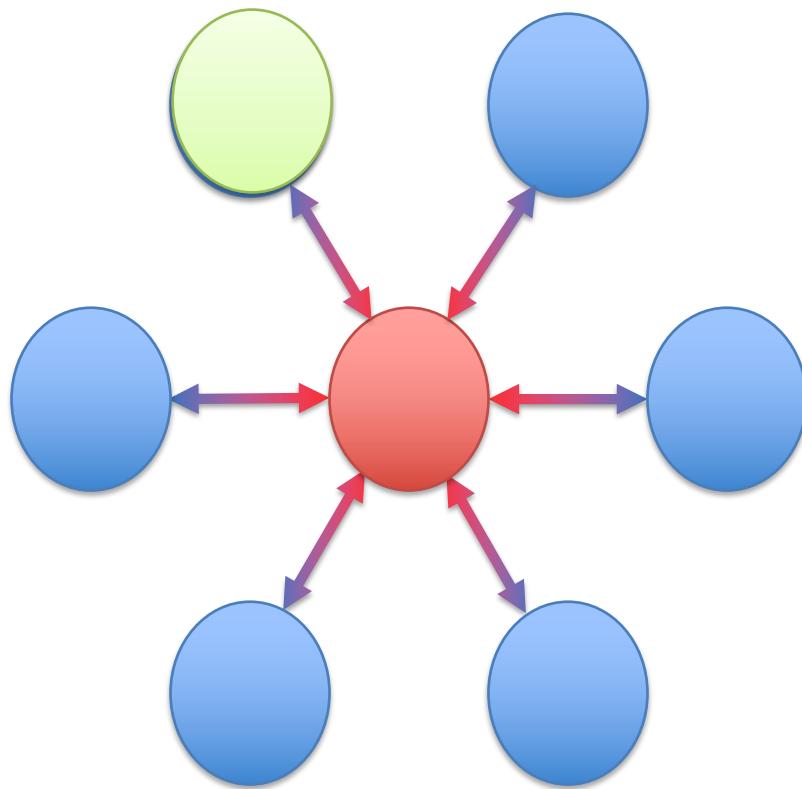
Workflow data says the most effective team size is 6.

Delegation / Collaboration Ratio



Indirect vs Direct Conversations

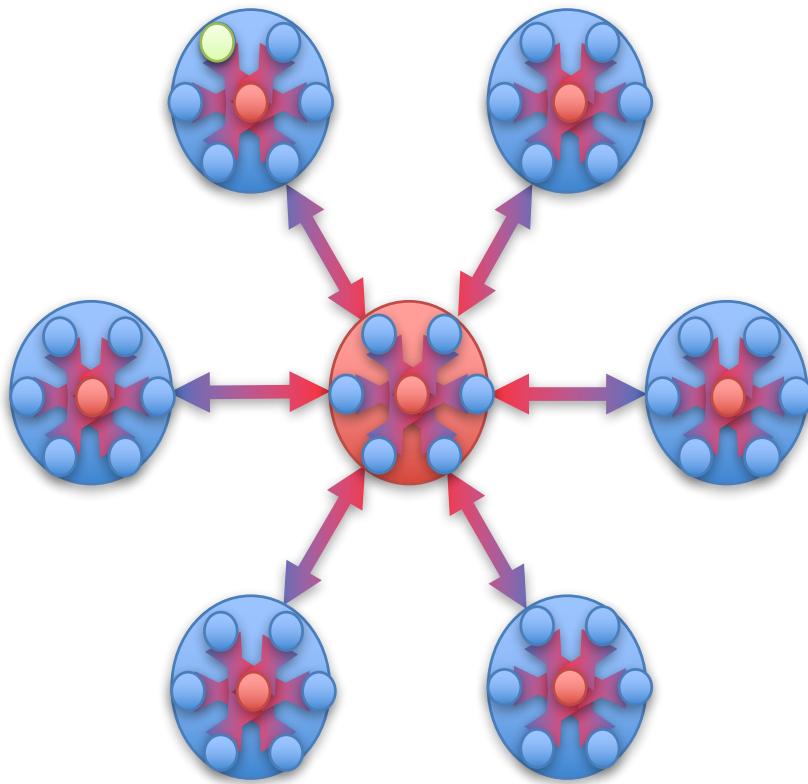
Managed Team



Team Size: 7

DCR: 1

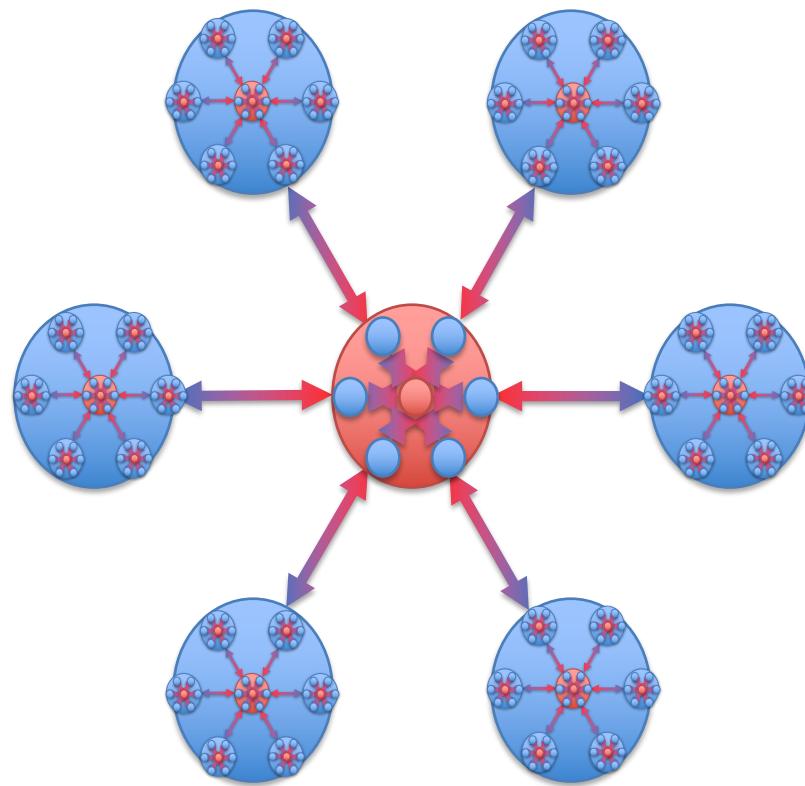
Managed Program



Team Size: 43

DCR: 6

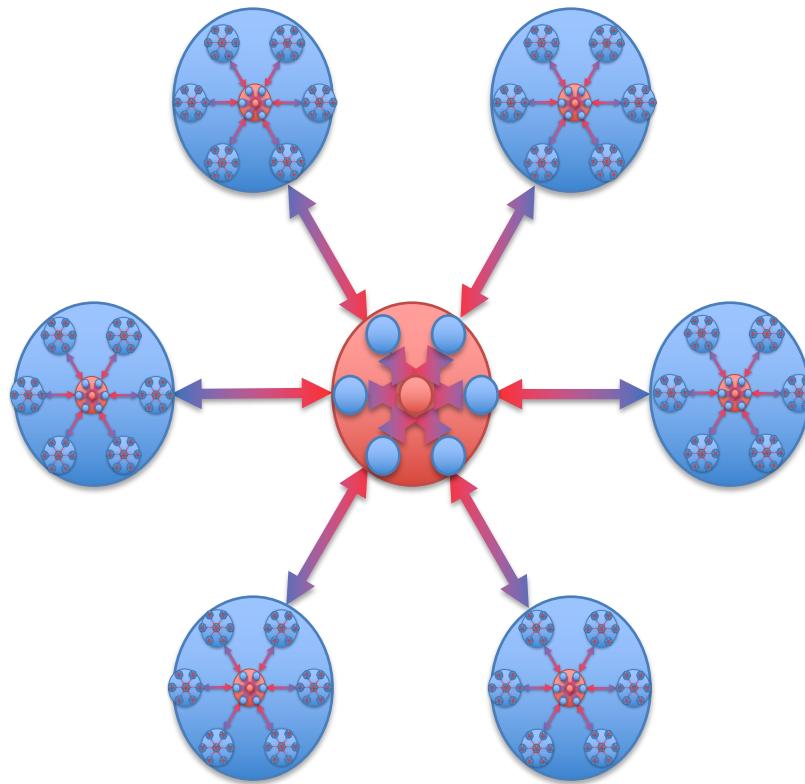
Program/Portfolio Management Office (“PMO”)



Team Size: 259

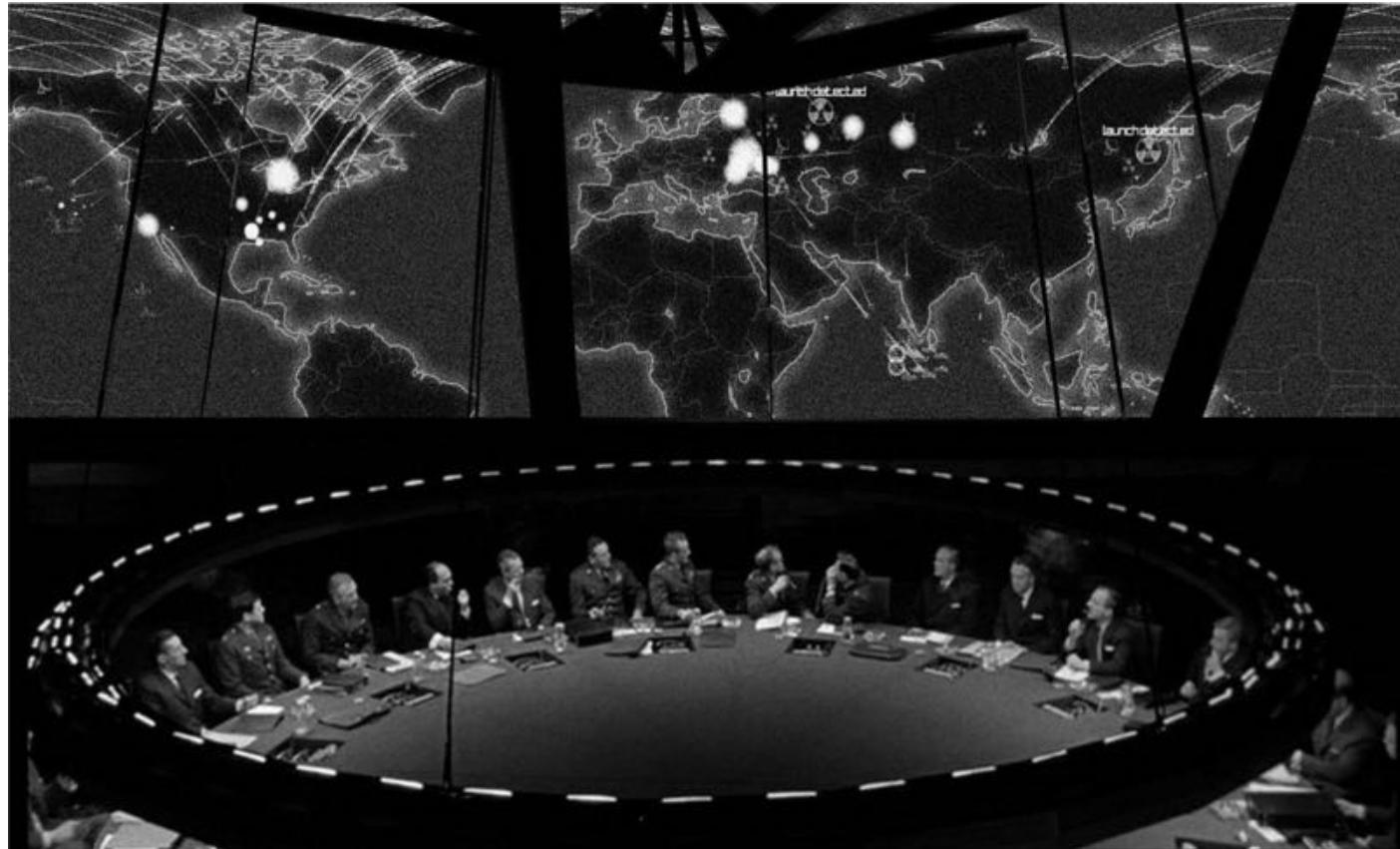
DCR: 42

Enterprise Project Management Office (“EPMO”)



Team Size: 1,555

DCR: 258



●	Squad
● ●	Section
● ● ●	Platoon/Troop
	Company/Squadron
	Battalion
	Regiment/Group
X	Brigade
XX	Division
XXX	Corps
XXXX	Army
XXXXX	Army Group/Front

US Military DCR: ... 60 Million?



The Evolution Of Trust

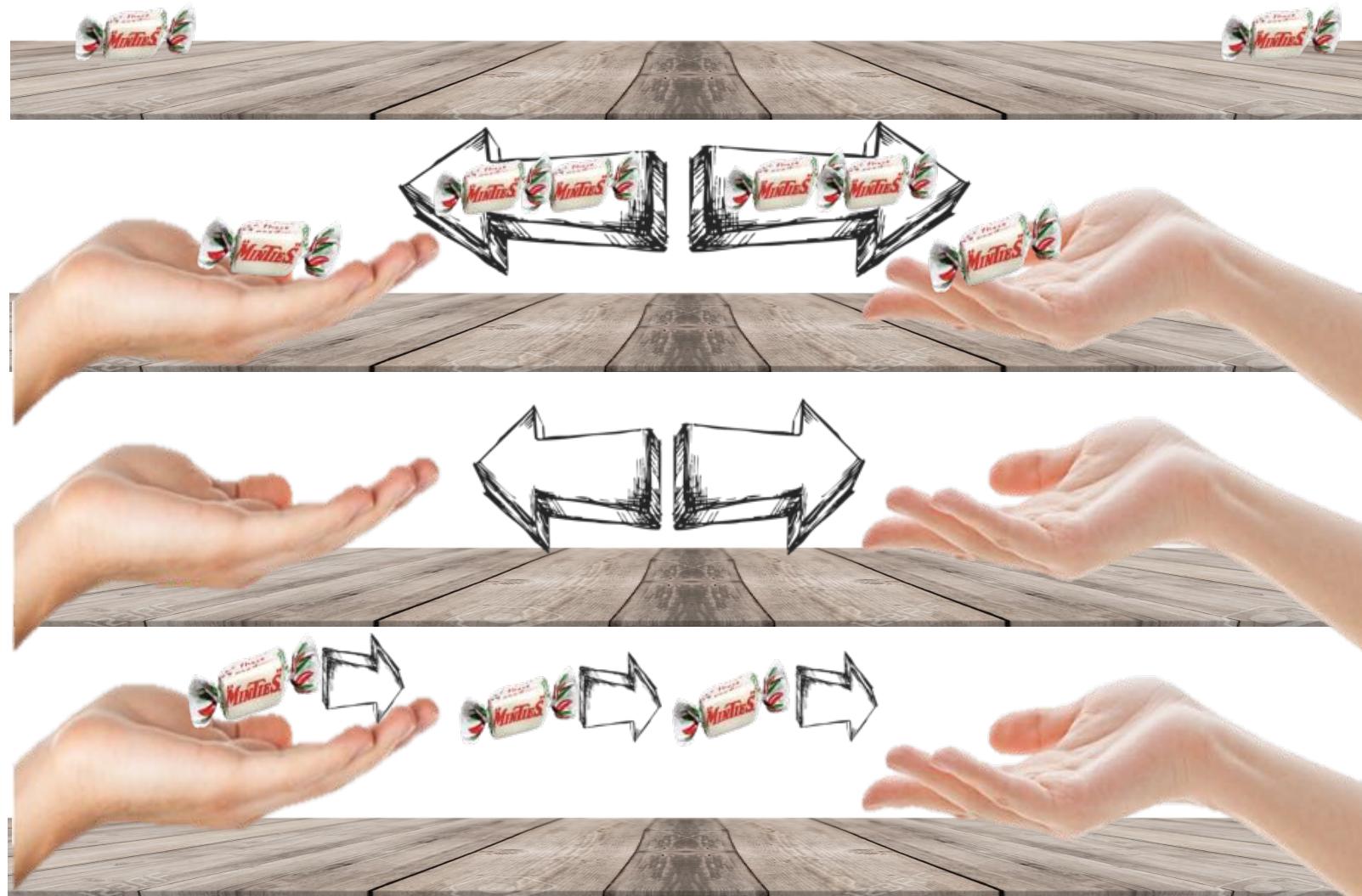
The Bonus Dilemma

Two players,
One Minty each.

If both collaborate,
both win a bonus

If neither does,
neither wins.

If one cheats,
they win the other's
bonus + another 2.



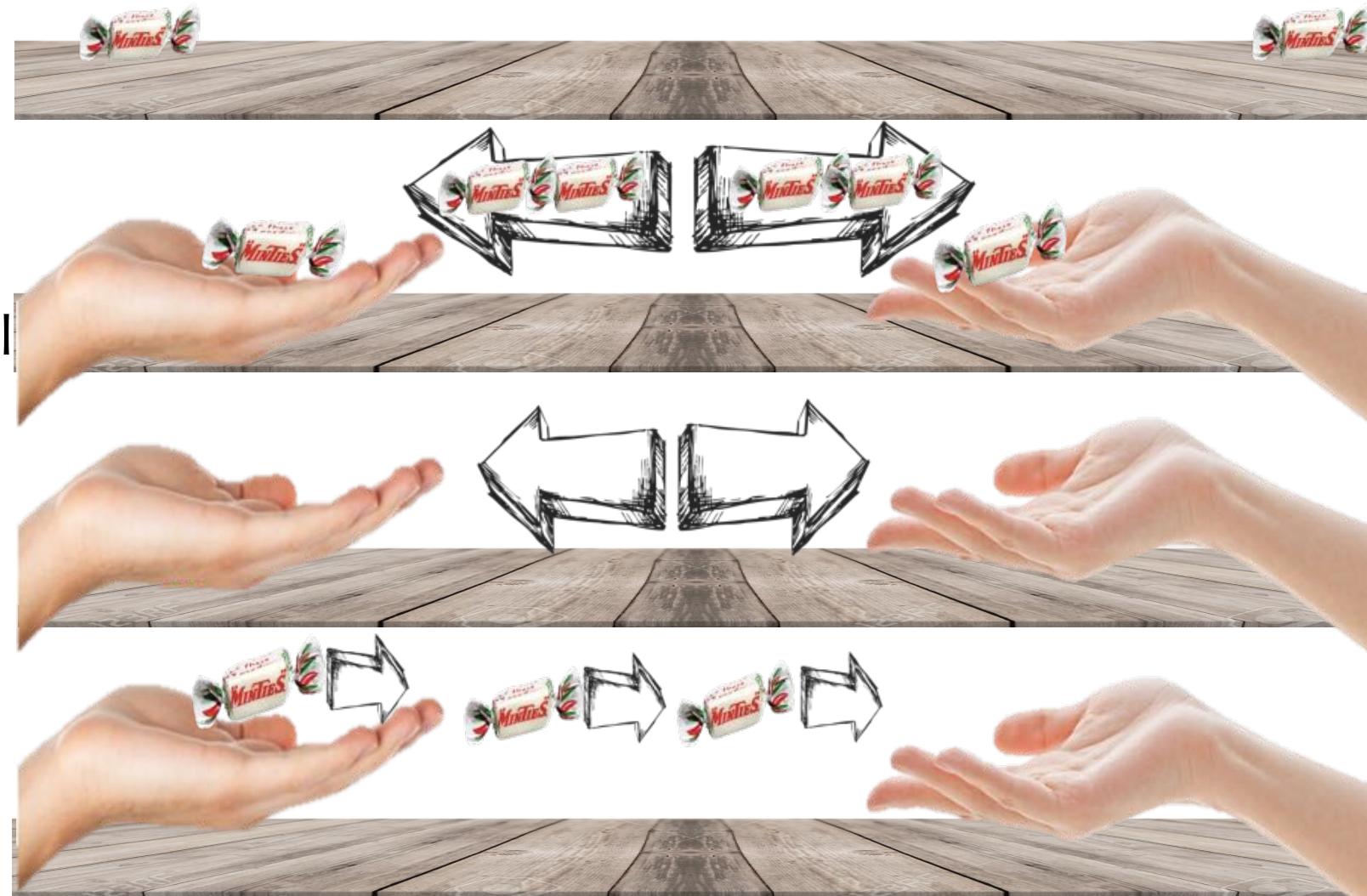
The N-Party Iterated Bonus Dilemma

Pairs take 6 turns each. Negative scores allowed.

After 6 turns, cull the lowest 50% of all players.

The remaining 50% play each other

In the end there can only be one ...



The Evolution Of Trust



<http://ncase.me/trust/>

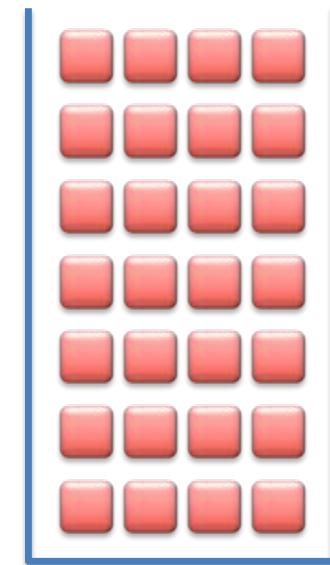
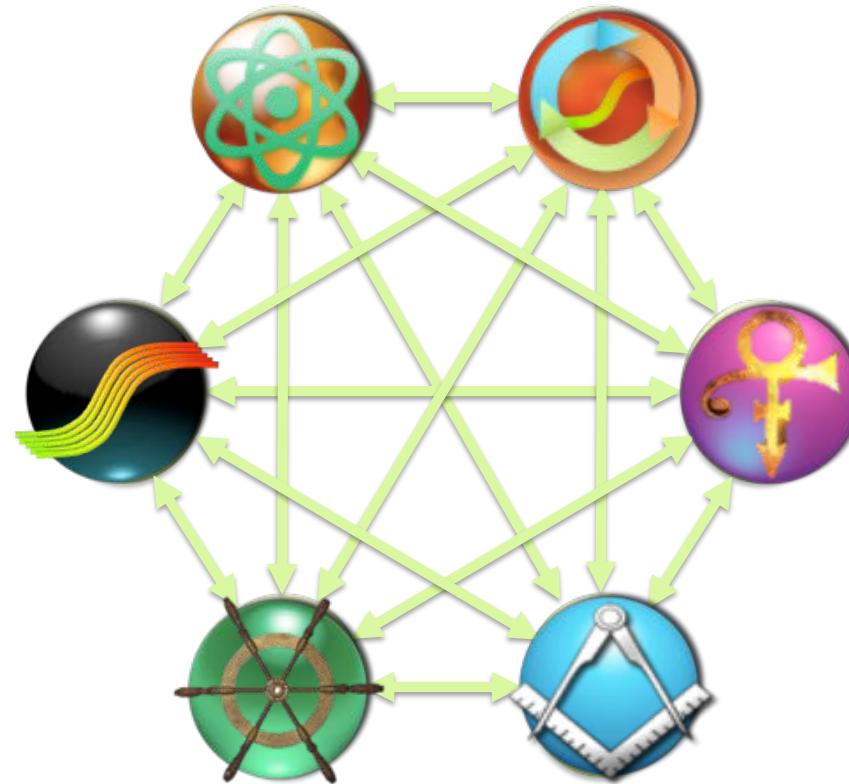
Accurate communication only
occurs within a culture of trust ...



The problem hierarchy solves is combinatorial conversations.
But there's another way. An older way. A more human way ...

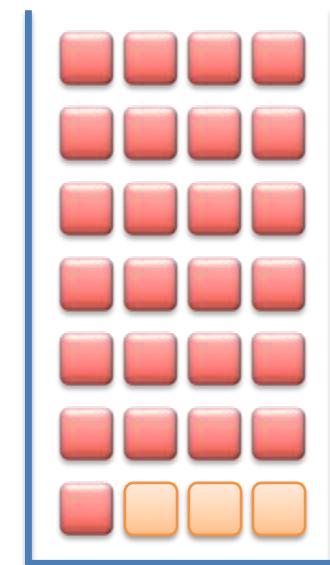
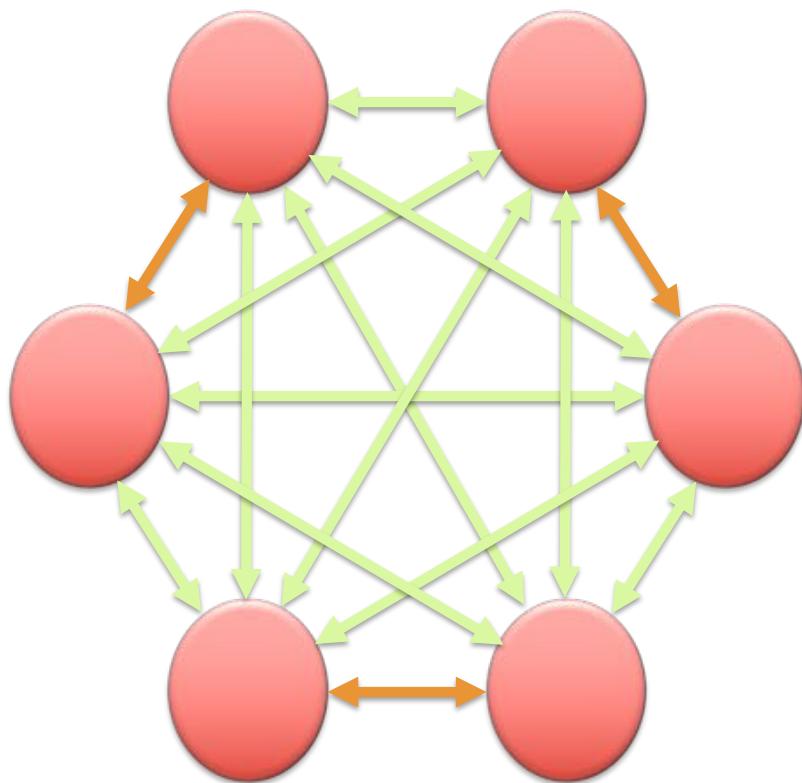


Autonomous Squad



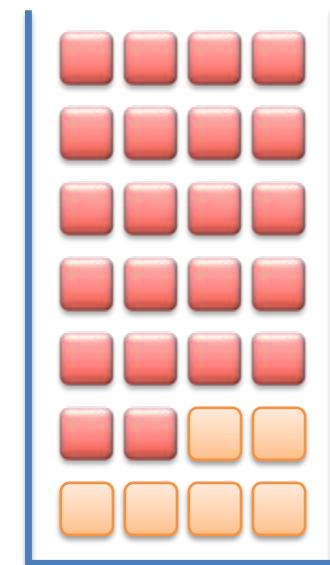
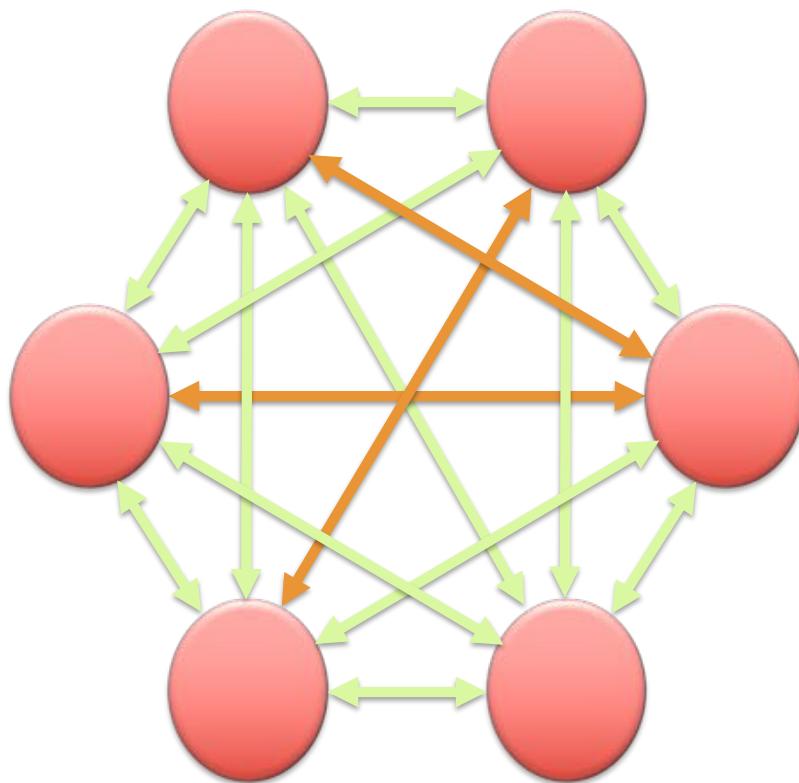
Team Size: 6
Collaboration Loop Limit: 2

Autonomous Squad



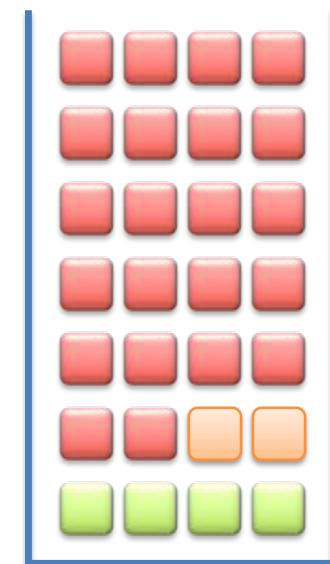
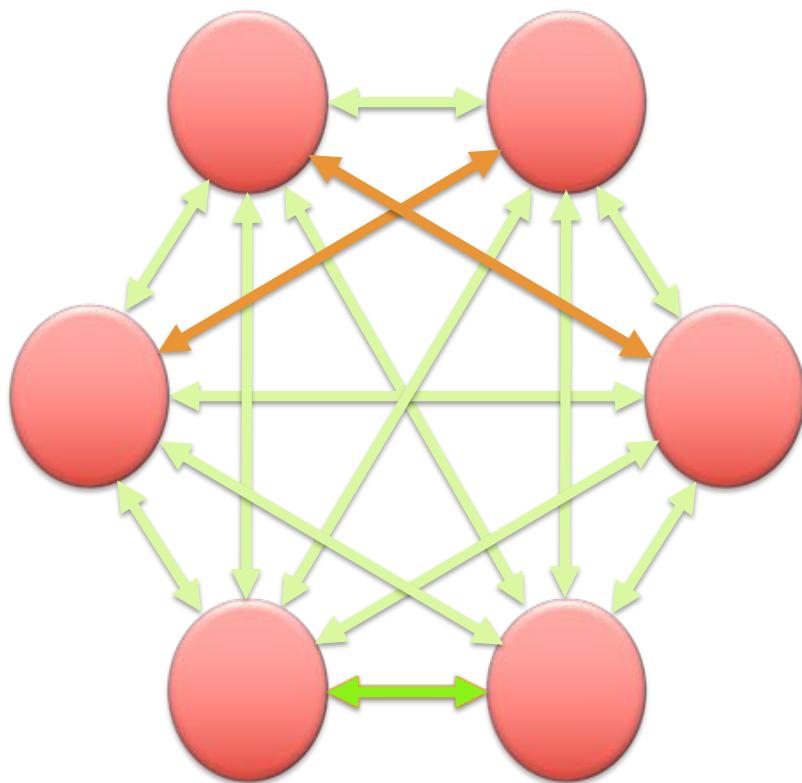
Prioritization + Pairing

Autonomous Squad



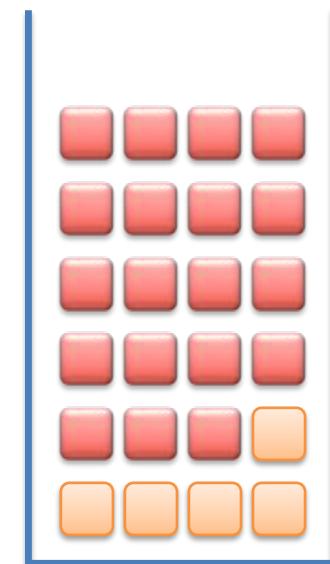
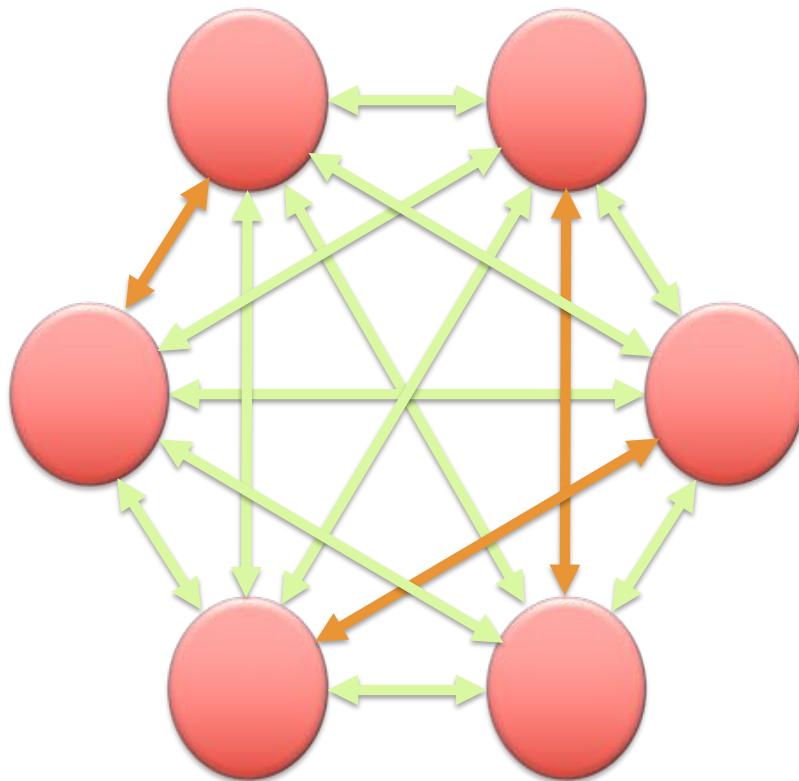
Prioritization + Pairing

Autonomous Squad



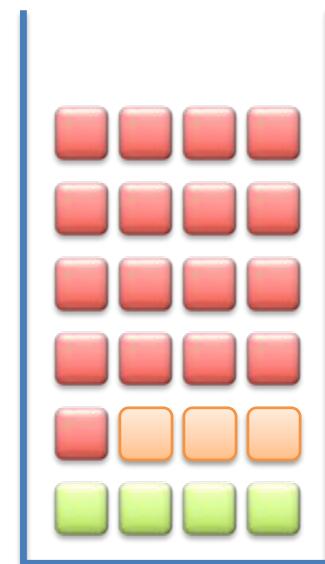
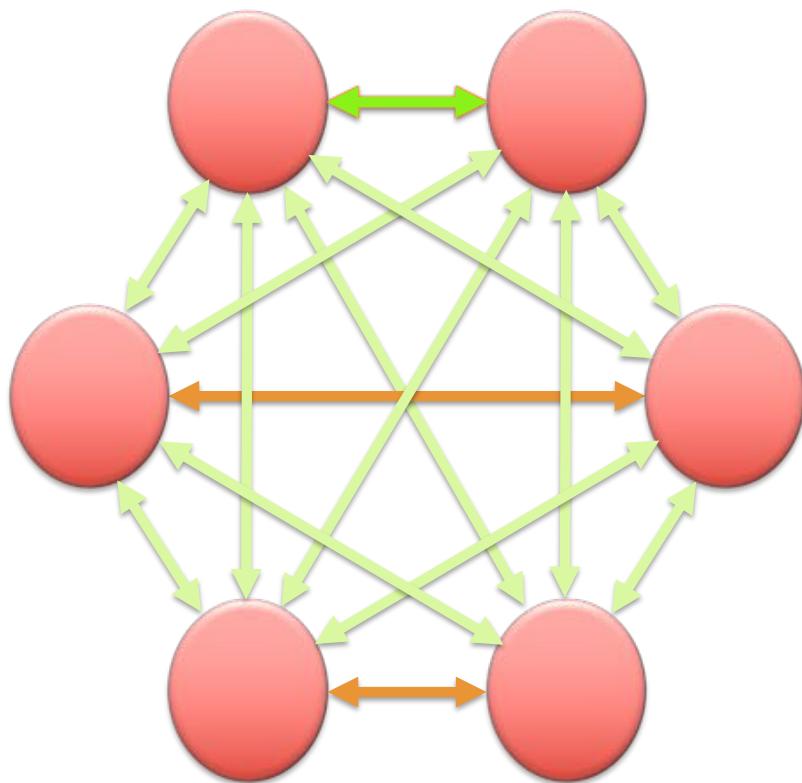
Prioritization + Pairing

Autonomous Squad



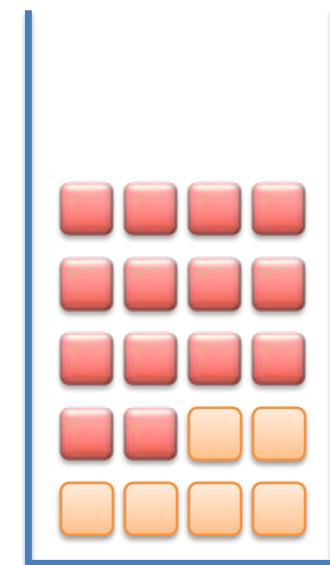
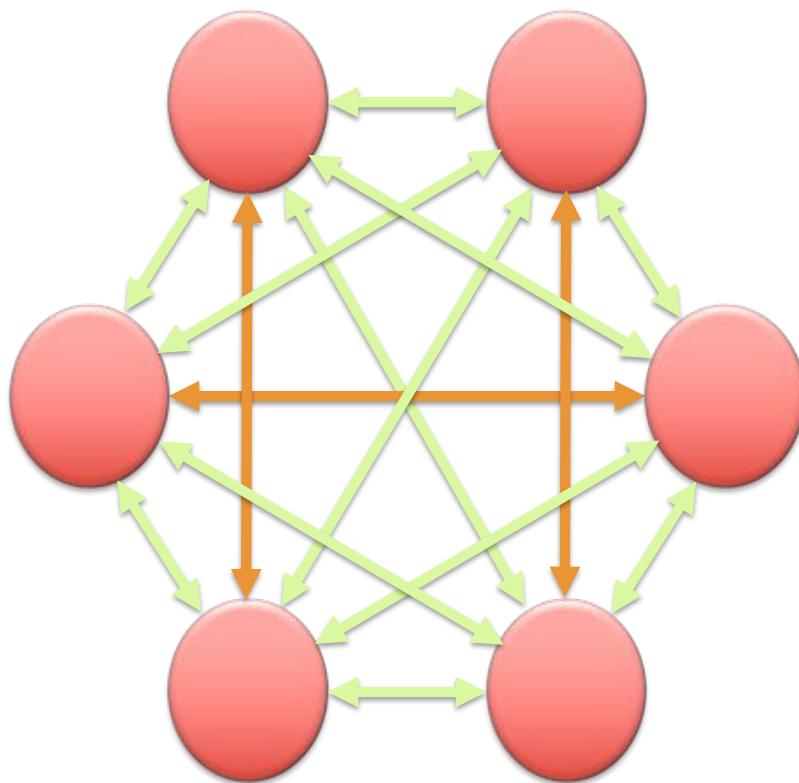
Prioritization + Pairing

Autonomous Squad



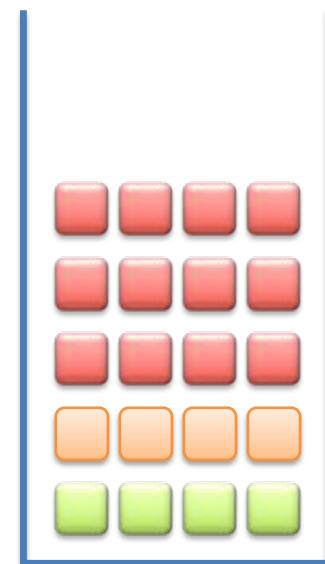
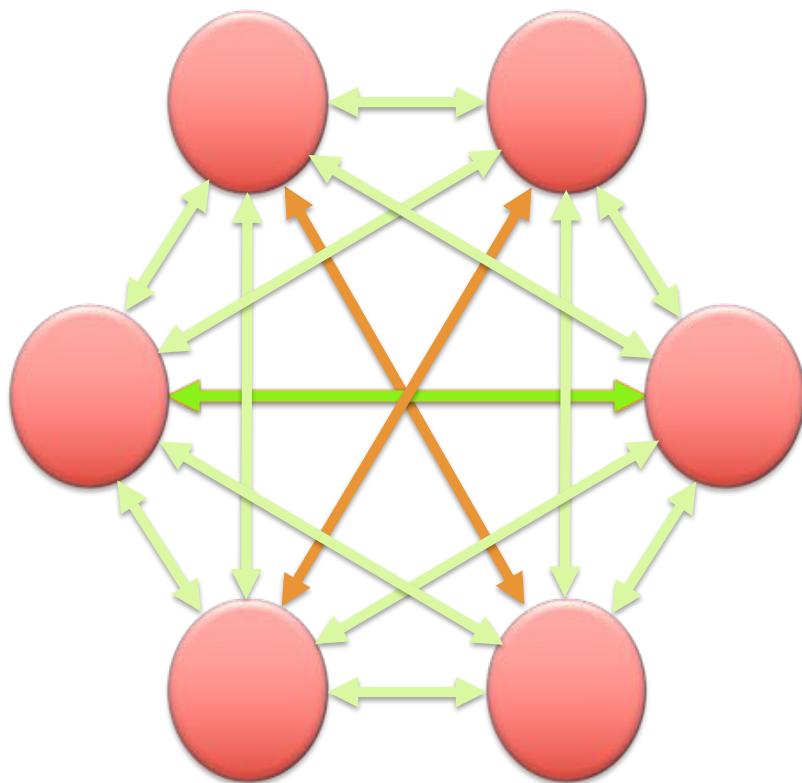
Prioritization + Pairing

Autonomous Squad



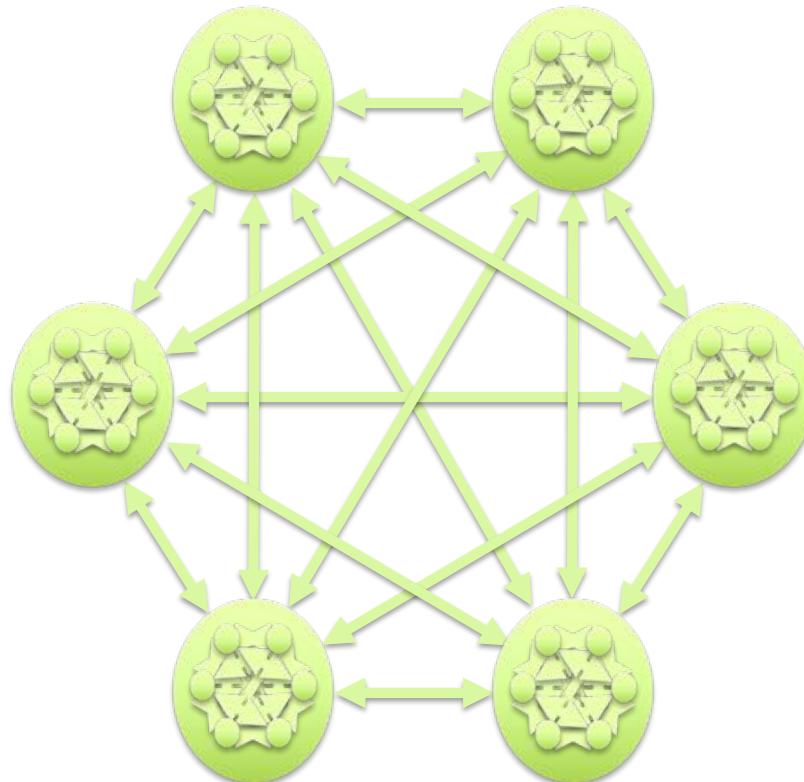
Prioritization + Pairing

Autonomous Squad

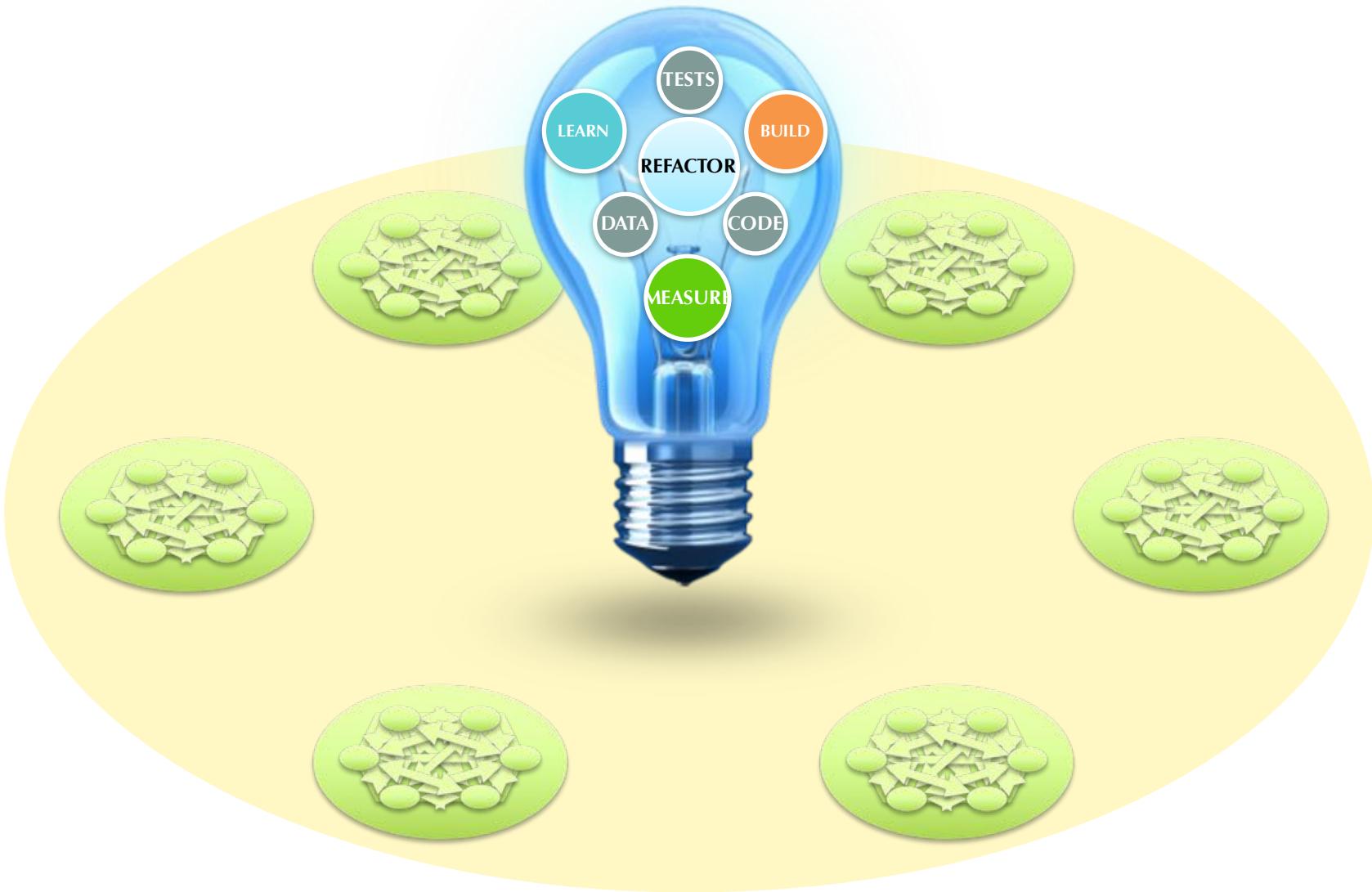


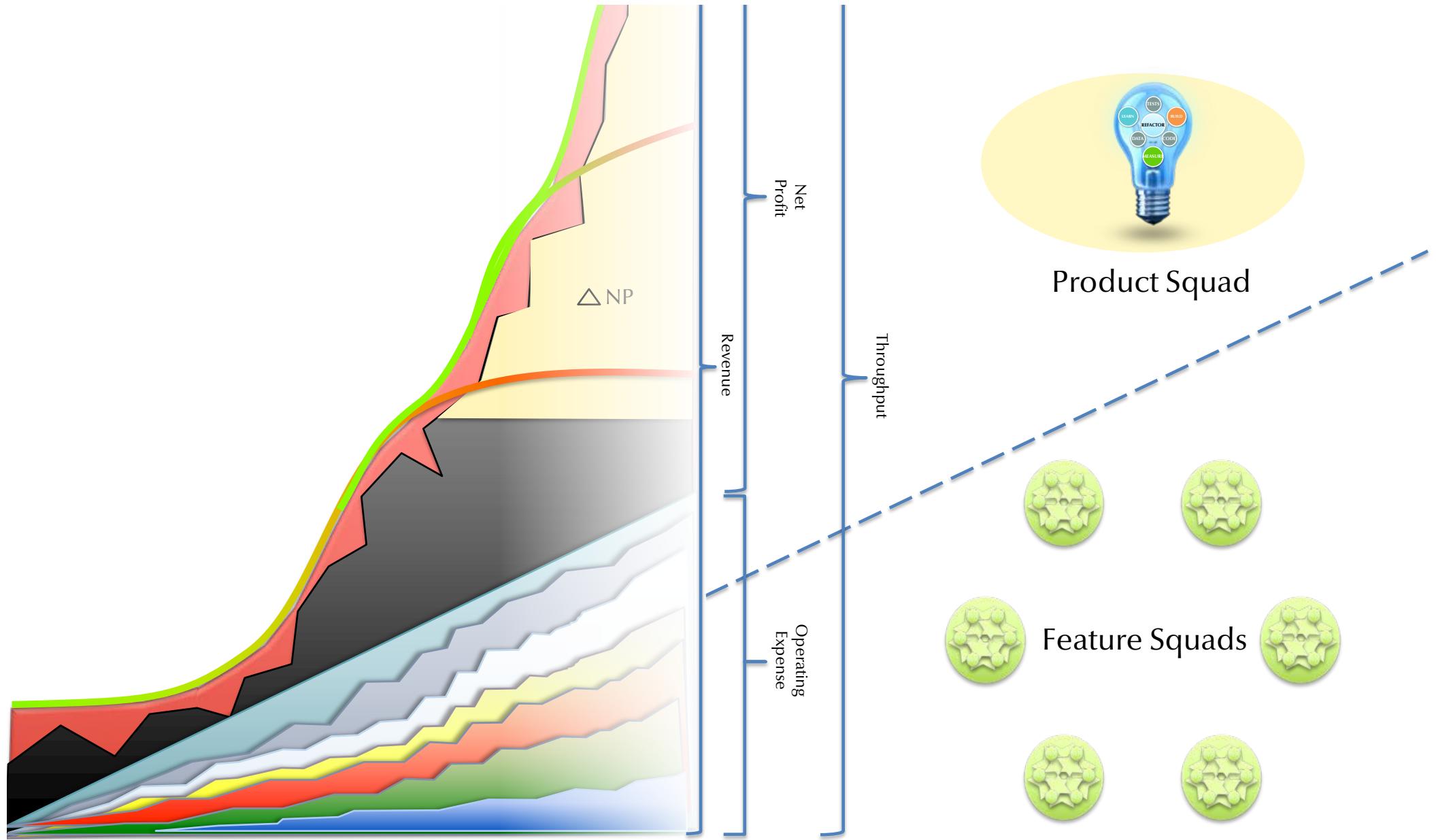
Prioritization + Pairing

The problem command and control hierarchy solves is combinatorial conversations.
36 people can have 3.7 septillion different conversations ...
(Not all shown here)



Mission Command provides a superior framework of intent.



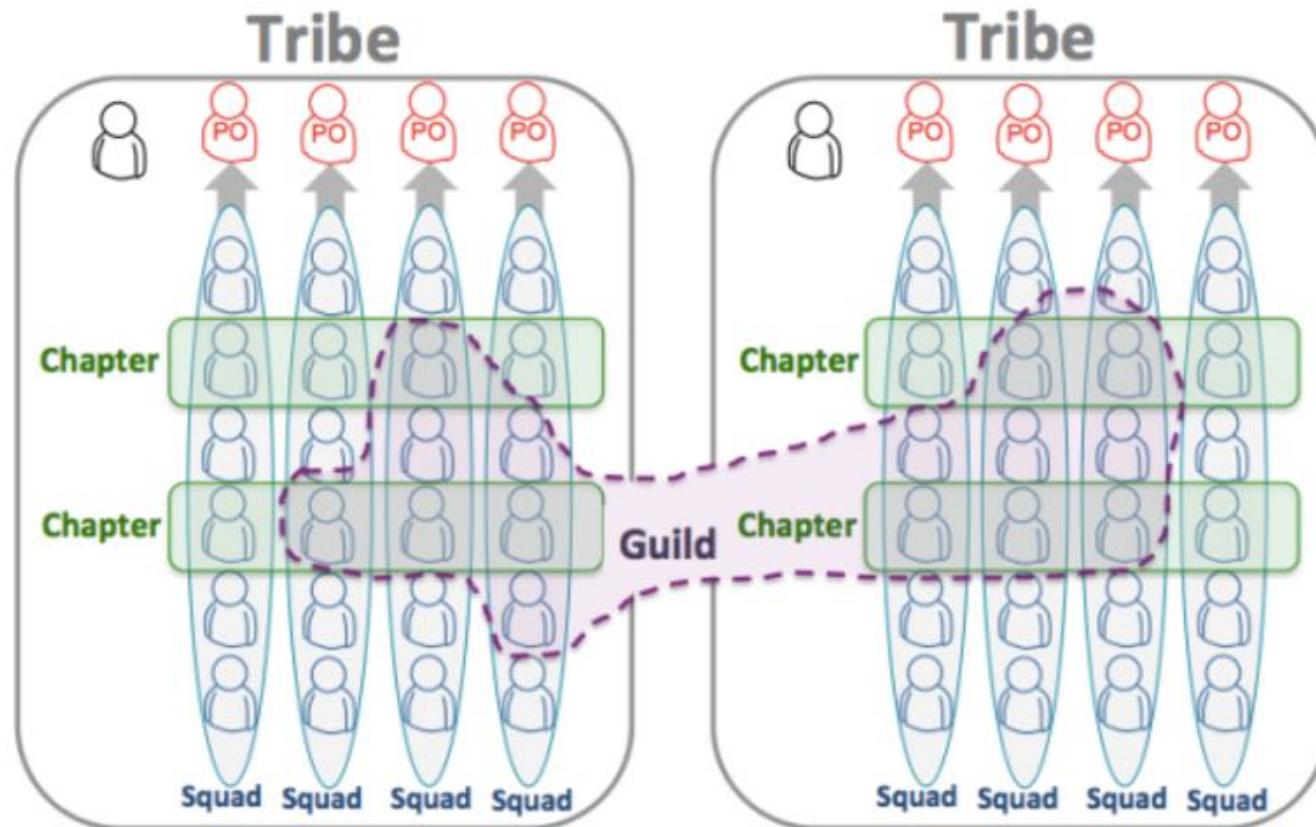




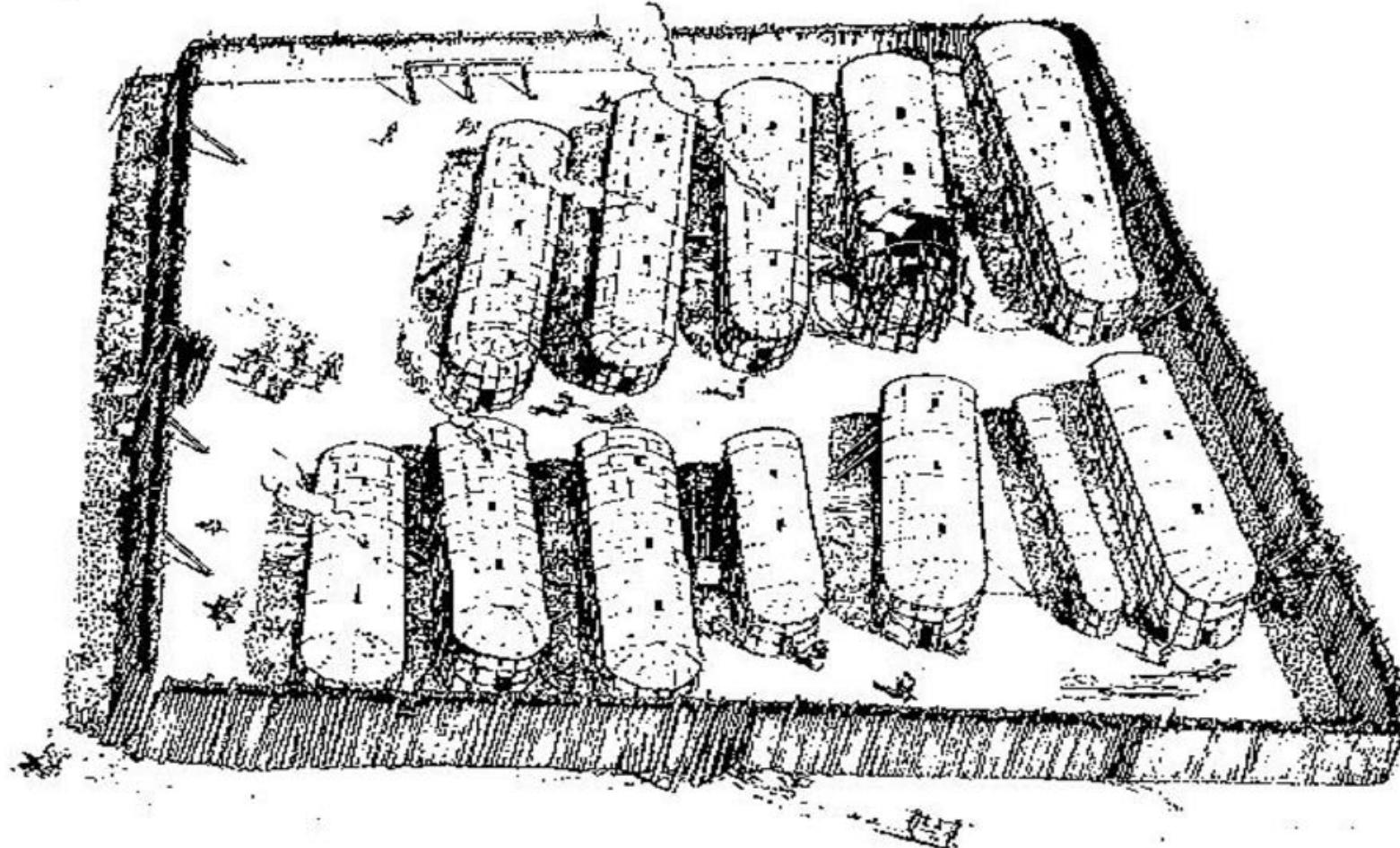
The Game Without Thrones

Mission command at Spotify ...

Henrik Kniberg & Anders Ivarsson
Oct 2012

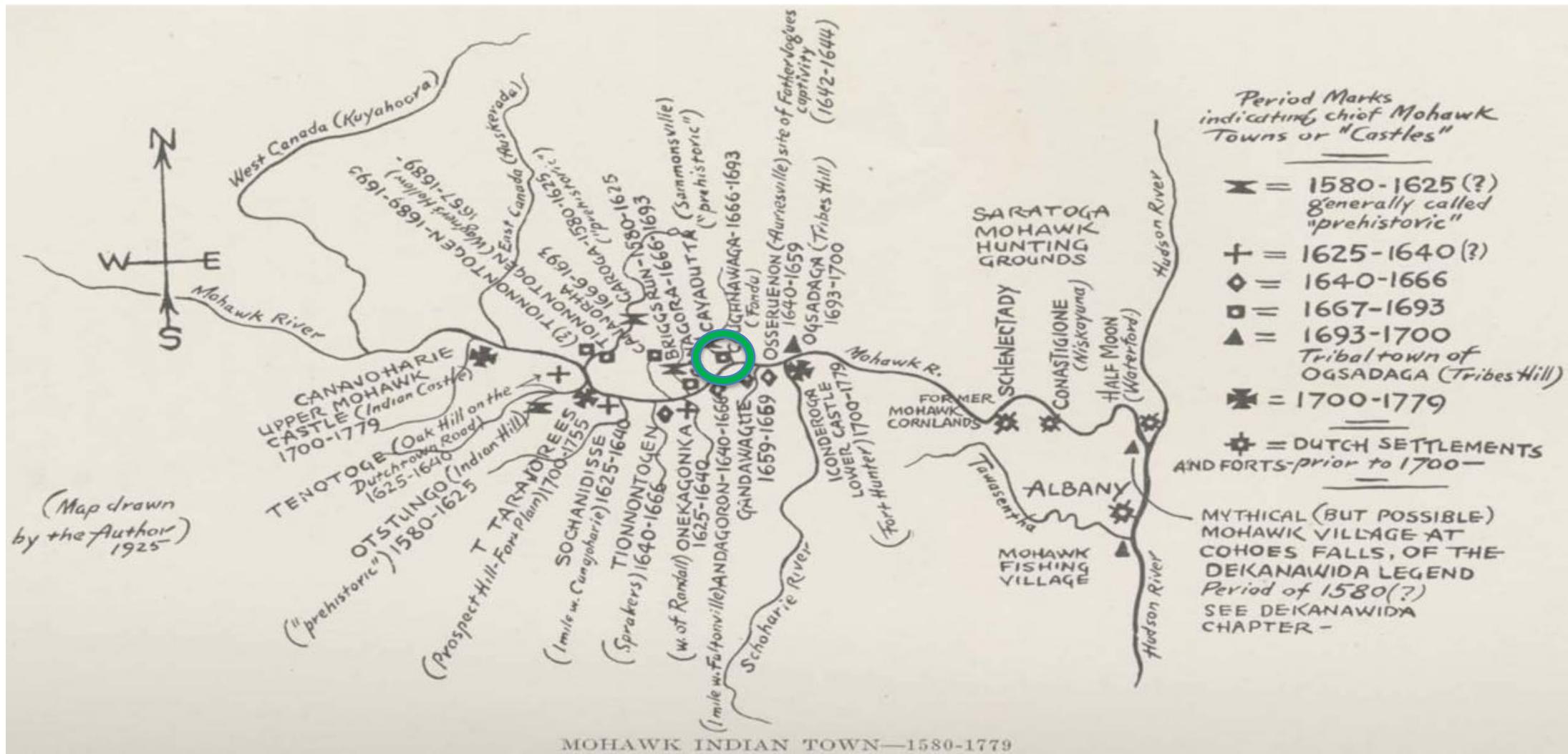


Learning from the Iroquois “Great Law of Peace”
This is Caughnawaga. Clans like chapters decentralise governance.



The Mohawk village of Caughnawaga, inhabited 1666–93, courtesy of the Tekakwitha Shrine, Mohawk-Caughnawaga Museum, Fonda, New York.

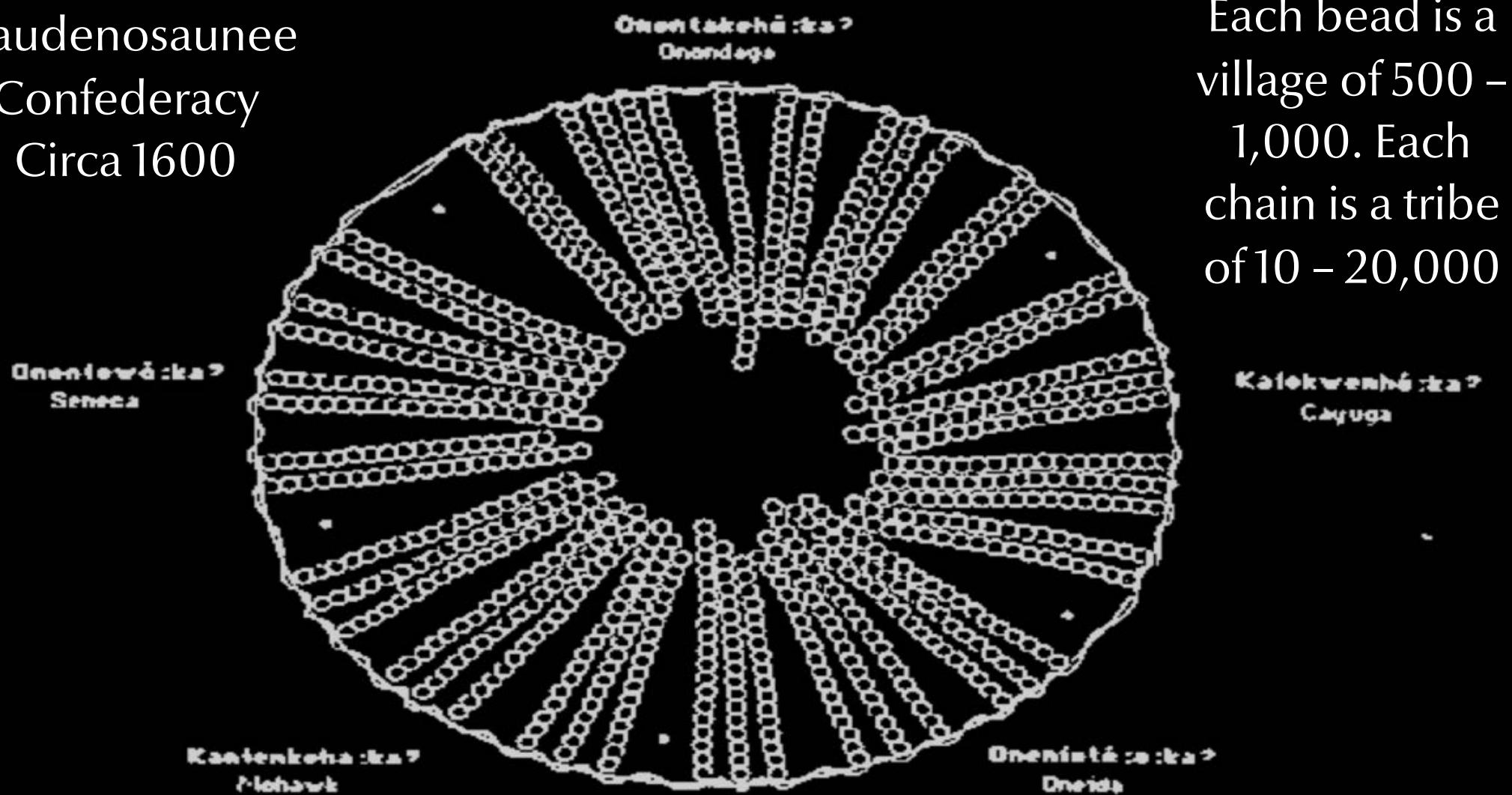
Villages along a river form a tribe – a longhouse of longhouses of longhouses.
 Through clans and councils, longhouses form a social fractal.



A longhouse of tribes made a nation.
The five nations as a longhouse: The Haudenosaunee Confederacy.

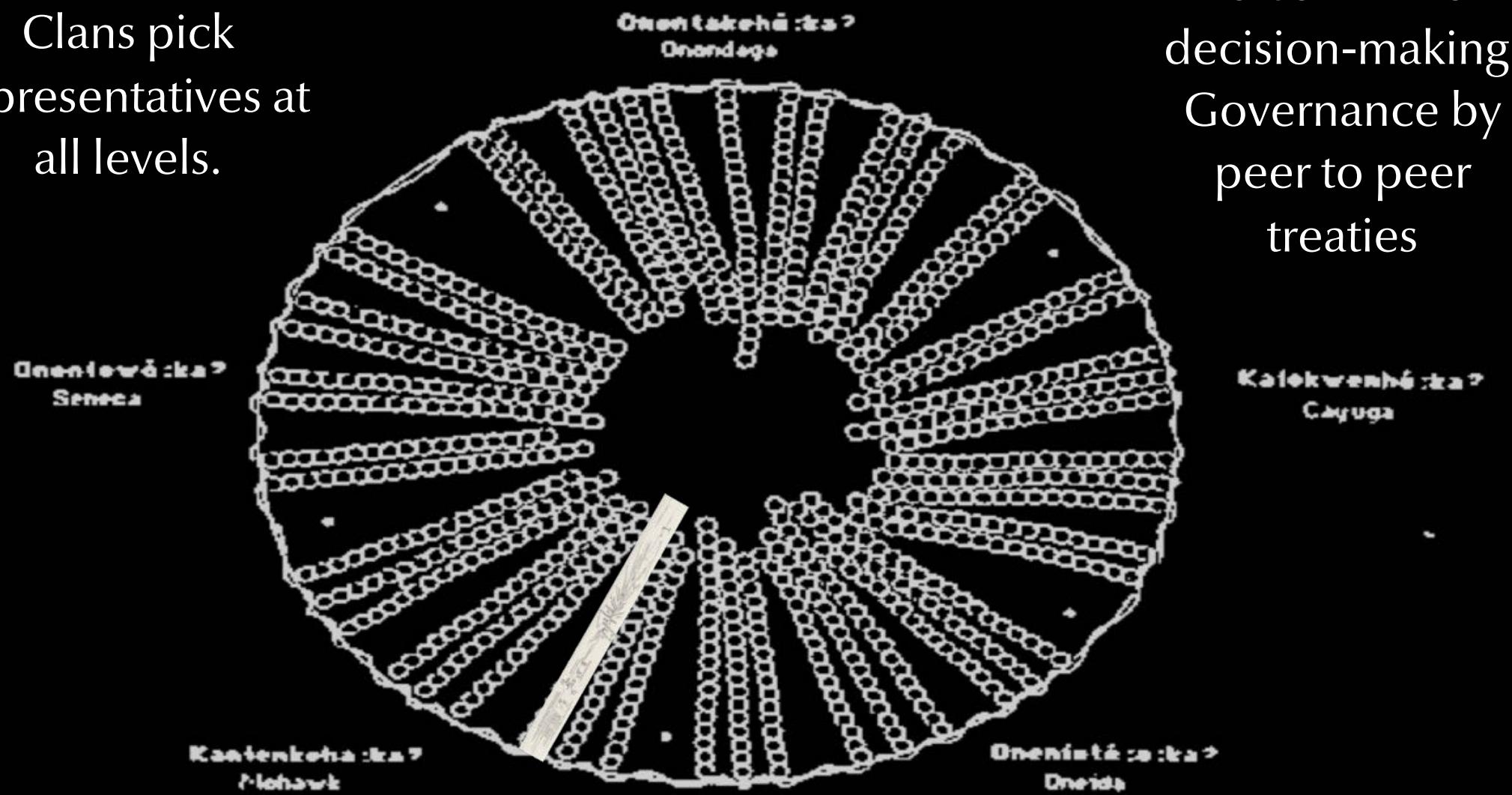


Haudenosaunee Confederacy Circa 1600



Each bead is a
village of 500 -
1,000. Each
chain is a tribe
of 10 - 20,000

Clans pick
representatives at
all levels.

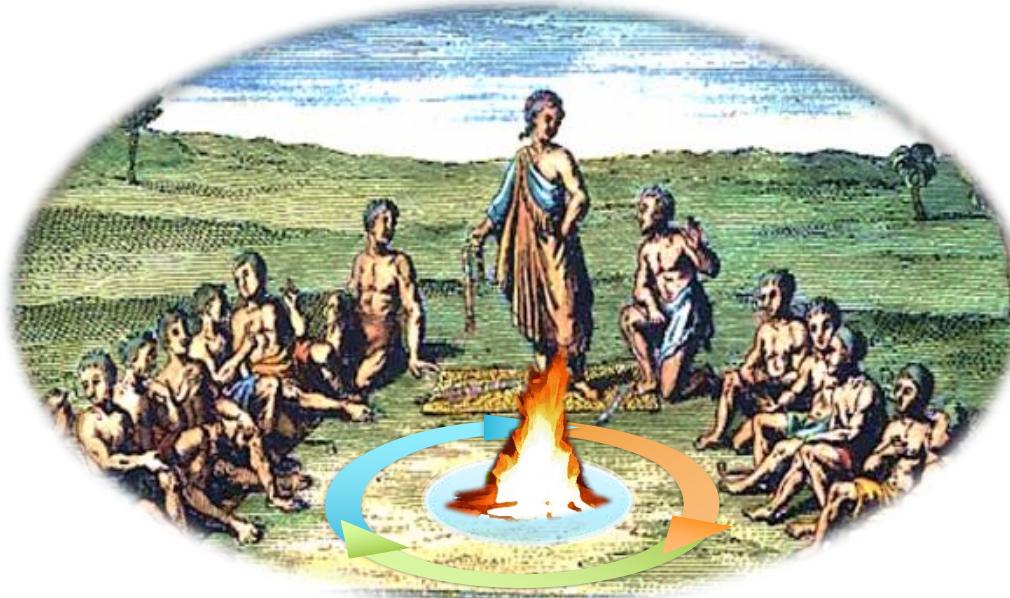


No centralized
decision-making.
Governance by
peer to peer
treaties

Iroquois Governance: treaties negotiated by consensus at all levels.



Leadership as a Service



Councils & Treaties

Split management into three parts: Speaker, Leader and Team.

Speaker maintains timeframe and ceremonies for making decisions.

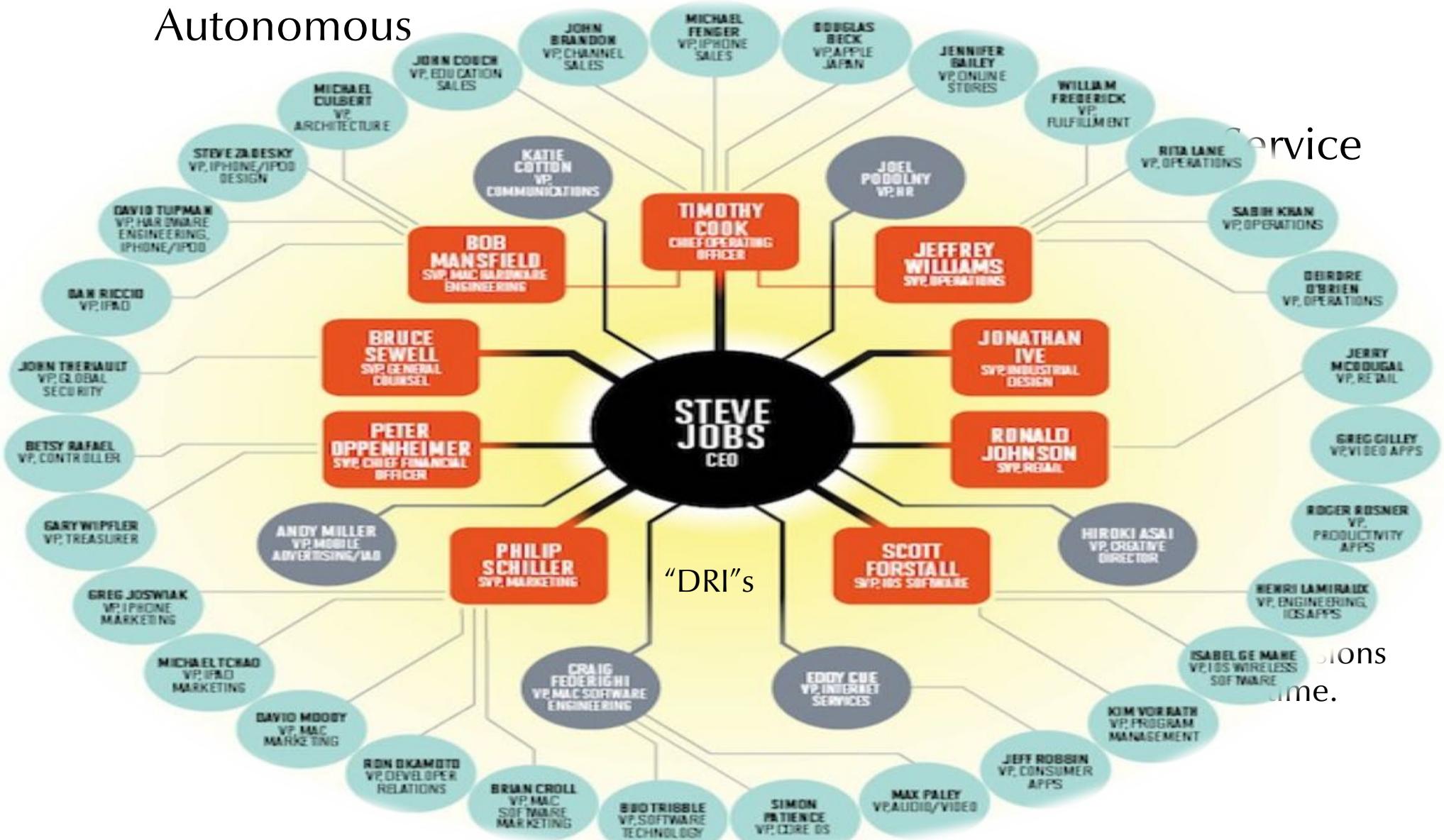
If and only if the Team isn't unanimous, the Leader decides.

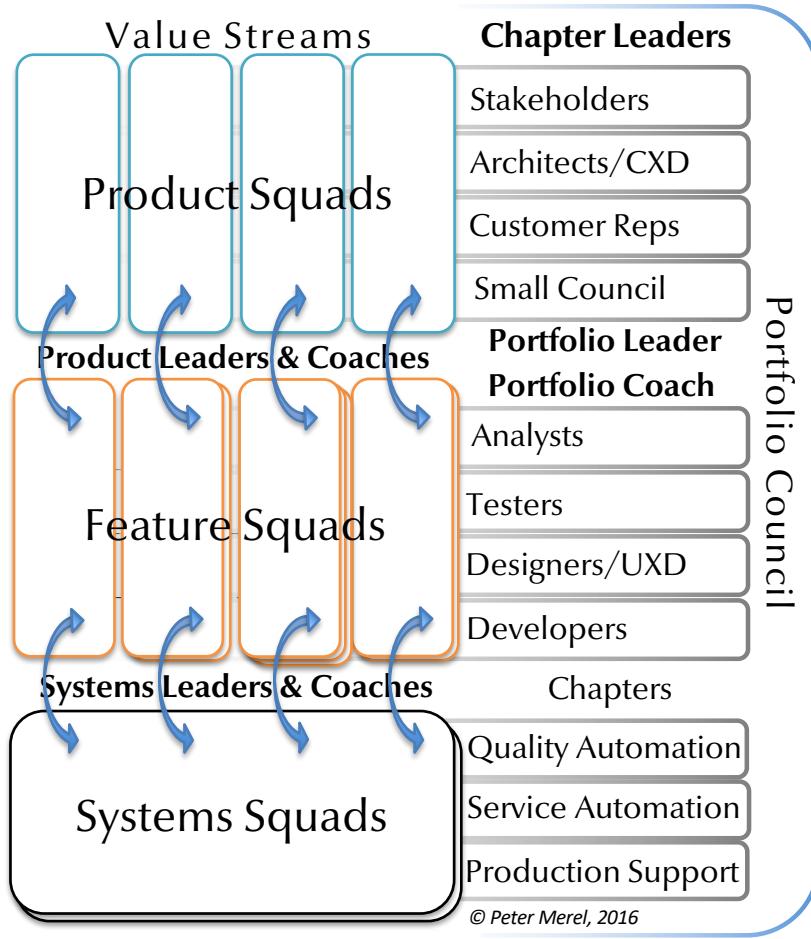
Motivating trade-offs to achieve consensus without politics.

The Leader role ensures decisions are always made in good time.

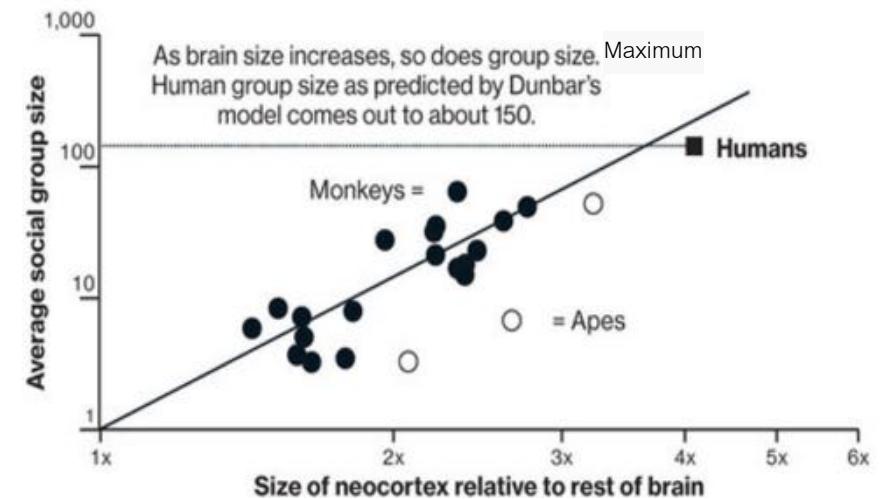
Designate different leaders for different responsibilities: DRIs

Autonomous Service

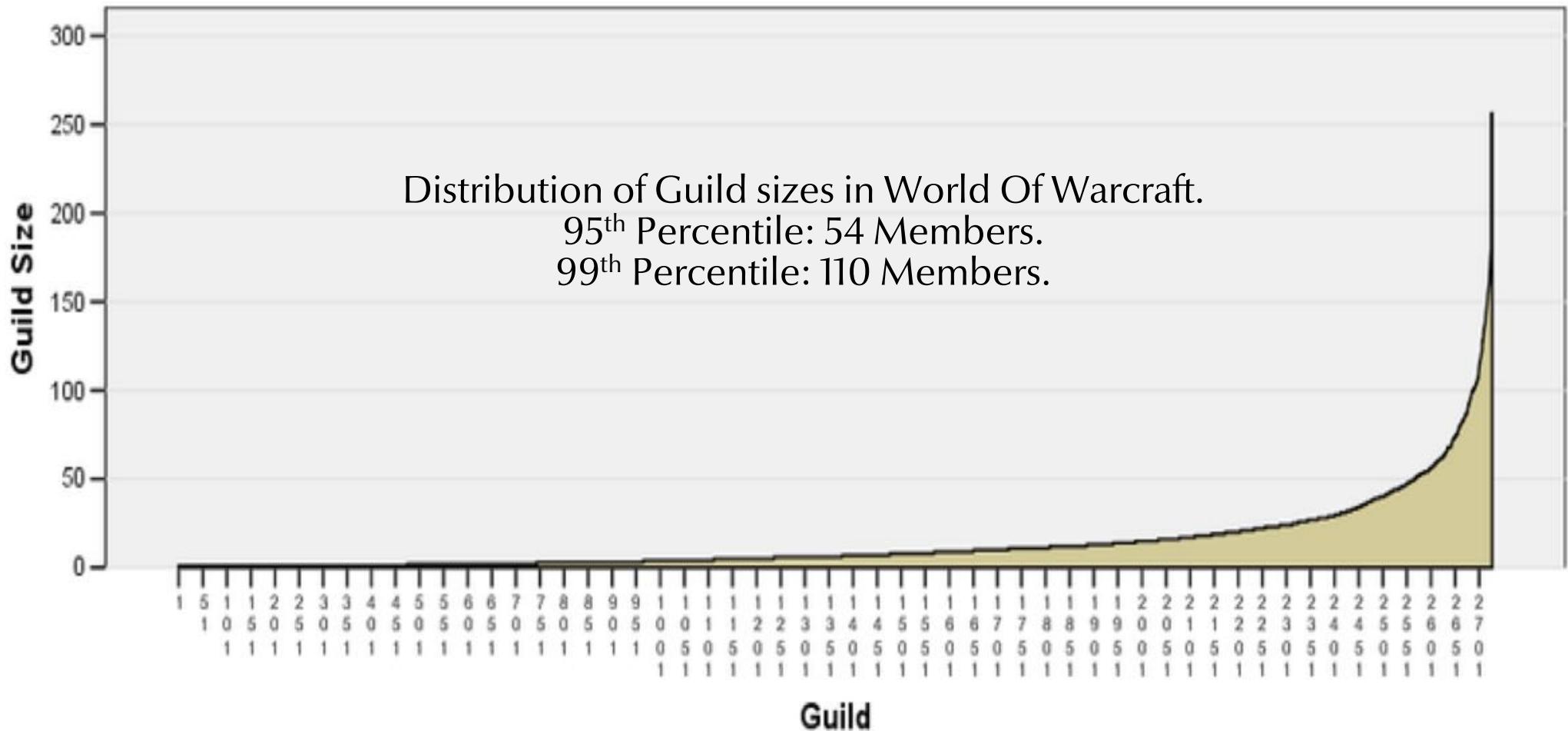




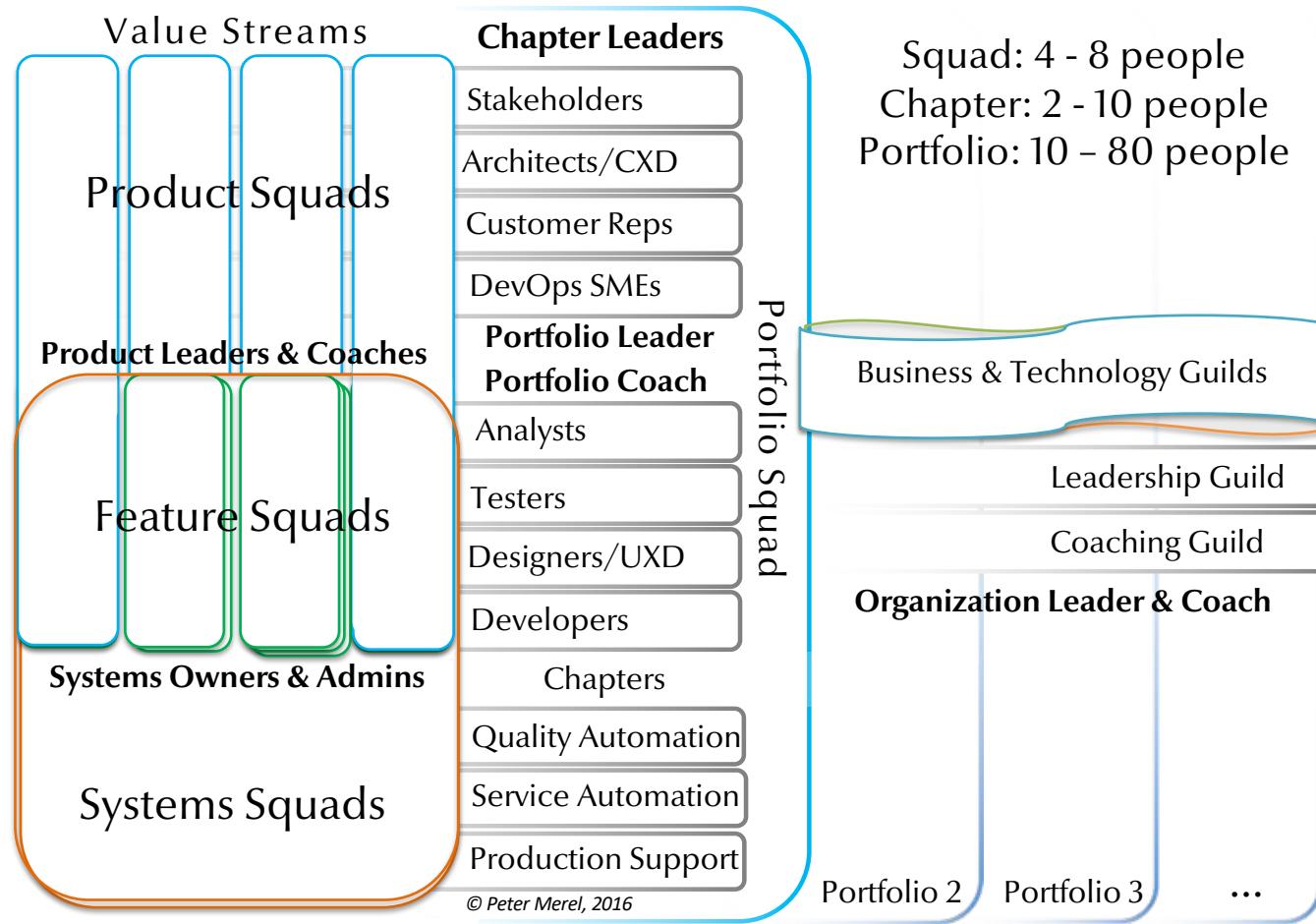
Squad: 4 - 8 people
 Chapter: 2 - 10 people
 Portfolio: 10 - 80 people



“First World” Dunbar Limit: 50-60

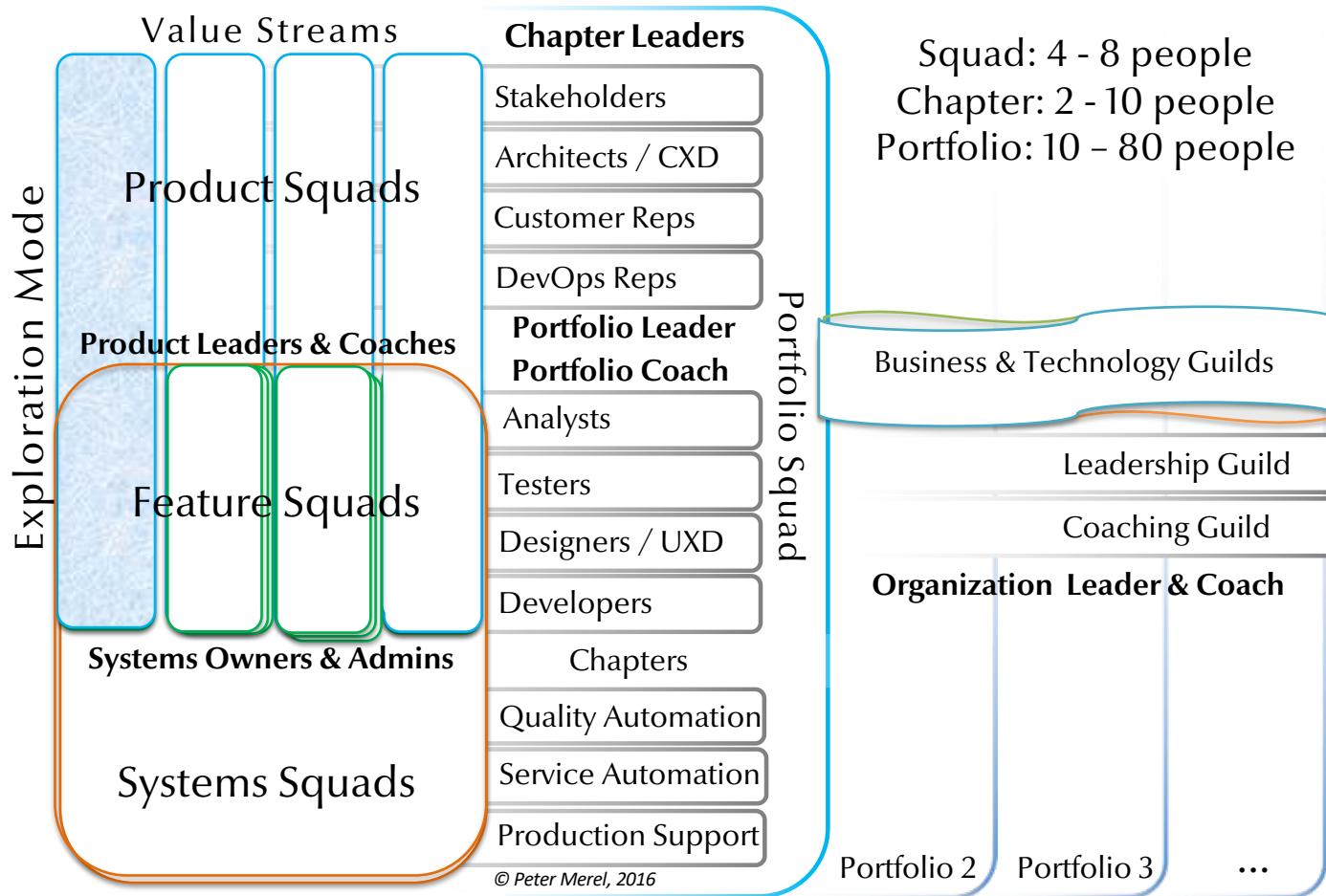


Autonomous



Portfolio Delegation/Collaboration Ratio: 1

Autonomous

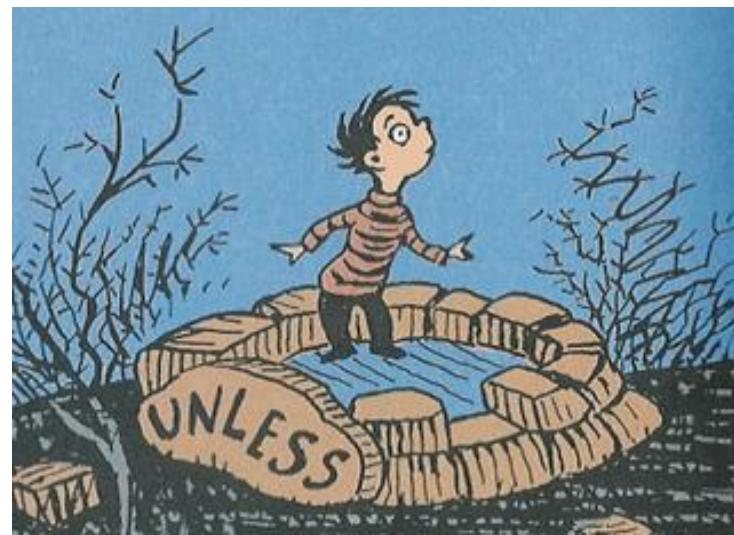


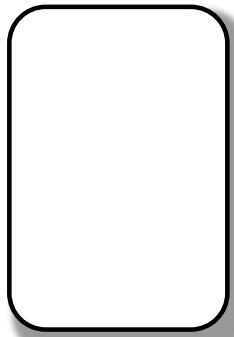
All streams prioritize features to lift bottlenecks.
A stream in exploration mode prioritizes new markets.



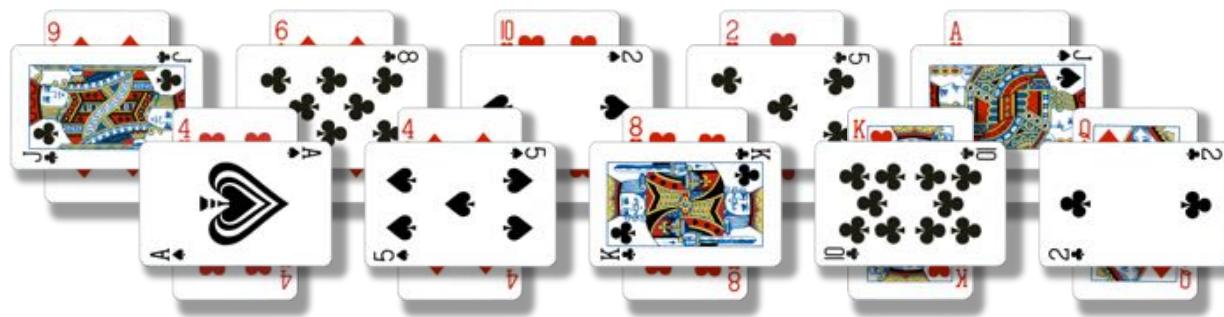
Reward Models

The Tragedy Of The PMO





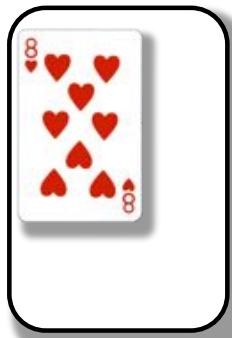
Tech Debt



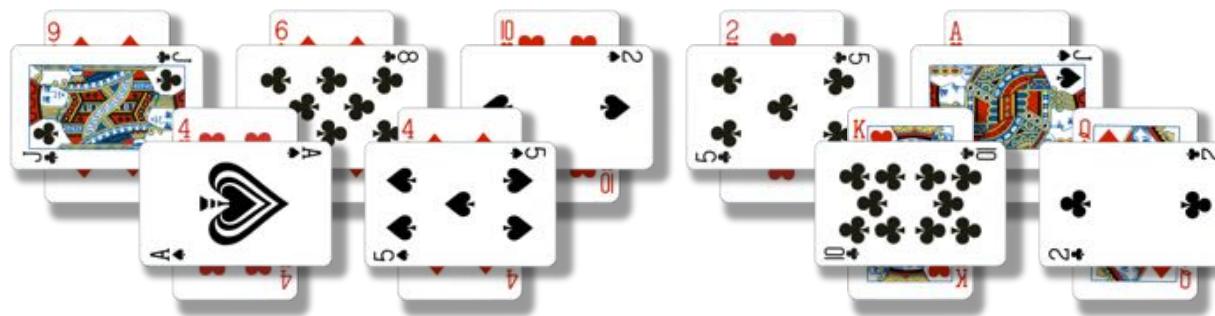
Bonus



This PMO has four value streams, each managing a P&L. All start with 20 and each kick in 1 chip to make a 4 chip bonus. We deal 10 features to start.



Tech Debt



Bonus



Manager one delivers a feature. It costs 8 and yields a return of 13. For an extra 50% they could eliminate the tech debt. But they're angling for the bonus ...



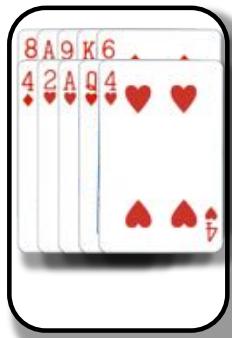
Tech Debt



Bonus



Every manager has had a turn. Each turn, any manager can pay one chip to analyze (deal) a new feature, up to a maximum of 3 new features. Here, none do that.



Tech Debt



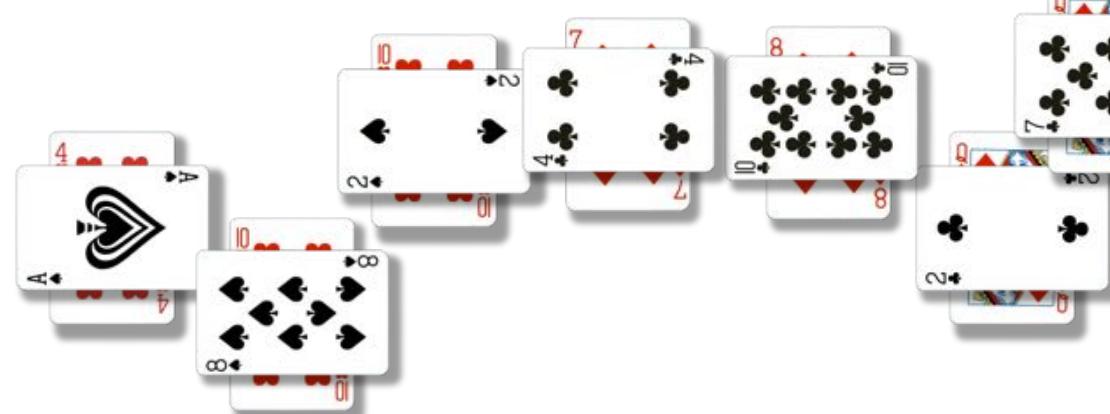
Bonus



All the managers have taken turns, round robin, until they have no more P&L to spend. The streams analyzed seven new features but none paid down the tech debt.



Tech Debt



Bonus

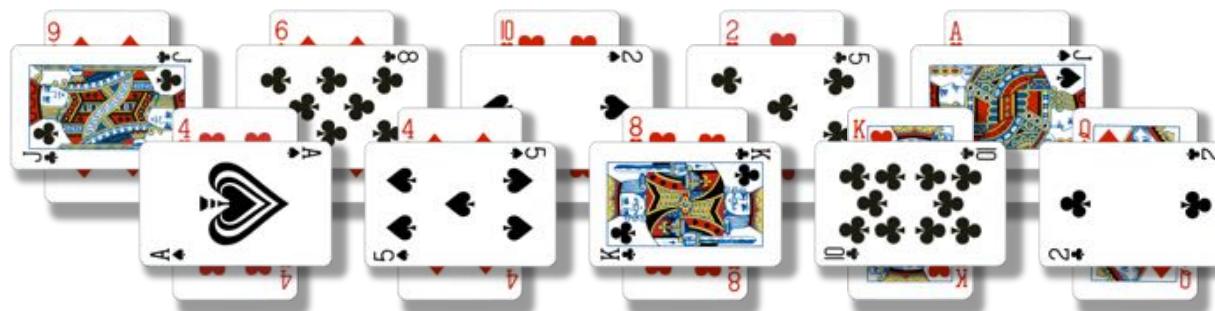
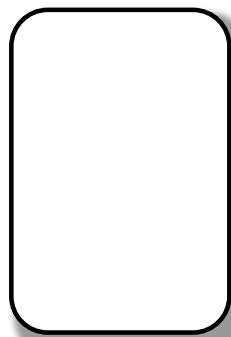


Manager 2 earns the bonus. Gross Profit of 4 chips BUT Tech Debt of 60. 10% interest on Tech Debt means **Net Profit is -20**. And Tech Debt compounds!

The Remedy Of The PMO



This time let's try Business Agility. No separate bonuses and just one P&L. We all get a one chip bonus if the portfolio earns net profit, and none otherwise.



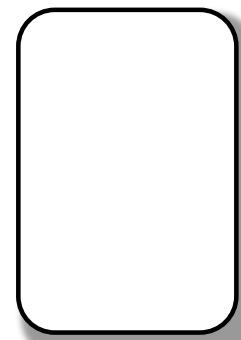
P&L

Tech Debt

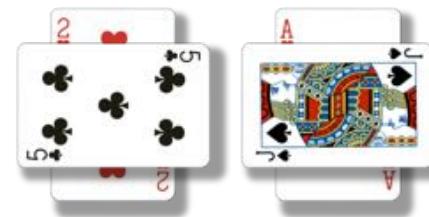


Bonus

Player one eliminates features that won't yield net profit after paying tech debt.



Tech Debt



P&L

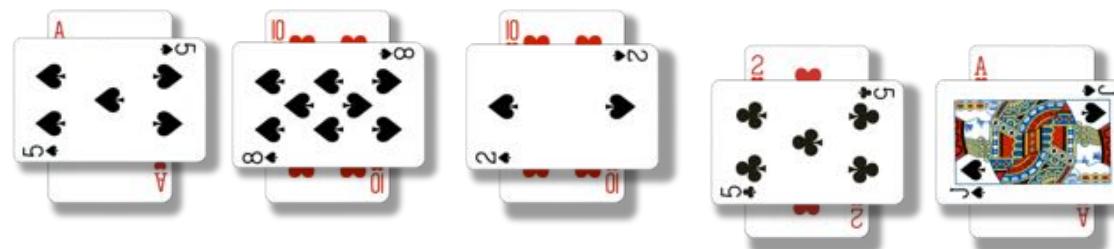
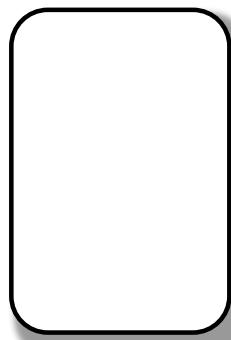


Bonus

... and then immediately analyzes three features ...



P&L



Tech Debt

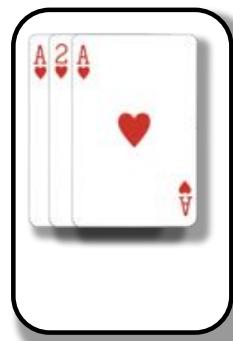


Bonus

... yielding three worth delivering.



P&L

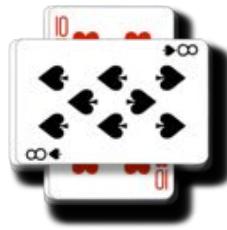


Tech Debt

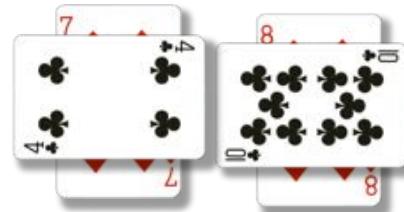
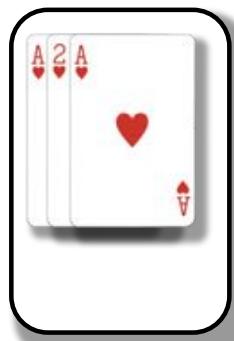


Bonus

Player 2 analyzes three new features ...



P&L



Tech Debt

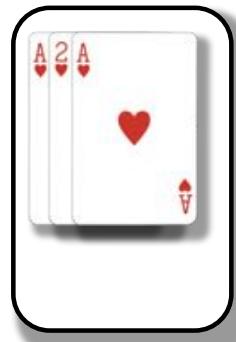


Bonus

... but none are worth delivering after accounting for tech debt.



P&L



Tech Debt

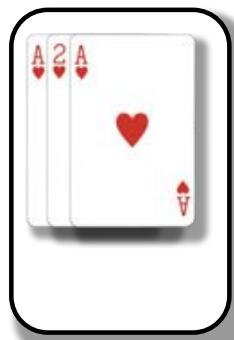


Bonus

Player three has better luck ...



P&L



Tech Debt



Bonus

... and gets busy delivering two features.



P&L



Tech Debt



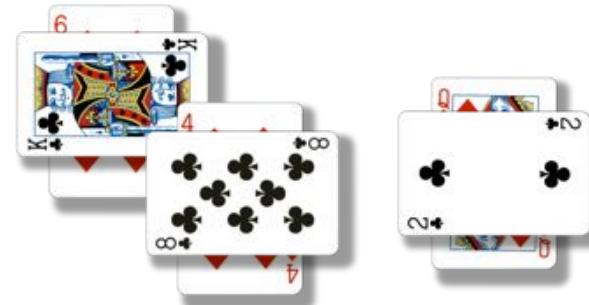
Bonus

Player 4 also discovers two features worth delivering ...



P&L

Tech Debt



Bonus

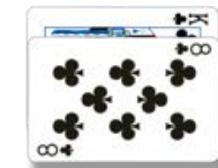
In real life the player all do this work in parallel.



P&L

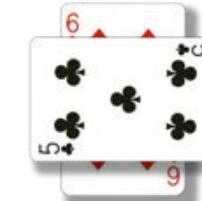
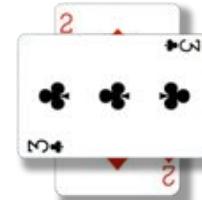


Tech Debt

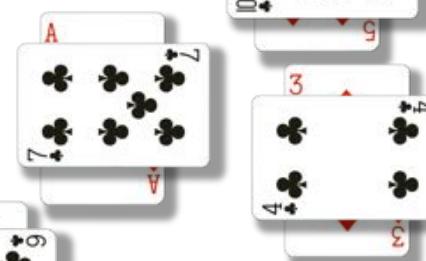
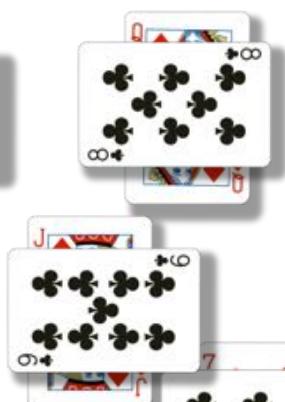
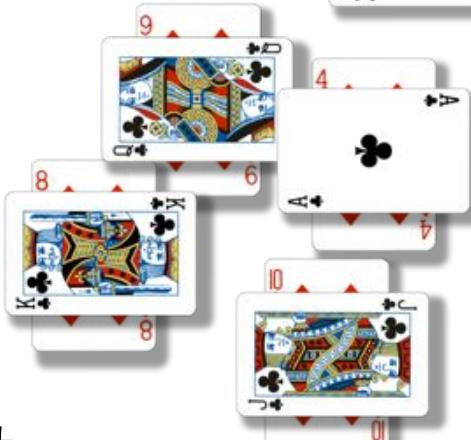


Bonus

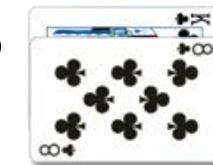
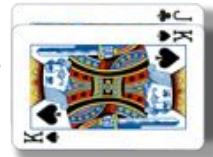
i.e.. here everyone has done the analysis part of their next turn.



P&L

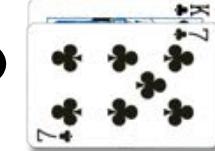


Tech Debt



Bonus

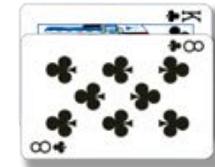
Leaving more than enough P&L available to eliminate the tech debt ...
(In real life we should use BDD/CI/CDD/MR to continuously pay it off!)



P&L

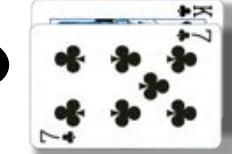


Tech Debt

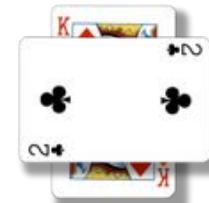
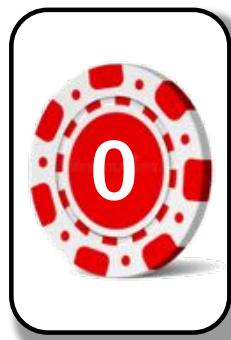


Bonus

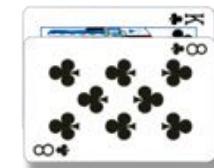
The portfolio made a net profit of 12 poker chips – and bonuses for everyone!



P&L



Tech Debt



Bonus



Open Book Management

Open Book Management

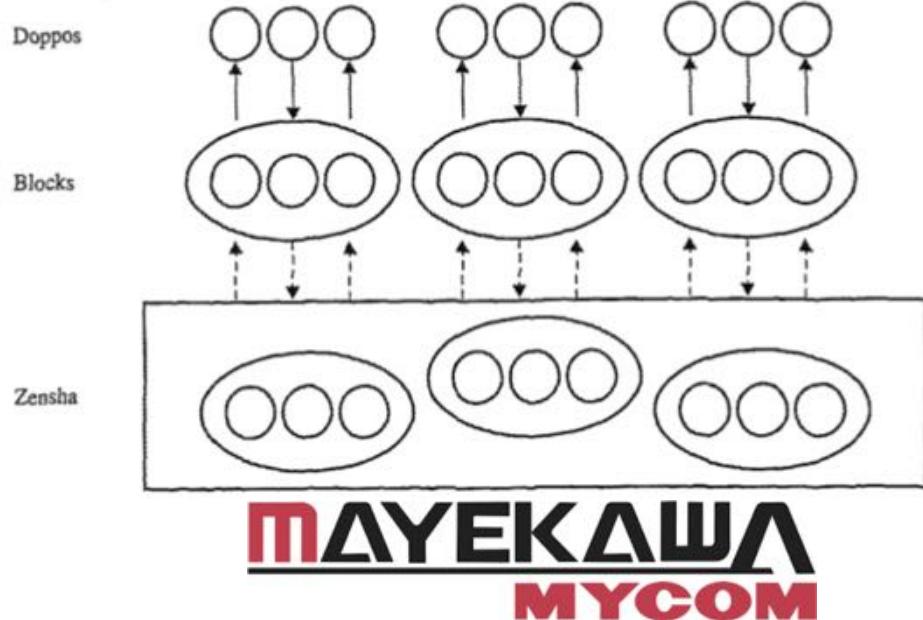
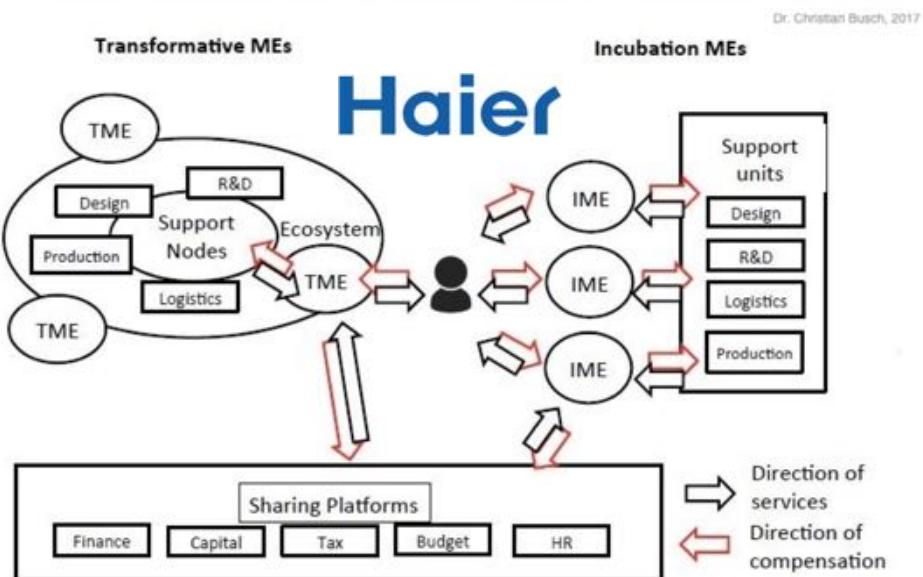
1. Open the books (if not actual top line then throughput analytics)
2. Teach everyone the GAAP and Throughput Accounting rules.
3. Link everyone's bonus to top-line throughput improvements
4. Include share options ("ESOPs") in the bonus pool

5. "**The Great Game of Business**": split the bonus into ten pieces
6. Every quarter increase the number of pieces up for grabs
7. Continuously identify Critical Numbers (i.e. throughput constraints)
8. Use 5-Whys and Mini-games to work on factors of Critical Numbers

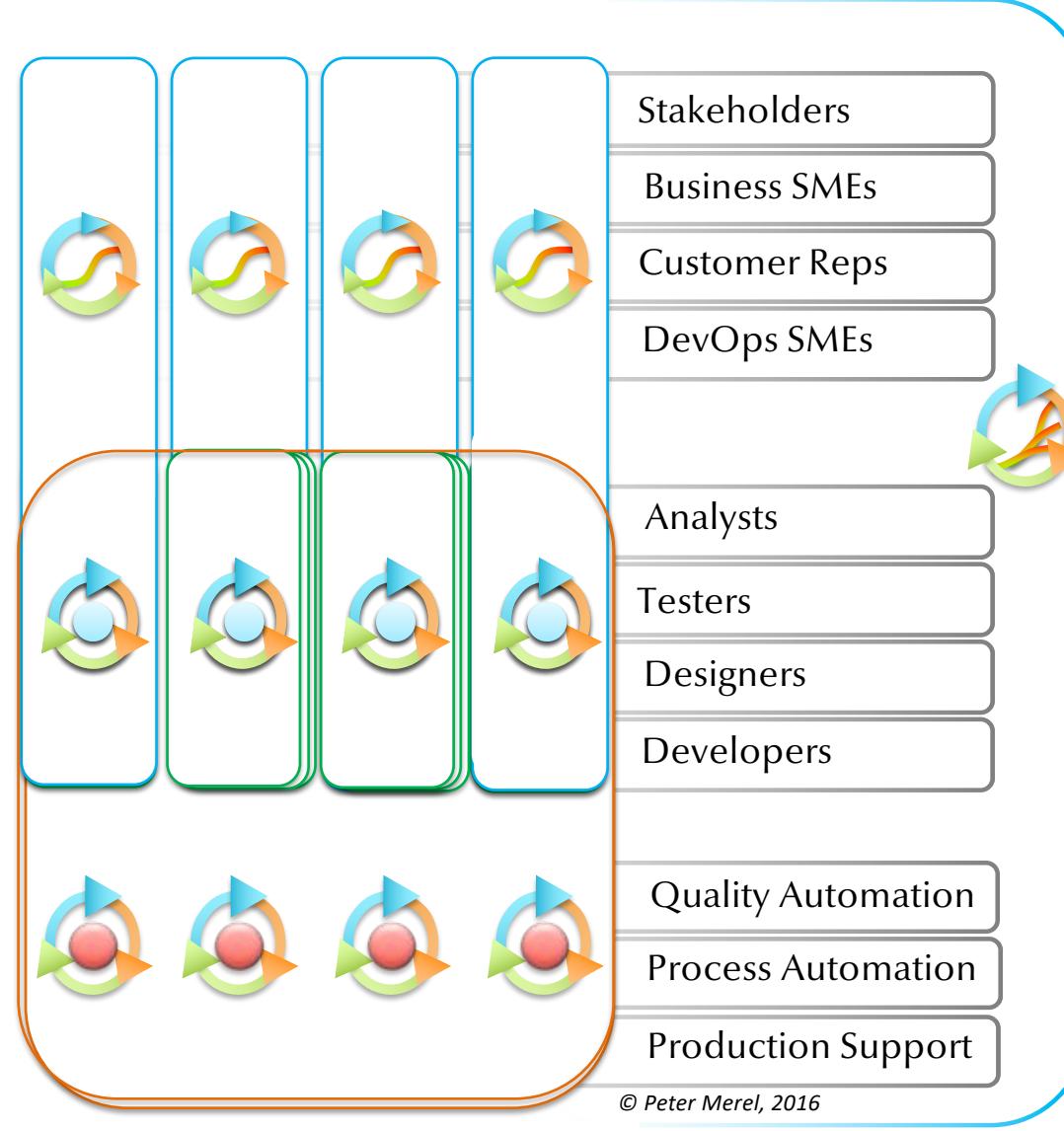
SRC Holdings Share Price Growth:

234,000% in 25 years



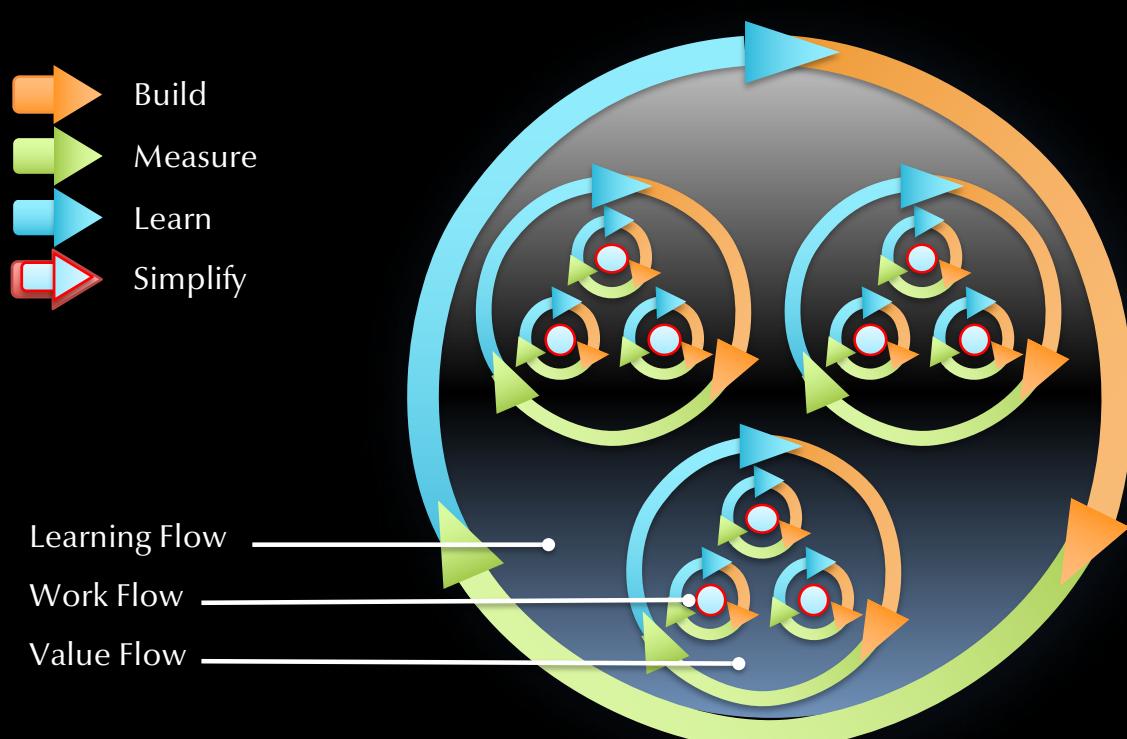


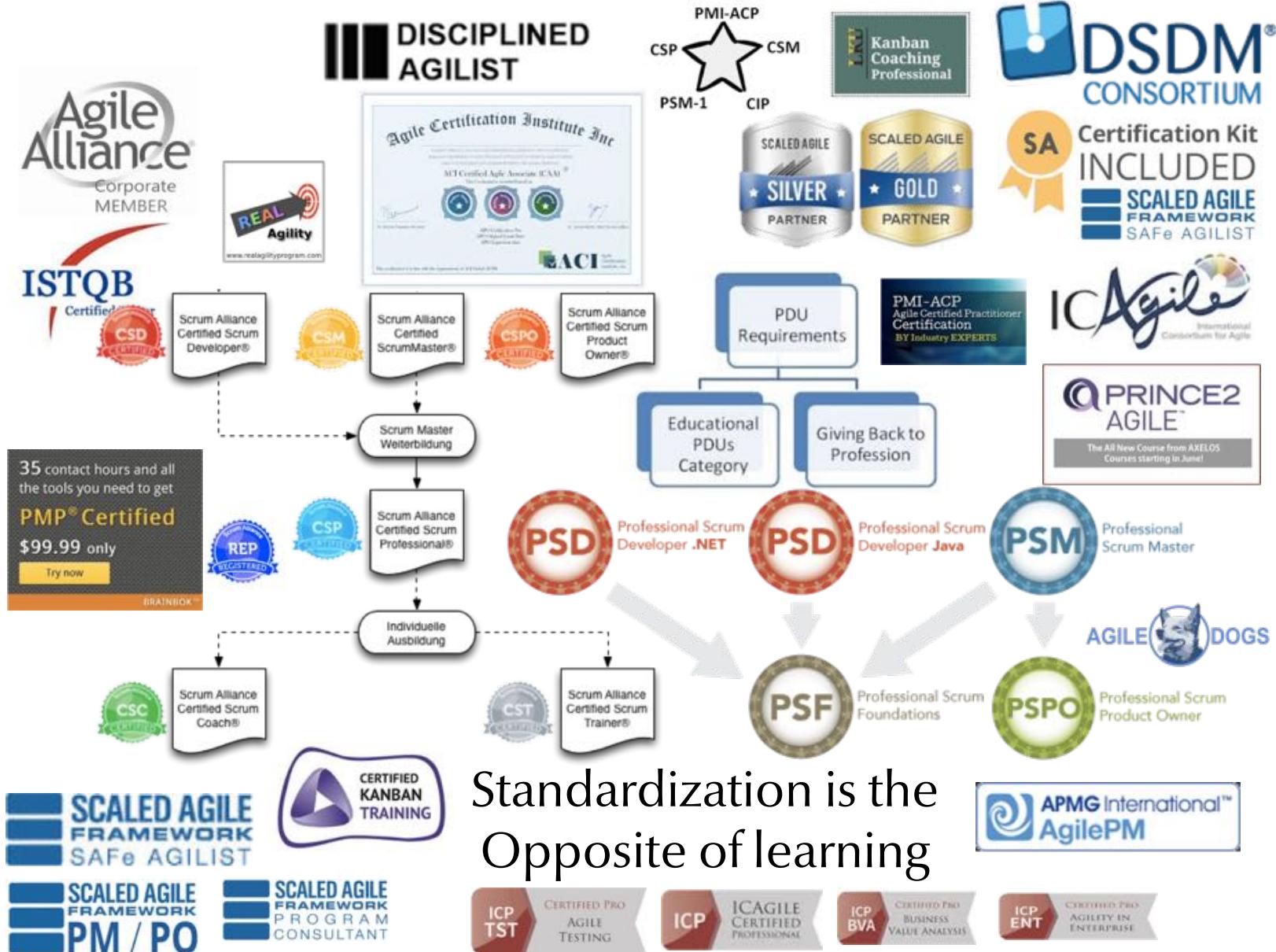
Autonomous

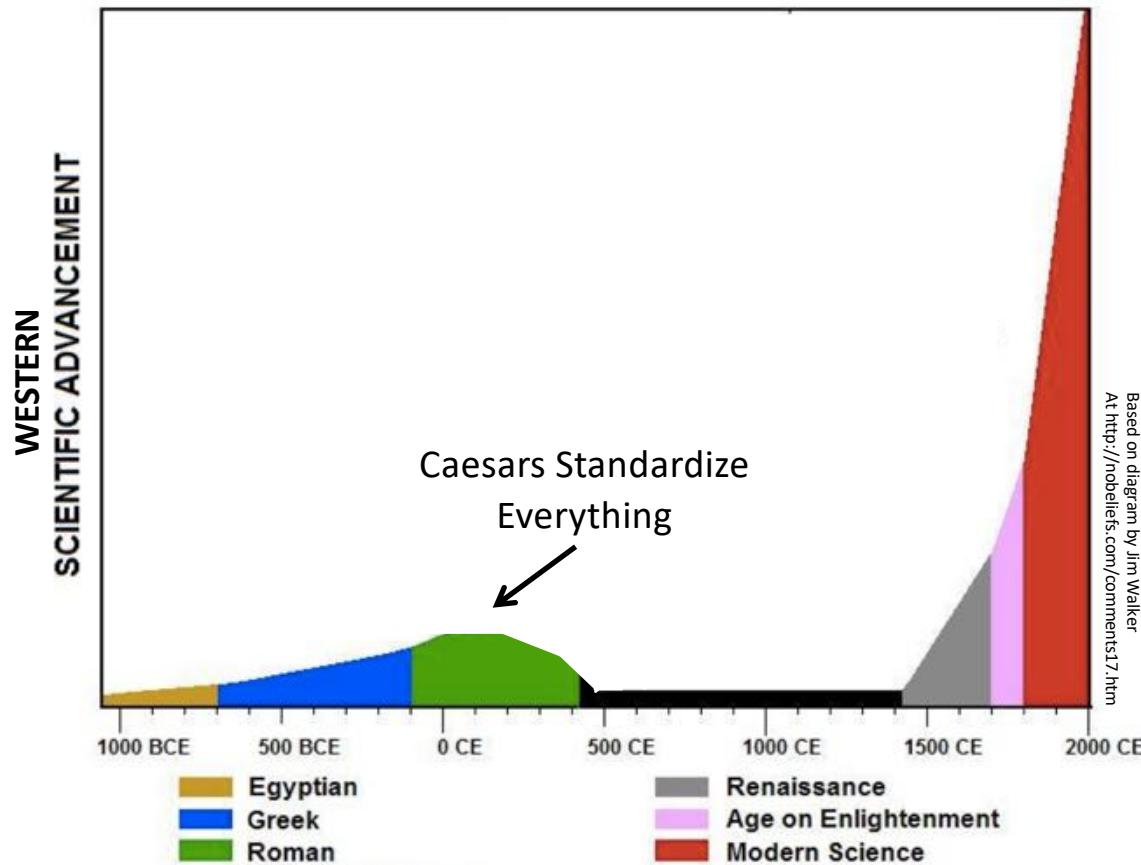


Triple loop Learning

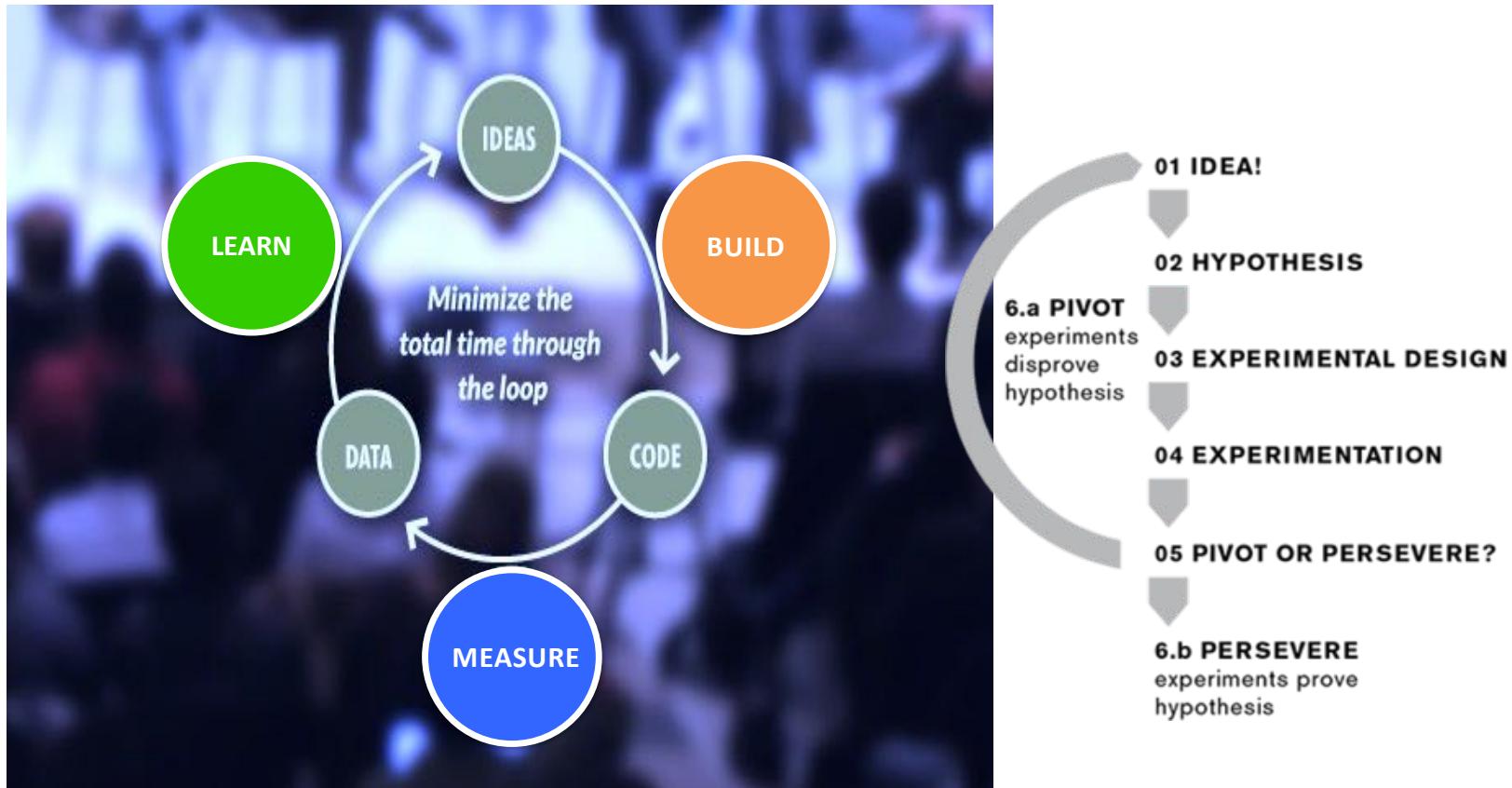
- › Learning Flow -> Work Flow -> Value Flow
- › Self-Organizing Transformation: Steel Threads
- › Continuous Delivery & Continuous Learning



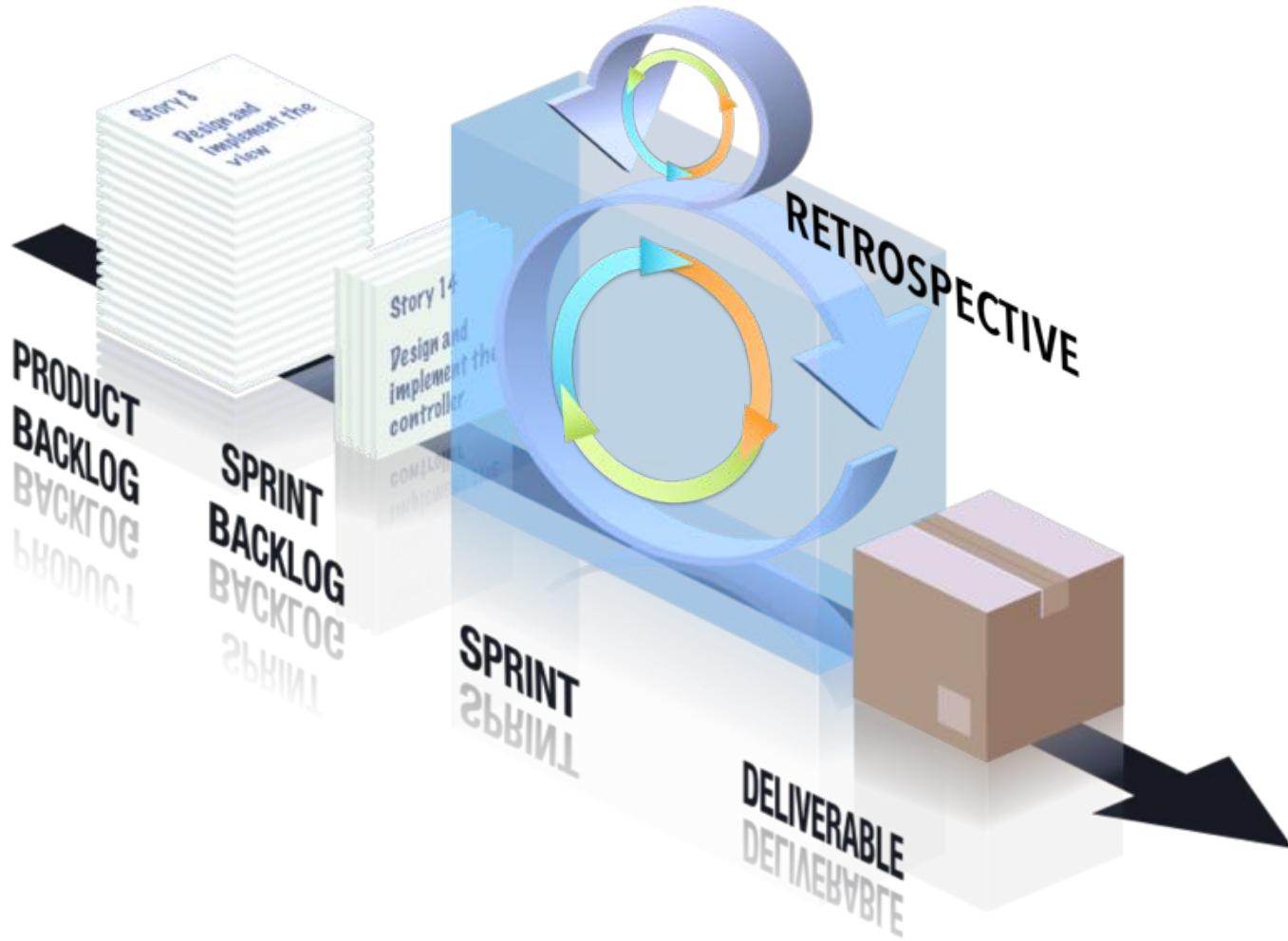




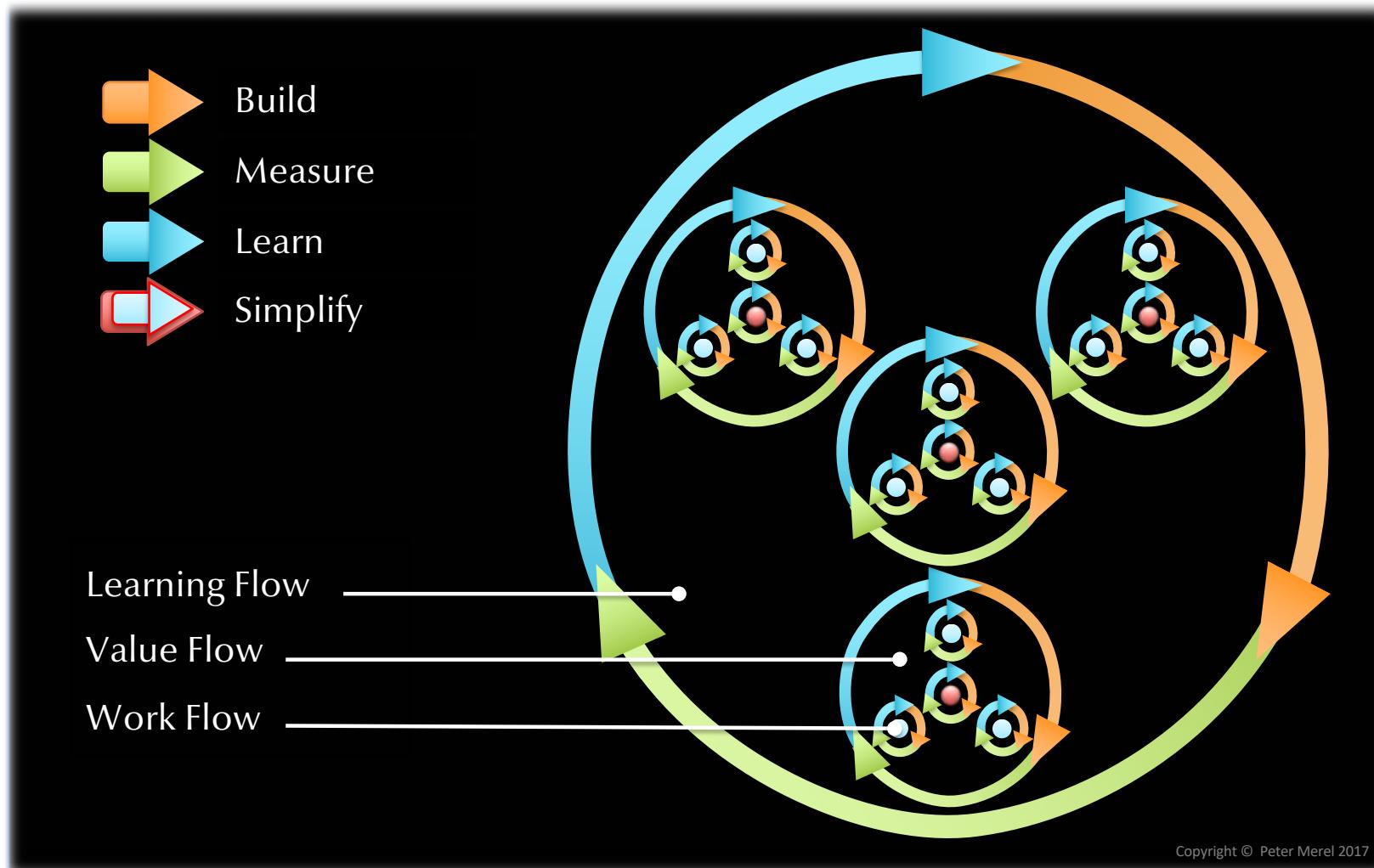
Learning doesn't standardize understanding.
Learning obsoletes understanding.



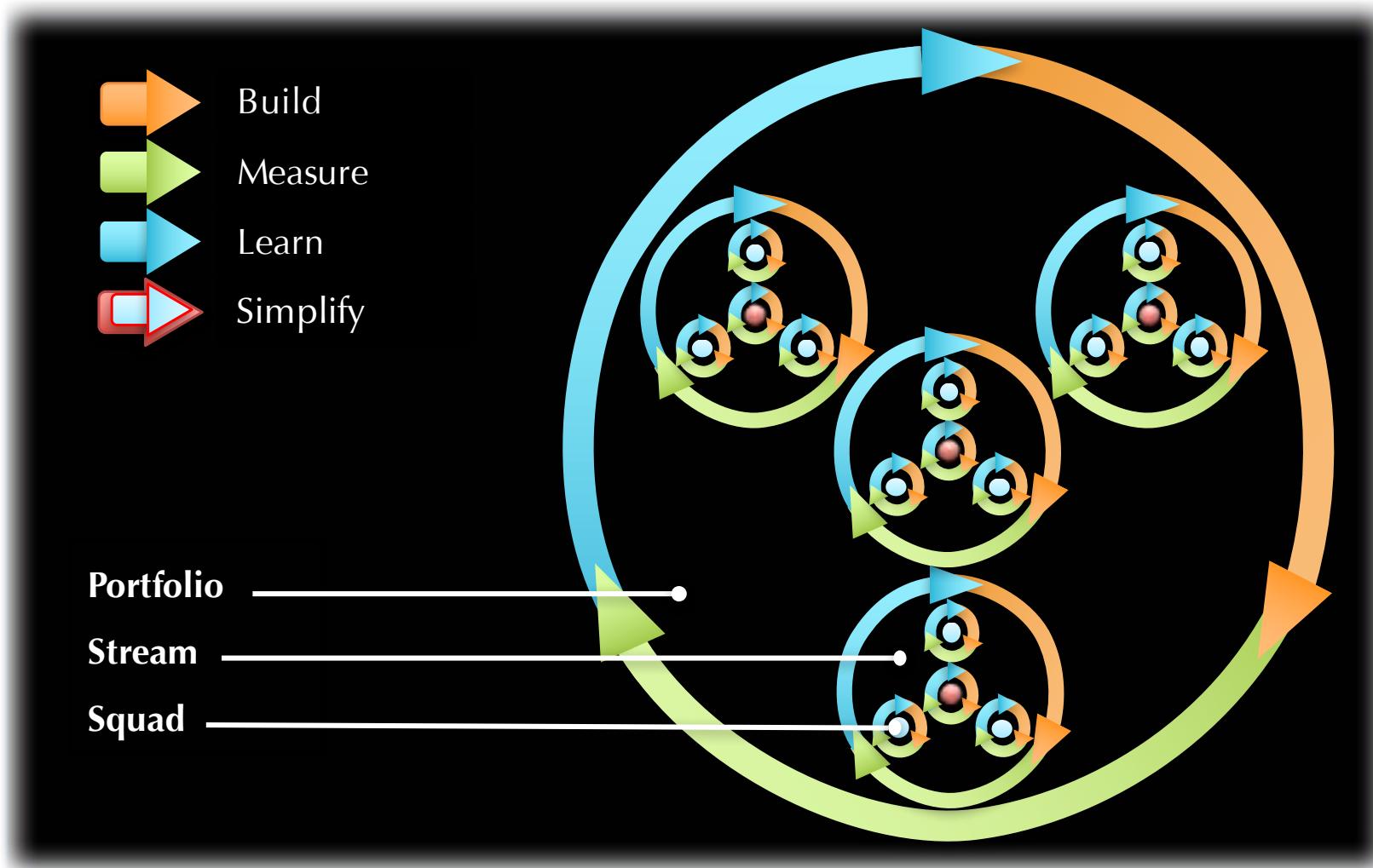
Lean Startup is single loop learning. Startups need profitability, not productivity. They learn fast or die slow.



Scrum is double-loop learning.
It learns what products to deliver, and how.



Learning flow accelerates work flow
which accelerates value flow.

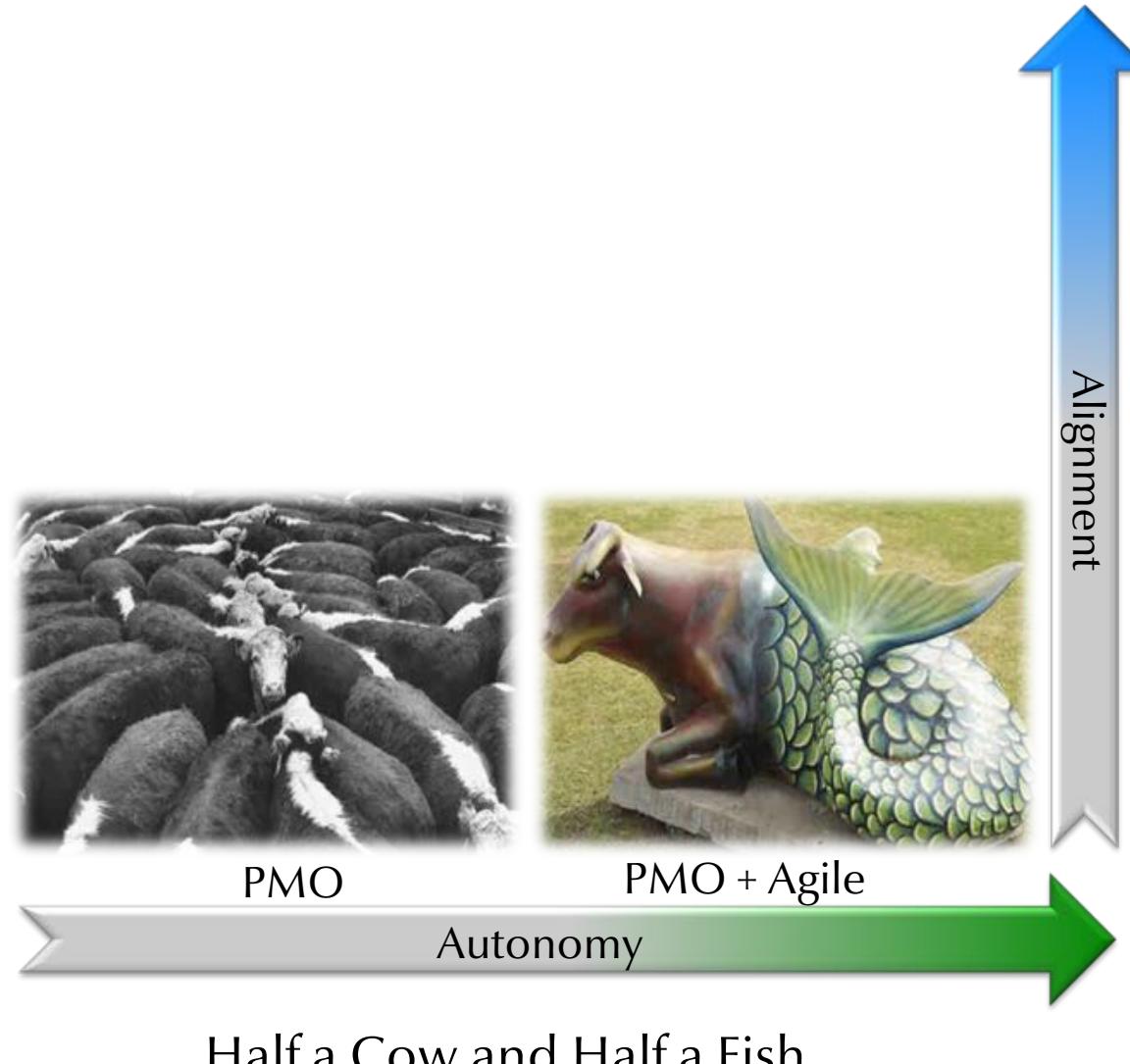


Triple Loop learning means we treat learning as a product and the organization as its market.

Learning



Learning



Learning



"Scaling" Agile



PMO



PMO + Agile

Autonomy

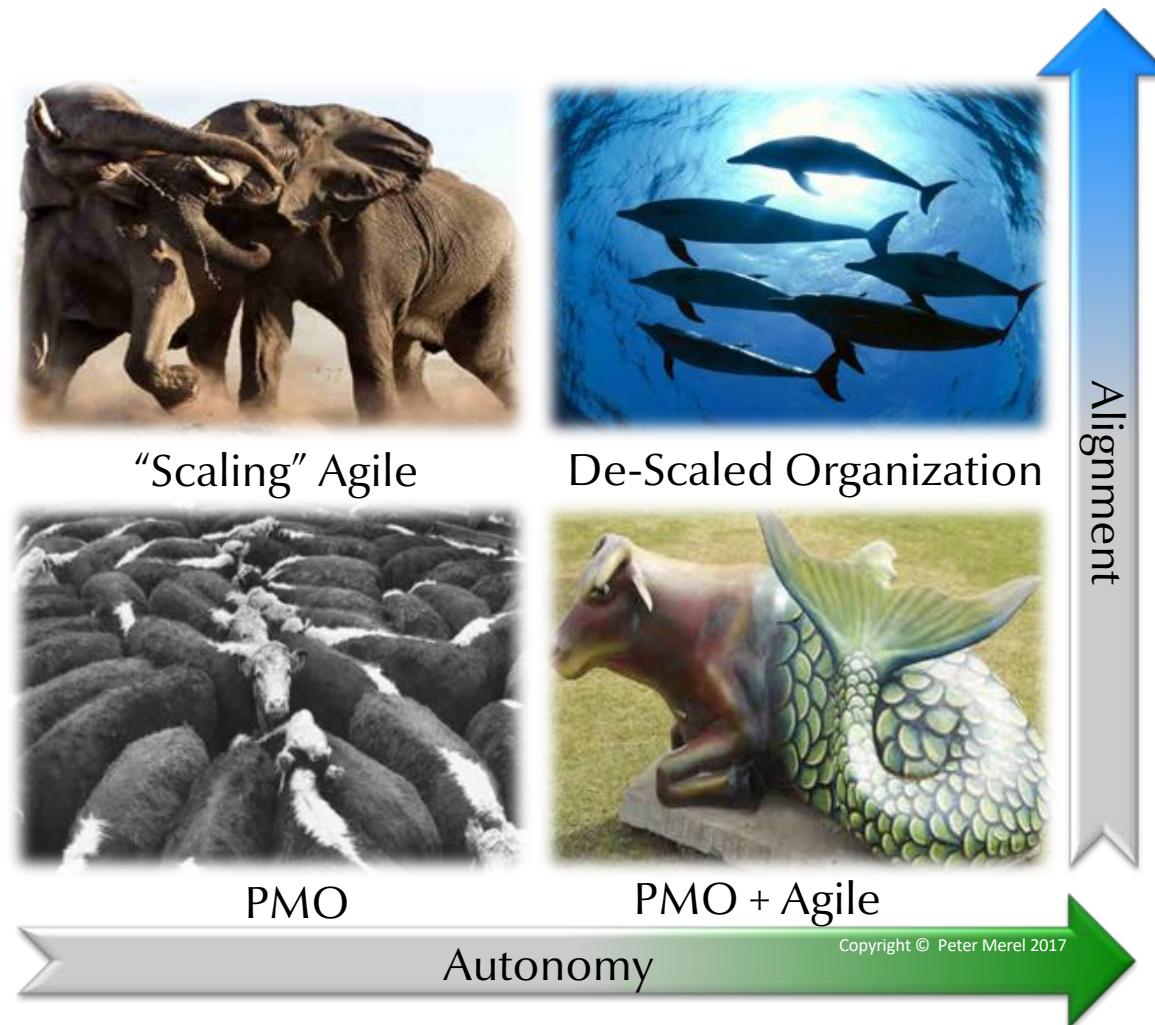


Alignment



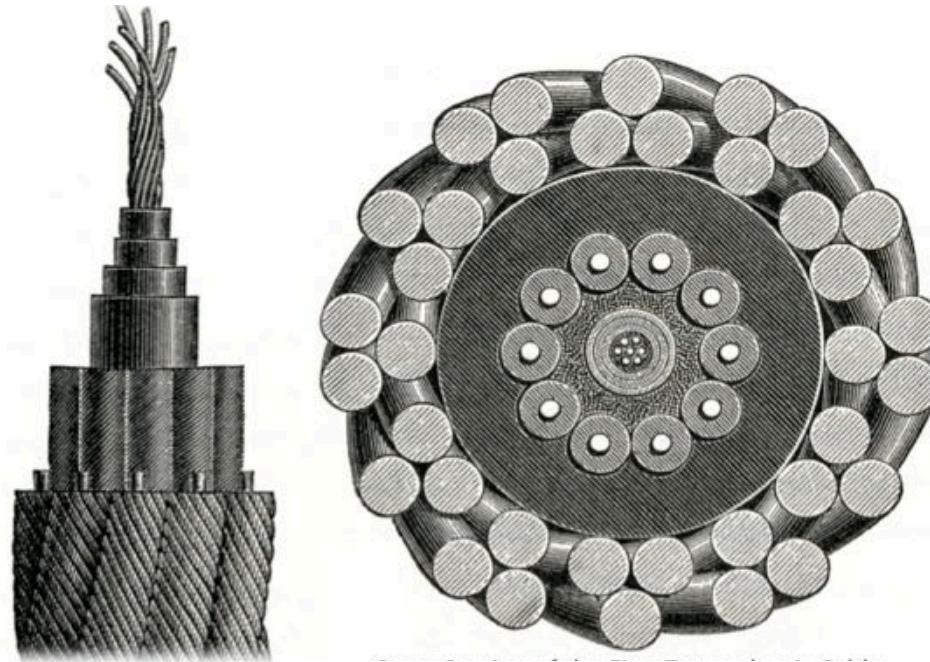
Align Agile teams to the PMO

Learning



Refactoring the organization into self-managing streams of self-organizing teams
Continuously, exponentially transforming change recipients into change agents.

How does an organization learn without
compromise, confusion and loss of control?
We can't stop and change everything at once!

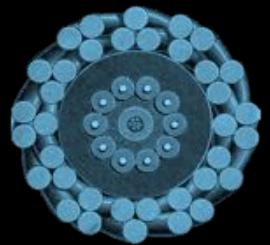


Cross-Section of the first Transatlantic Cable

Learn Agile using Agile. Make a steel thread stream, a slender but uncompromised capability. Then exponentially split and double.



40 bandits threaten a tiny village ...





... they'd robbed the year before.



The “Seven Samurai” Kanban

Change Drivers Change Epics Change Features Change Treaties Change Stories



The “Seven Samurai” Kanban

Change
Drivers Change
Epics Change
Features Change
Treaties Change
Stories

Assessment

Change
Canvas

Open
Space

X S C A L E

... they can only afford to pay in rice.

The “Seven Samurai” Kanban

Change Drivers Change Epics Change Features Change Treaties Change Stories

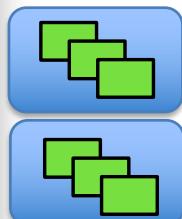
Awareness & Assessment

Alignment



Change
Canvas

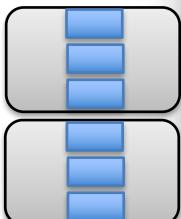
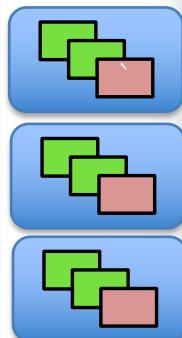
Acceptance
Matrix



X S C A L E

Portfolio
Council

Open
Space



The samurai marshal the fearful villagers ...

The “Seven Samurai” Kanban

Change Drivers Change Epics Change Features Change Treaties Change Stories

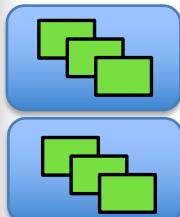
Awareness & Assessment

Architecture



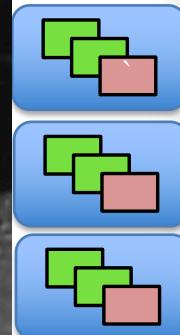
Change
Canvas

Acceptance
Matrix

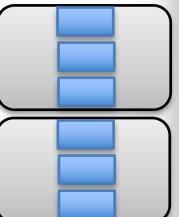


X S C A L E

Portfolio
Council



Open
Space



... and map an adaptive strategy breadth-first.

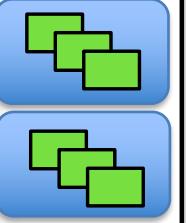
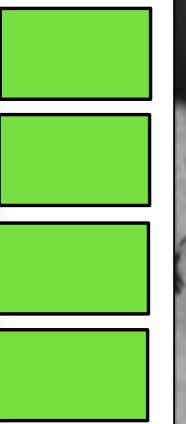
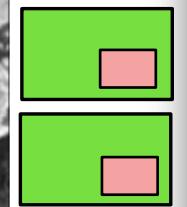
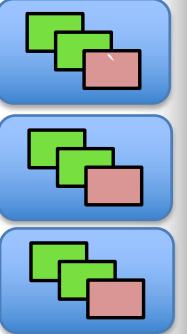
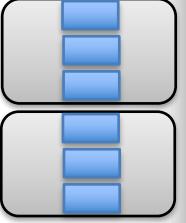
The “Seven Samurai” Kanban

Change Drivers Change Epics Change Features Change Treaties Change Stories

Awareness & Assessment

Alignment & Architecture

Analytics

Change Canvas	Acceptance Matrix	Change Increments	Stream Council	Portfolio Council	Open Space
					 

X S C A L E

To pick off the bandits ...

The “Seven Samurai” Kanban

Change Drivers Change Epics Change Features Change Treaties Change Stories

Awareness & Assessment

Alignment & Architecture

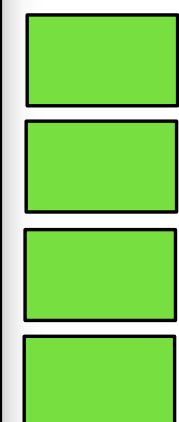
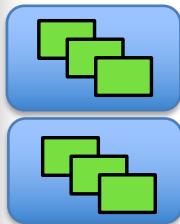
Acceleration



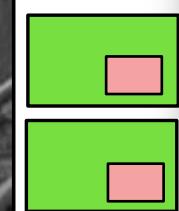
Change Canvas

Acceptance Matrix

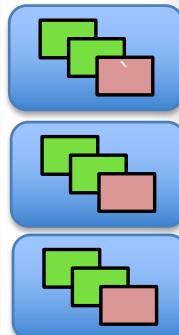
Change Increments



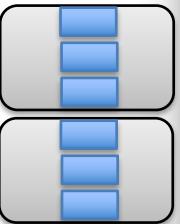
Stream Council



Portfolio Council



Open Space

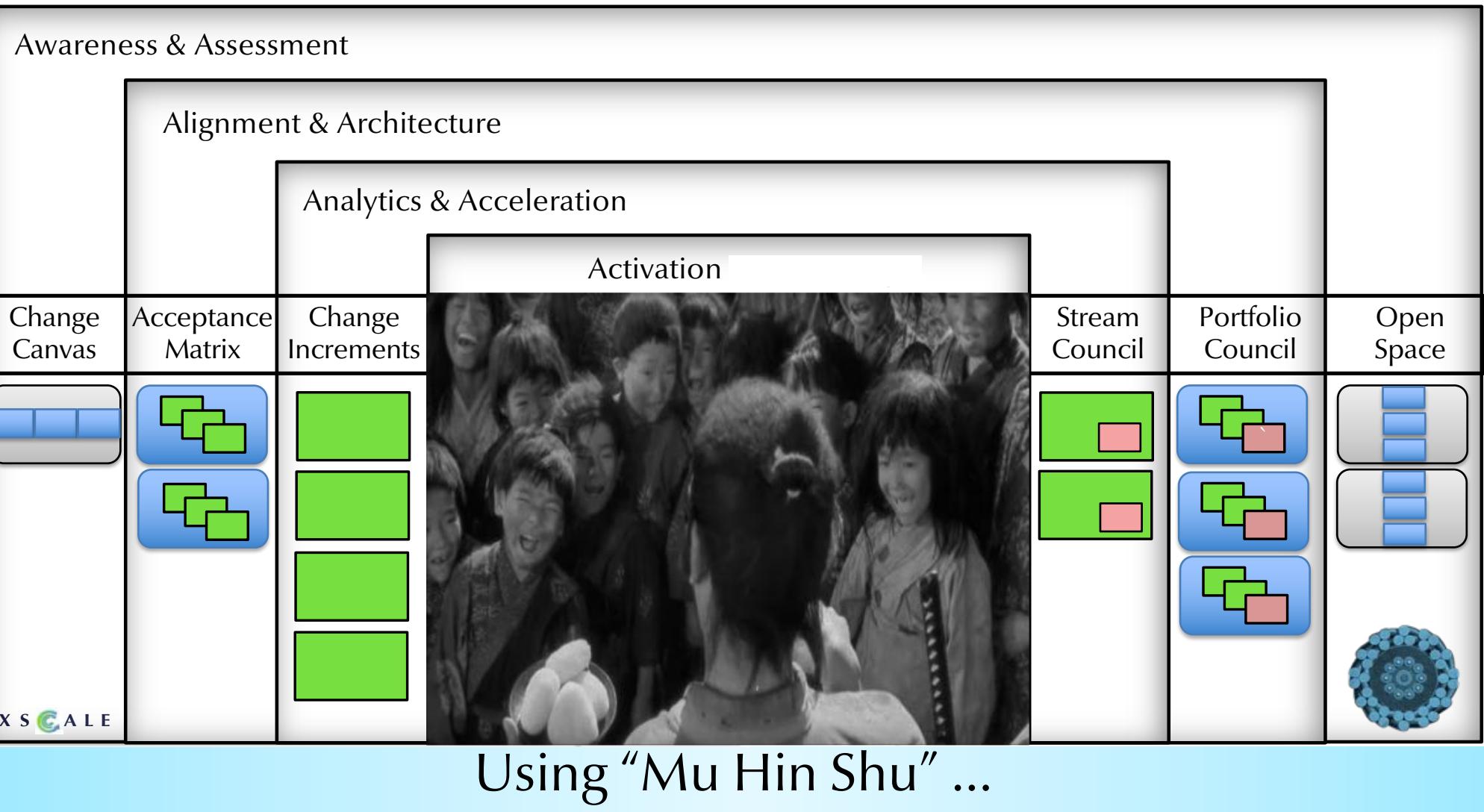


X S C A L E

... and teach the village to organize itself.

The “Seven Samurai” Kanban

Change Drivers Change Epics Change Features Change Treaties Change Stories



The “Seven Samurai” Kanban

Change
Drivers Change
Epics Change
Features Change
Treaties Change
Stories

Awareness & Assessment

Alignment & Architecture

Analytics & Acceleration

Autonomy

Change
Canvas

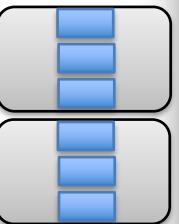
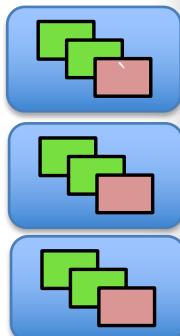
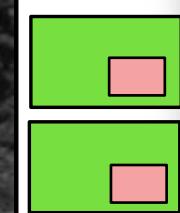
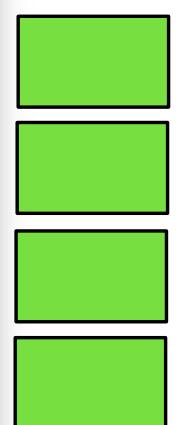
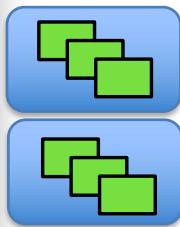
Acceptance
Matrix

Change
Increments

Stream
Council

Portfolio
Council

Open
Space

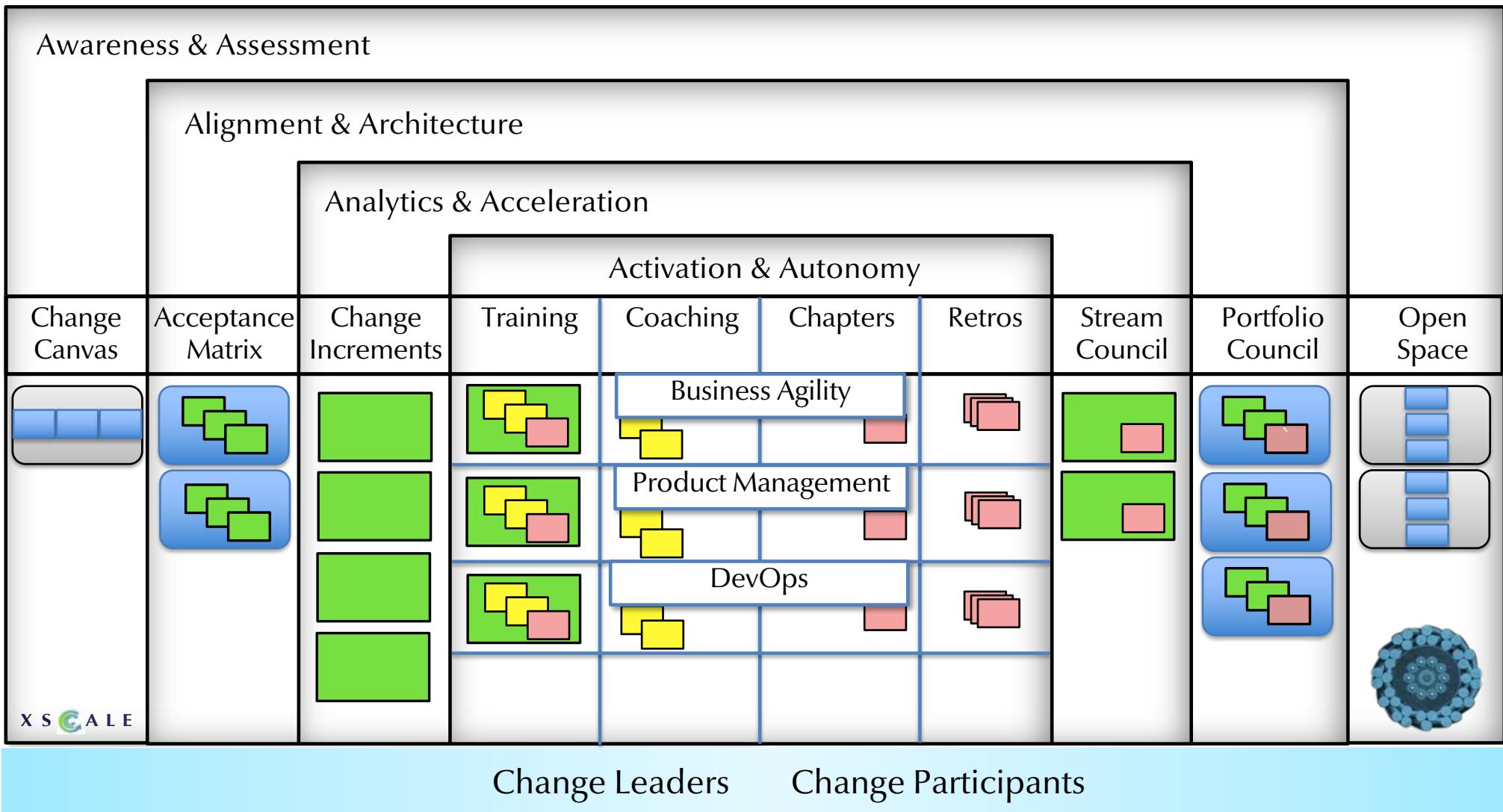


X S C A L E

... to bring the village into autonomy.

"Seven Samurai" Change Kanban

Change Drivers
 Change Epics
 Change Features
 Change Treaties
 Change Stories





Agile Organization

Change features are prioritized breadth-first to maximize impact and minimize WIP.

We represent change progress using "Seven Samurai" Kanban & Throughput Diagrams

"Seven Samurai" Self-Propagating Transformation

Discovery

Awareness & Assessment Use open space and interviews to raise awareness of change drivers. Throughput & maturity analytics to assess constraints. Generate canvas and 3D kanban for the change ecosystem.

Inception

Architecture & Alignment Spike tech enablers and develop acceptance matrix for business, product, delivery, and devops learning-epics. Align change-participants & leaders to change-epics.

Mobilisation

Activation & Autonomy Make a slender end to end agile value stream work, then work reliably, then work fast, then split and double. Mentor servant leadership and coach retros, chapters and councils for self-organization. Uplift capabilities in two learning modes:

Instruction: Individual mentoring & team training/coaching

Immersion: embedding green staff in mature streams

Refactoring

Analytics & Acceleration

Refactor communication and reward models to focus on business throughput and learning flows. Harness decision-making to shared throughput analytics and a single open-book P&L. Rebase individual KPIs on group benefit to the top-line.

Ecosystems thinking

- › Ecosystems are “networks of mutual benefit”
- › Whole board: think globally, act locally
- › Avoiding hill-climbing: iterative and **reductive**





12 Principles of
Ecosystems Thinking

Ecosystem



Ecosystems are networks of mutual benefit.

Ecosystem



The more different species they generate,
the more stable with changing constraints.

Ecosystem



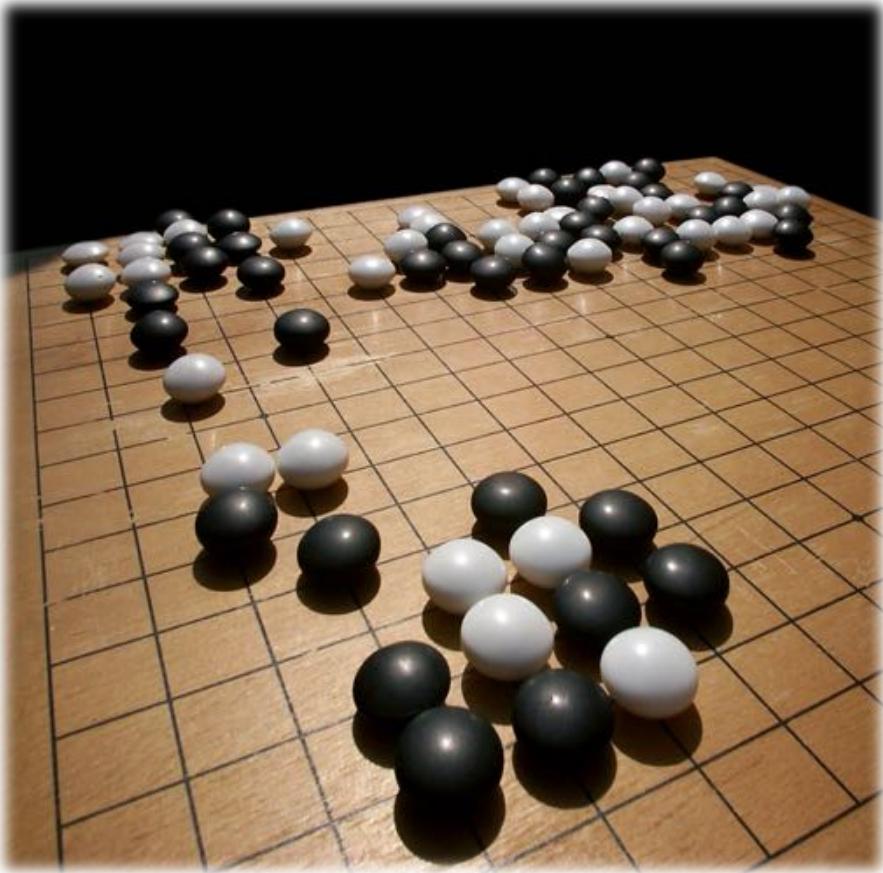
The more different relationships they supply,
the more productive they become over time.

Ecosystem



And the less susceptible to catastrophe.

Ecosystem



The Chinese game of Go is a close analogy to business ecosystems.

Disconnected groups of stones starve and die as constraints evolve.

Successful Go ecosystems are only designed by “Whole Board Thinking”:

Find the space with the greatest development potential on the board.

Then narrow your focus. Breadth-first, iterative, contractive systems thinking.

Move after move, this is the only way to win. “Think globally, act locally”.

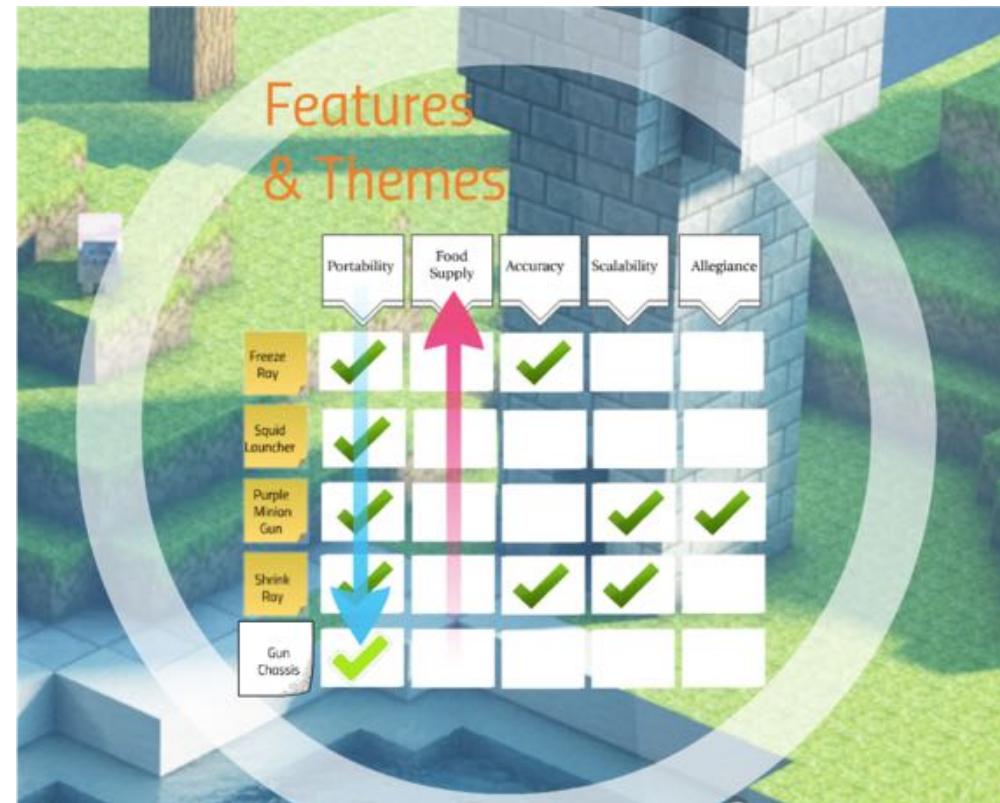


Leveraging XPM



Behavior Mapping

Quick, Breadth-first Derivation of
Features & Acceptance Criteria



For each Pirate Canvas Epic

- (a Why/Who/How/What):

Generate a starter set of Features

- using CAESAR or CRUDITE pattern
- Create/Abort/Edit/Save/Accept/Request-Help
- Create/Read/Update/Delete/Import/Transform/Export

Pick Themes (key categories of acceptance criteria)

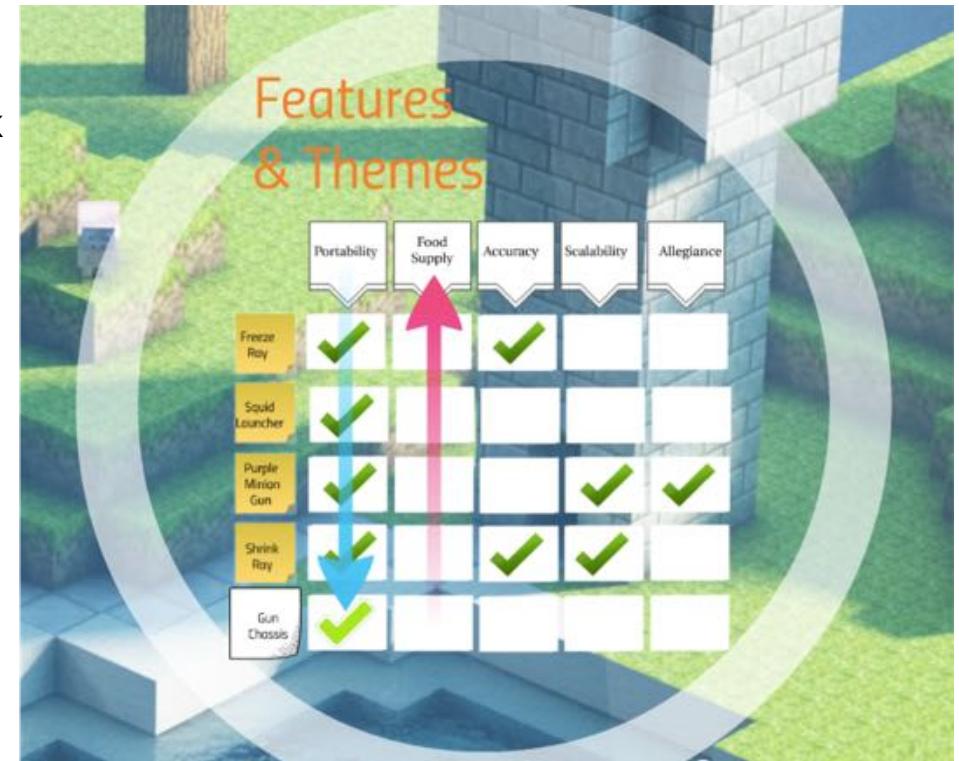
- UX Personas
- Architectural Components
- Non Functional Qualities
- Business Rules

For each Feature/Theme box, mark it if all agree:

- Acceptance criteria exist for that Feature x Theme
- Don't record detailed criteria – just go breadth-first

Sanity-checking questions generate matrix closure:

- For each Feature are there any missing Themes?
- For each Theme, are there any missing Features?
- If a Theme is all ticks, break out a Technical Feature



- Does this feature really contribute to the release goal?



Business Bingo

Fast, Breadth-First Feature Budgets & Priorities



Lay out 10 Fibonacci Numbers to estimate Features per Epic

- Add the last 2 Fibonacci numbers to make the next
- We use Fibonacci because it makes people fight!
- Use DRIs & LaaS to get Consensus

Pick 3 "Budget Bears" – three pre-costed metric probes

- Not relative; "Feature Points" are actual budget/Feature
- Best Bears are previous Features everyone is familiar with
- Baby Bear "was easy, no surprises" – say 3 team days
- Poppa Bear big and hairy, ~20 times more expensive at 55
- Mamma Bear is the mode – about same as most features

Tech authorities estimate, Business & Design question!

- Compare feature cards one at a time vs. all on table
- Split large Features by Theme; ideally all < 21.

Record estimates on cards and do over ...

- Pick 3 previous "Business Value Bears"
- Baby Bear Feature just a bell or whistle
- Mamma is in 80% we could live without
- Poppa one of the 20% we use every day
- Business estimates, Design/Tech question

Record Business Value number and then ROI:

- $ROI = 1 + ((Value^2 - Budget) / Budget^2)$
- +1 prevents negative ROI when $B \gg V$
- Squared Value prevents "ties" when $V=B$

Prioritize by descending ROI. Add COD if:

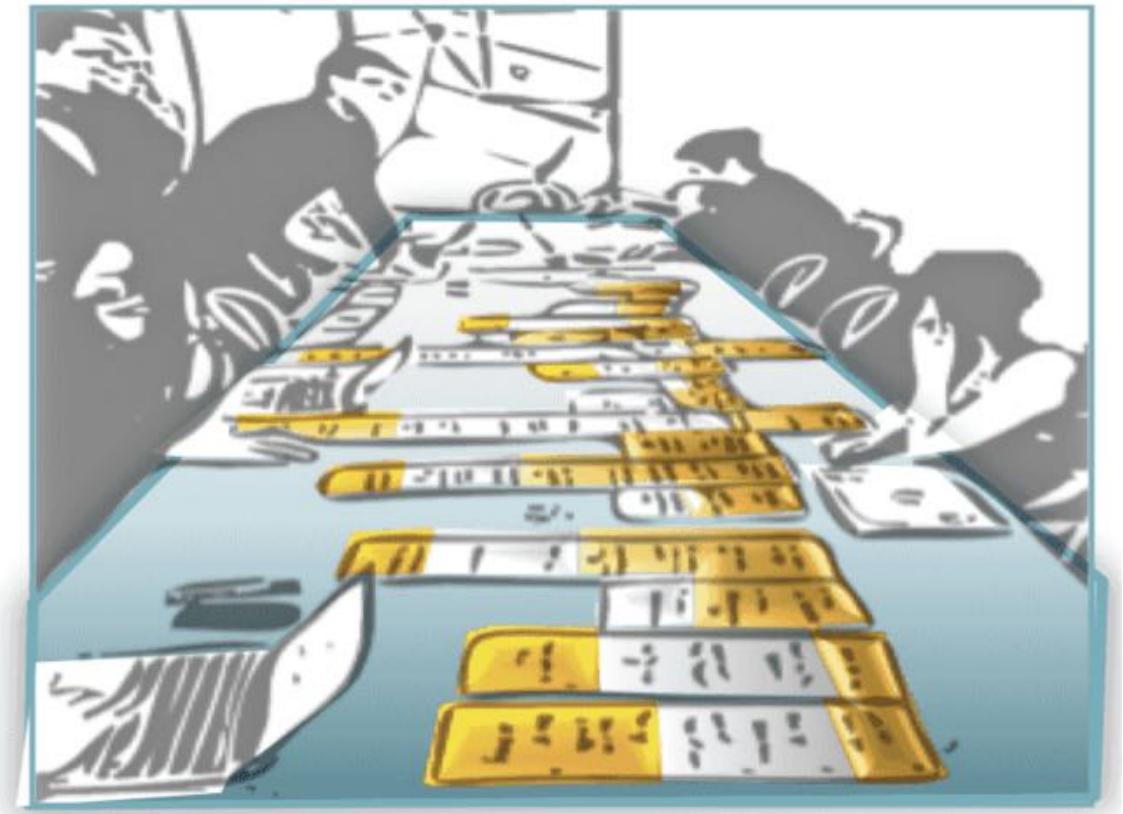
- Technical dependency trumps ROI or,
- Business forces trump ROI.





Release Refactoring

Quick, easy, reliable,
collaborative release planning.



Per Epic, lay out Features in descending ROI+COD priority

- To hit a specific date, calculate FPs you have by then given your resourcing. Otherwise calculate release dates after.

Per Epic, top-down, ask Business “could we include any of this Epic in our next Release without this Feature?”

- If not, this Feature is marked “Bronze”.

When you’re out of Bronze, ask, “Would leaving this next Feature out significantly reduce the Impact of next Release?”

- If so, this Feature is marked “Silver”
- Otherwise it’s marked “Gold”.

Now calculate how many total FPs and how much total ROI per each Bronze, Silver and Gold Group for each Epic.

To fit a Release Date, figure which mix of Bronze, Silver and Gold Groups > max ROI within the FP budget of the release.

- Assume Silver requires Bronze, and Gold requires Silver.

Otherwise determine Release Dates by grouping for business drivers. IE. RAT, MVP, Next Bottleneck, Next Market, etc.

