

Working LeSS Brings Great Results

One company's journey from chaos and uncertainty to clarity and confidence

The Basics

Company Profile

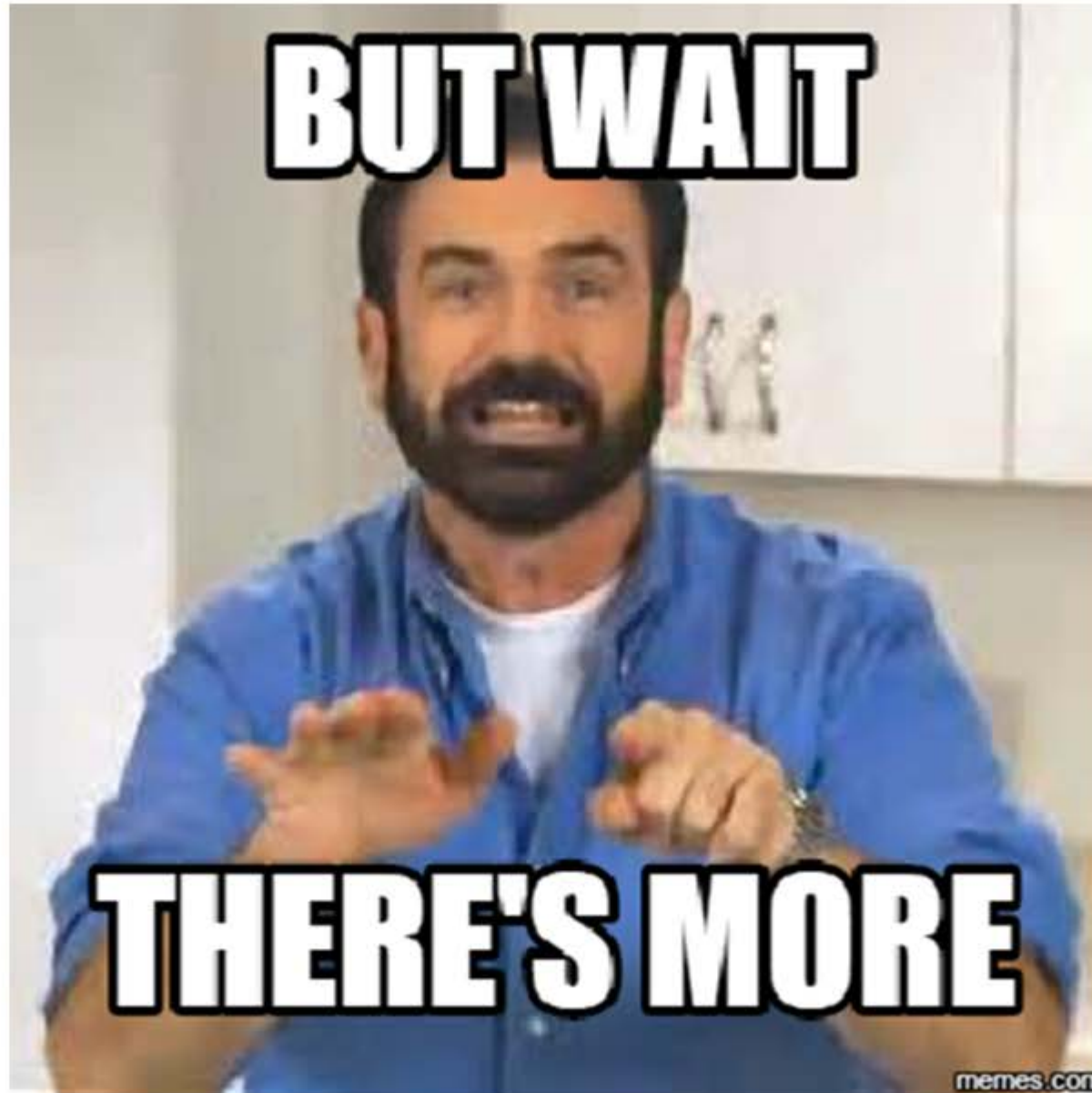
- 175 Employees
 - Platform Teams
 - Server
 - Design Application
 - Web, iOS, Android, Windows Mobile
 - Product Team
 - Services Team
 - Sales Team
 - Customer Support
 - Senior Management

Primary Business Challenges

- Two Releases in prior 12 months
- Hundreds of Defects per release
- Low customer satisfaction
- Low company morale

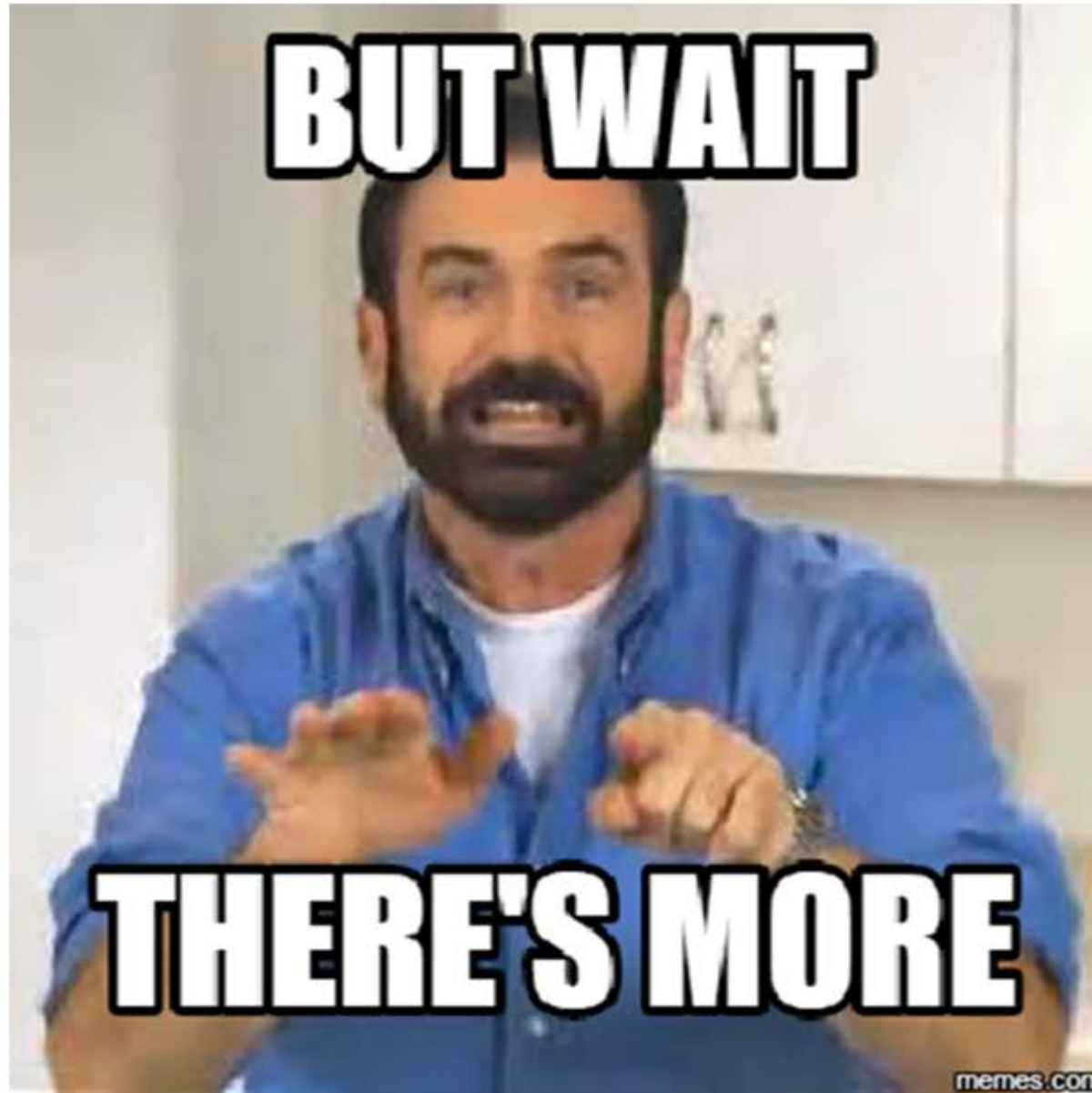
Digging a little deeper

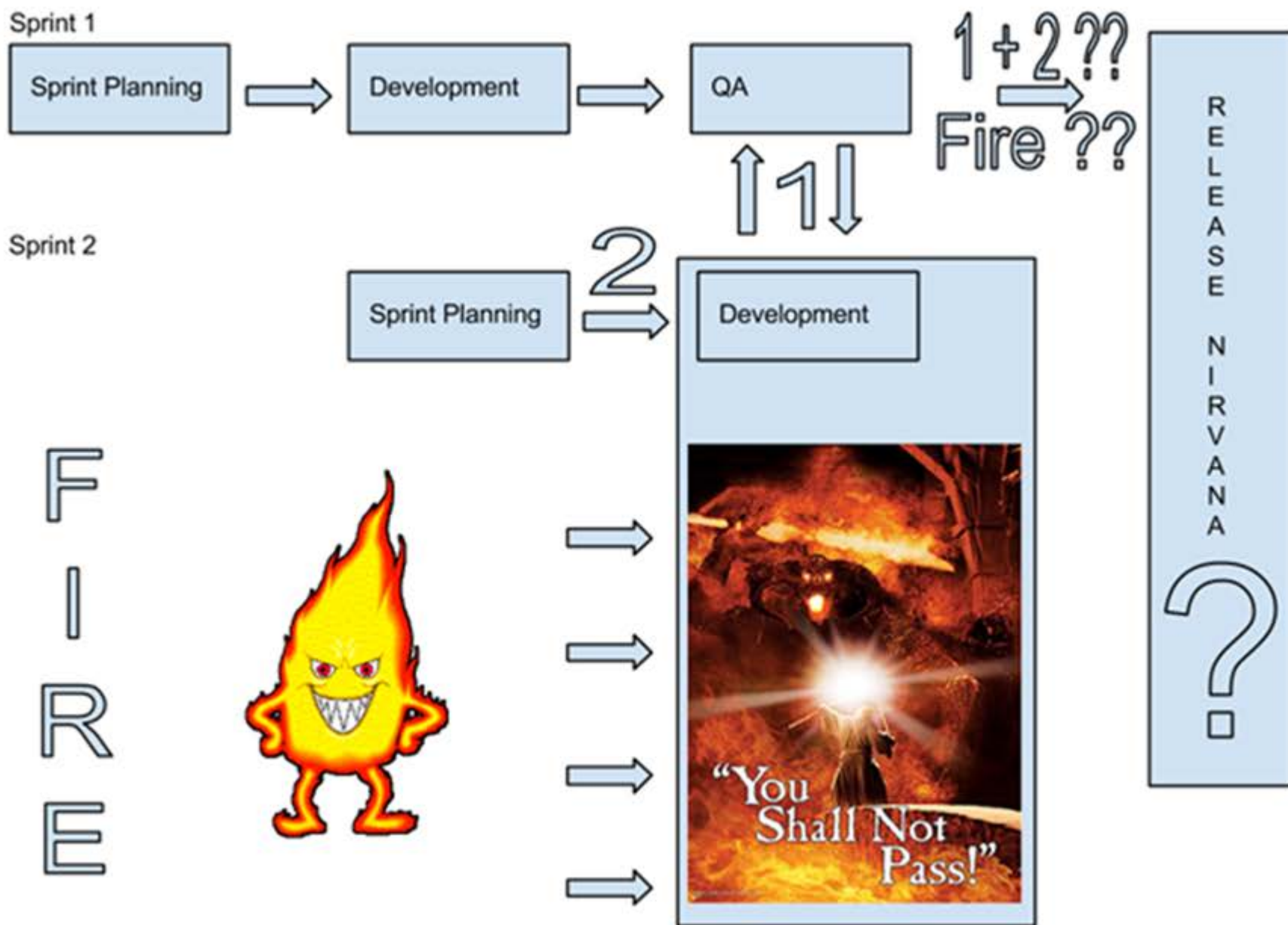
- No Definition of Done
 - No standards for entrance or exit criteria from a QA perspective
- Product Backlog in poor shape
 - Stories aren't fleshed out before sprint planning with all people (dev, qa, ui/ux, po)
 - Poor prioritization - Loudest Voice Syndrome (LVS)
 - Goals are poorly defined, sometimes not at all
- Constant interruptions from management and other stakeholders
- Unapproved work gets brought into sprints continuously
- No consideration of resource availability (who can do the work, and when)
- Releases happen on Fridays (handoffs - "not my problem")



Digging a little deeper (cont.)

- Releases were difficult to manage and extremely fungible events
- Integration and Regression Testing were initiated and completed near a release point
- Tools were a hindrance rather than a facilitating force (ticketing, help desk, build software)
- No individual or group of individuals focused on the company's continuous improvement



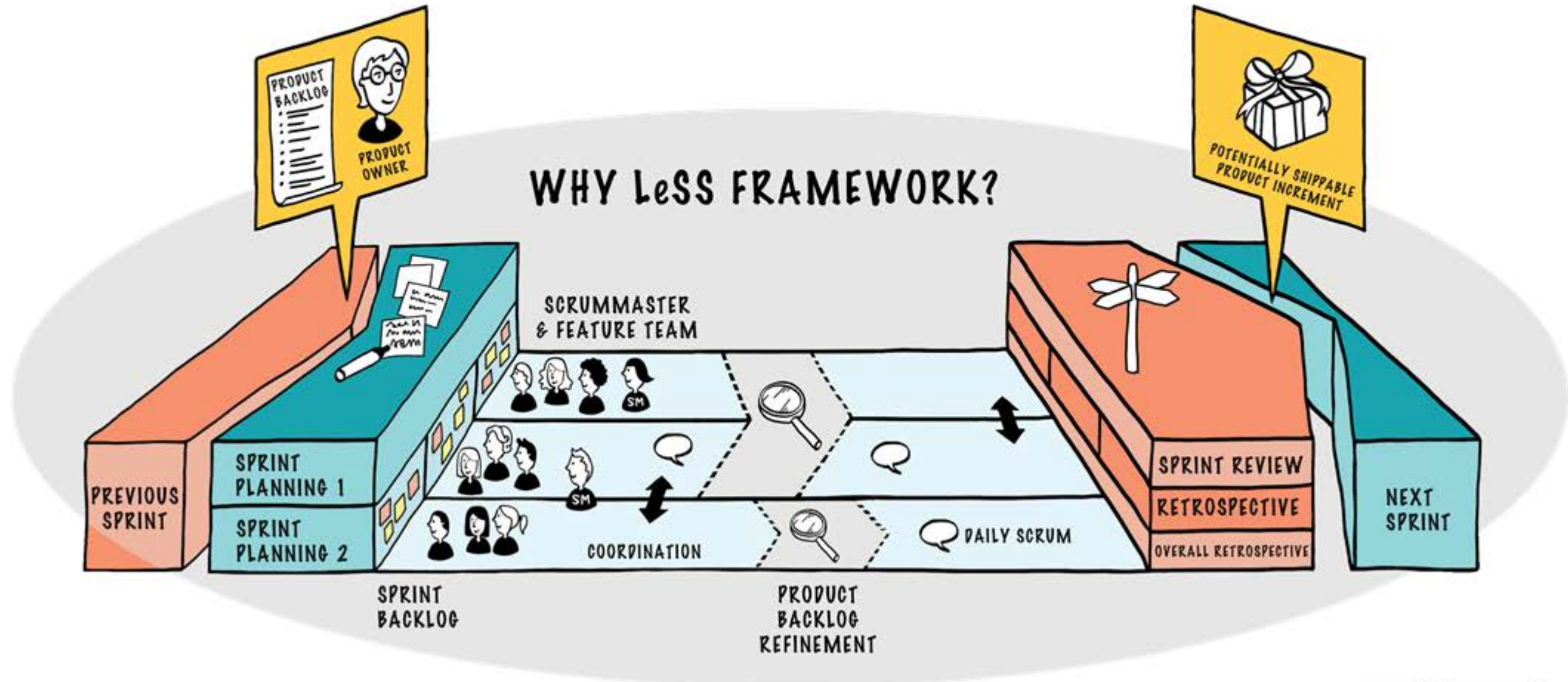


Ok We Get It.... Then What Happened?



How We Applied LeSS

Structure - The “Bones”



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In Practice

- Teams
 - Server
 - Design Application
 - Web, iOS, Android, Windows Mobile
 - “Oracle” teams regularly met and discussed platform health, APIs, break down component walls
- Sprint Planning One
 - Head of Product + Product Managers
 - Head of Engineering + Lead Developers
 - Head of QA
 - UX Resource
- Sprint Planning Two
 - Individual Teams

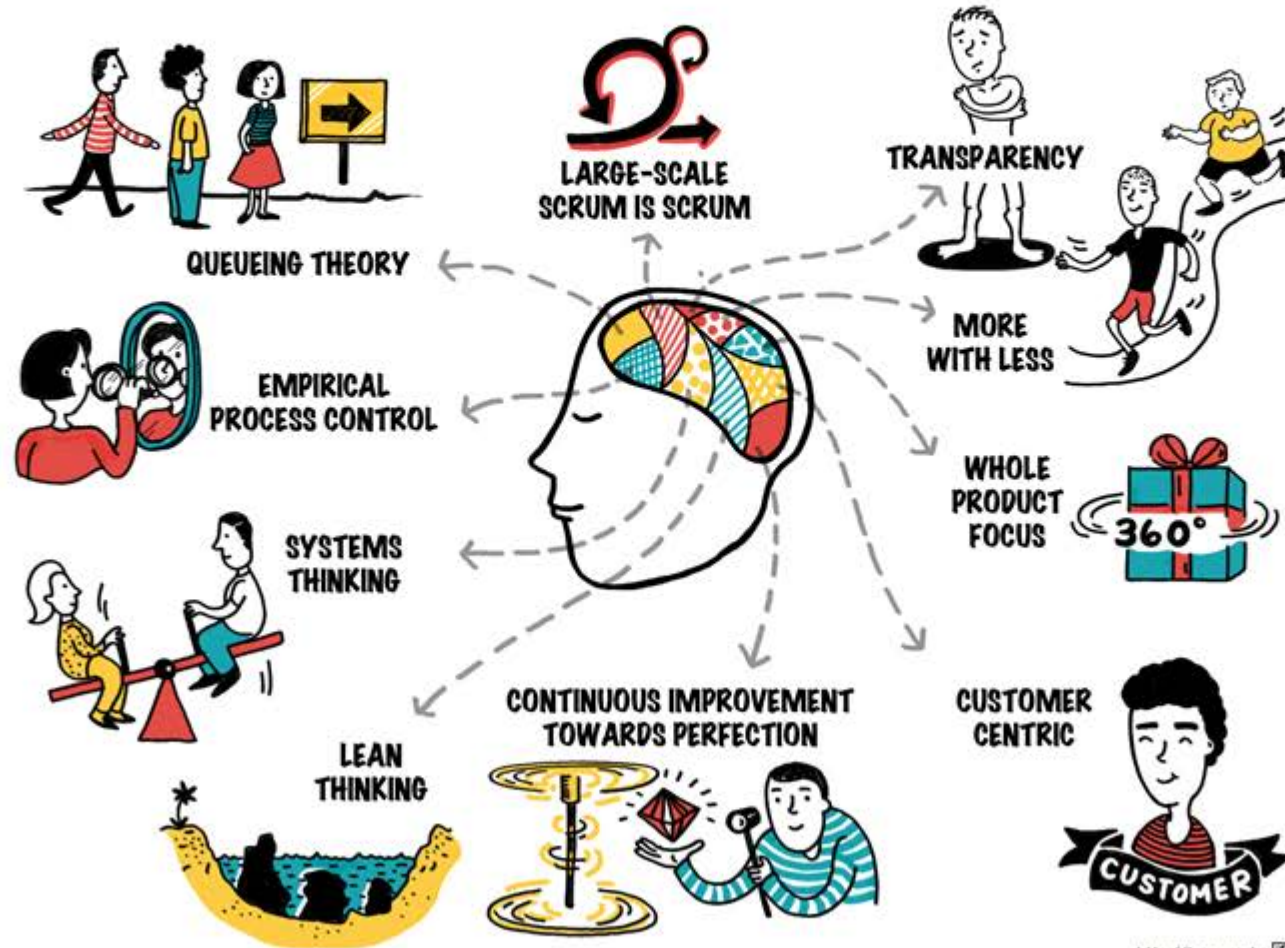
In Practice (cont.)

- Daily Scrums
 - Staggered to encourage teams to attend each other's dailies
- Scrum of Scrums
 - Cross-team coordination
 - Address high level issues on a consistent basis
 - One rotating representative from each team
- Continuous Product Backlog Refinement
 - Initial Refinement with senior managers and lead developers
 - Full Refinement with individual teams
 - Cross-team refinement when and where needed

In Practice (cont.)

- Unified Sprint Review
 - Product Owner and/or Developers would present to all teams, and then the company
- Team Retrospectives
 - After the Sprint Review, 1-2hrs for each team as needed
- Overall Retrospective
 - Day after Sprint Review and Team Retrospectives
 - Single room, 4-5hrs with 30-60min blocks for each team, everyone attending together
 - Review action items from prior sprint and put in new items from the current sprint
- Sprint Planning → Back to the beginning
- Structure without Principles is meaningless however.....

Principles - The "Brain"



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Transparency

- Everyone free to join Daily Scrums and listen
 - Staggered so developers could attend each other's scrums
- Centralized Product Backlog feeding all teams, accessible by everyone in the org
- Plannings and Reviews open to all input and suggestions
- Published Quality Standards, Sprint Quality Reports, and Definition of Done
- Published Sprint Target Goals and Final Release Notes
- Published company product roadmap internally and to customers

Systems and Lean Thinking

- Challenge: everyone blames everyone else for their troubles
- Company Culture?



How Did This Happen?

Symptoms

Lack of Trust

Low Quality

Lots of Handoffs

Constant firefights → short term thinking

Management subscribed to Theory X

Root Cause Analysis & Resolutions

People are not intrinsically bad (Theory Y)

Lacked common rules of the road

- Guard rails
- Street markings
- Speed limits
- Traffic direction
- Why can you “go fast” on the Autobahn but not regular streets?

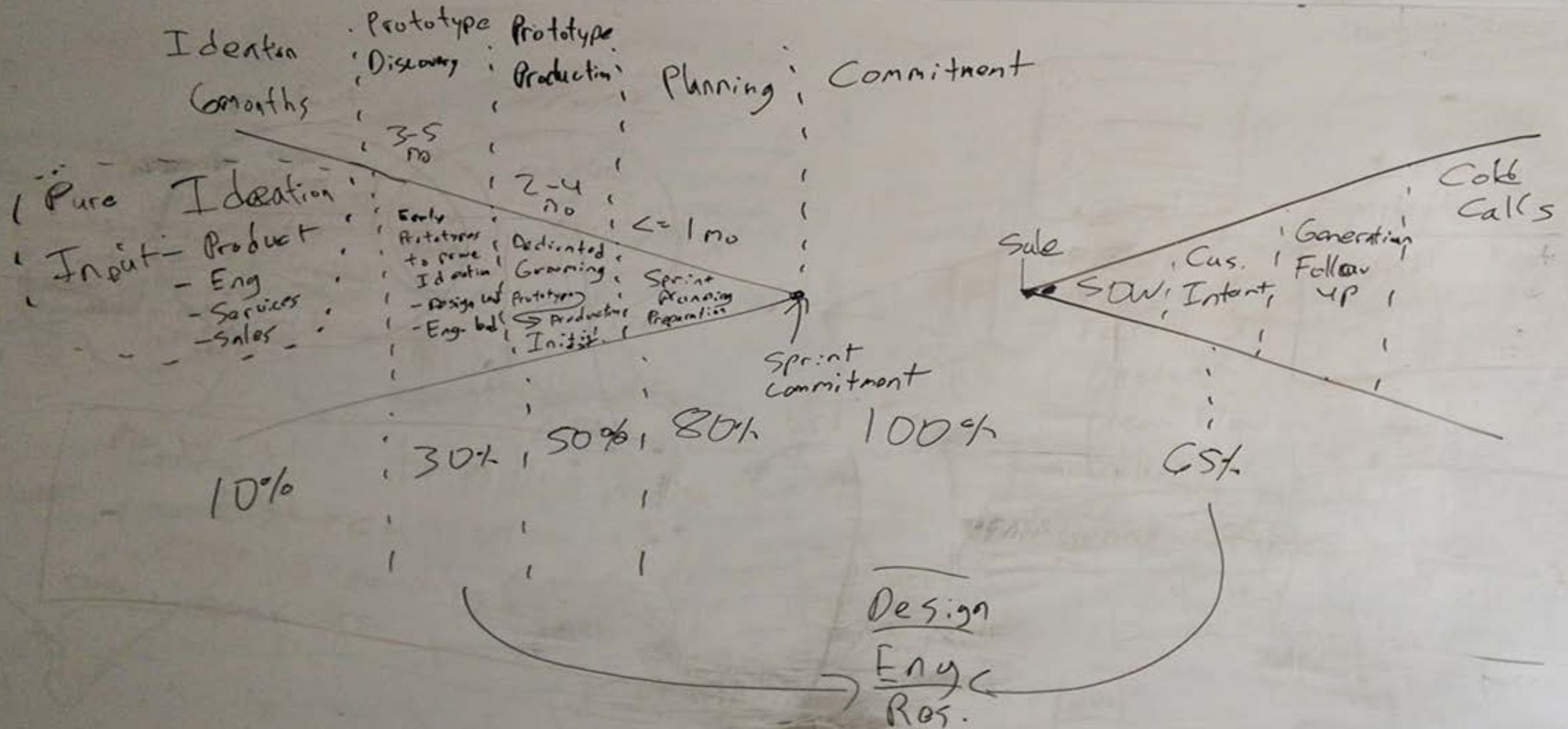
API Contracts

Intra- & Inter-Group Working
Agreements

Failures led to fear of failure

Queuing Theory & Customer Centric

- Focused primarily on marrying a realistic and “affordable” (cost of delay) Product and Sales Pipeline that ingested ideas and delivered value ****early**** and ****often****
 - “6 months” deep
 - Pure Ideation → Prototype (discovery) → Prototype (“production”) → Planning → Commitment → Feature Delivery
 - Cold Calls → Lead Generation Follow up → Customer Intent → SOW -- Sale
- What is the optimal entry point for Sales and Product to deliver highest customer value as quickly as possible?



It's All About Quality

Bugs are not an error in logic. They're a unit test you forgot to write

Technical Excellence - The “Muscle”



SPECIFICATION BY EXAMPLE



CONTINUOUS INTEGRATION



CONTINUOUS DELIVERY



TEST AUTOMATION



TECHNICAL EXCELLENCE



ARCHITECTURE & DESIGN



ACCEPTANCE TESTING



THINKING ABOUT TESTING

CODE

CLEAN CODE



TEST-DRIVEN DEVELOPMENT



UNIT TESTING

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What Quality Meant

- Customers trust the company product works and are willing to buy
- Sales trust the company product works and are willing to sell
- Customer support trusts the company product and support documents work
- Senior Management trust the company product works and enable it rather than control it
- Engineering trusts Services will construct sustainable solutions
- Services trusts Engineering will construct sustainable solutions
- Quality Builds Trust. Trust Reduces Friction. Reduction In Friction Increases Speed

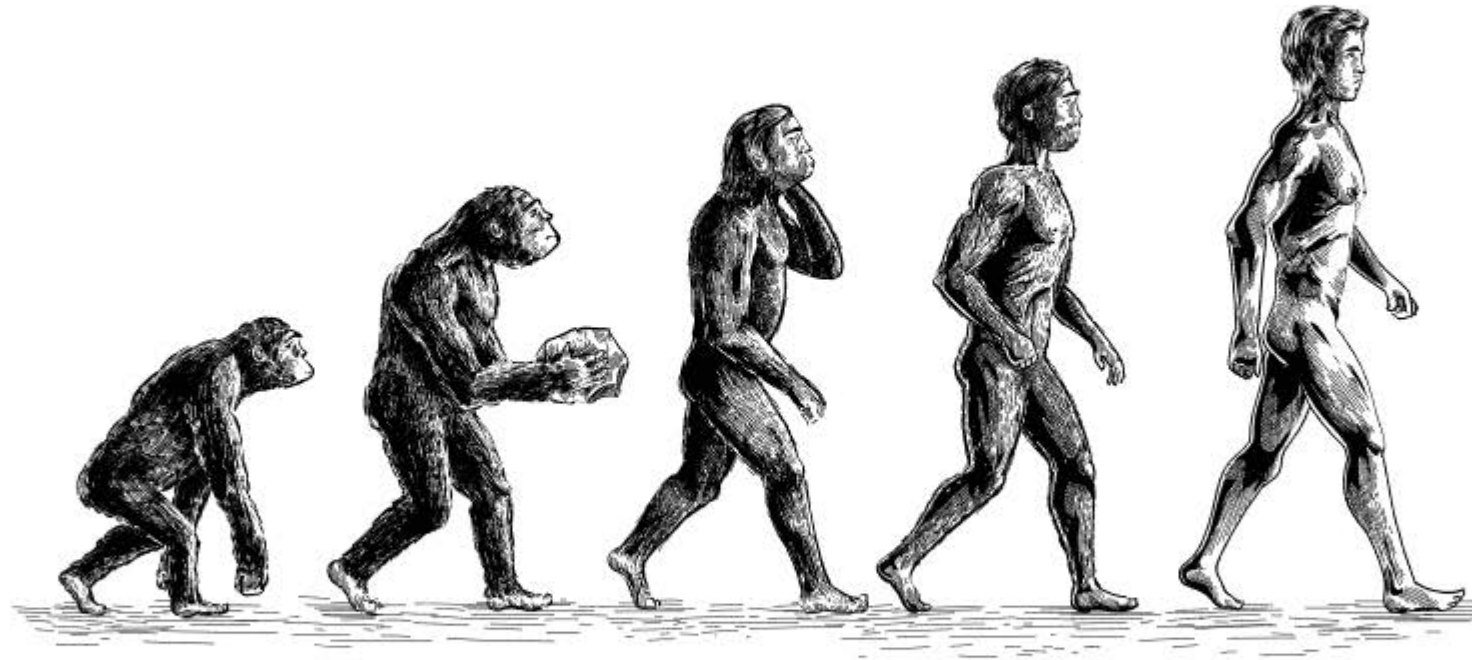
Structural Quality

- Unit Testing
- Acceptance Testing
- UI Testing
- Test Automation
- Code Analysis
- Continuous Integration & Deployment
- Architecture & Design - Contracts - “Oracle at Delphi” Team - API holders/nurturers
- DevOps

Achieving Buy-in

- Quantified the Cost of Low Quality
- Quantified Tech Debt over several months
 - Investigate
 - Identify
 - Prioritize
 - Squash
- Lifecycle Cost far exceeds the cost of allowing new defects into the system
- “Go Slow To Go Fast” → New Features were delayed to address quality issues
- How did this manifest via delivery?

NATOMA CONSULTING



The Evolution of Delivery



Sprint 1

Sprint Planning



Development



QA

1+2??
Fire??



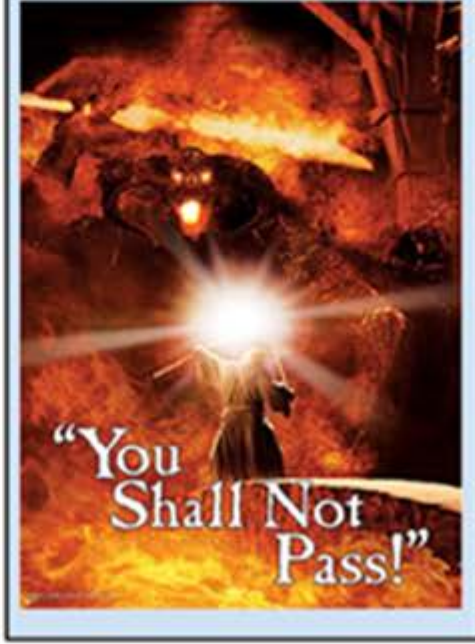
Sprint 2

Sprint Planning



Development

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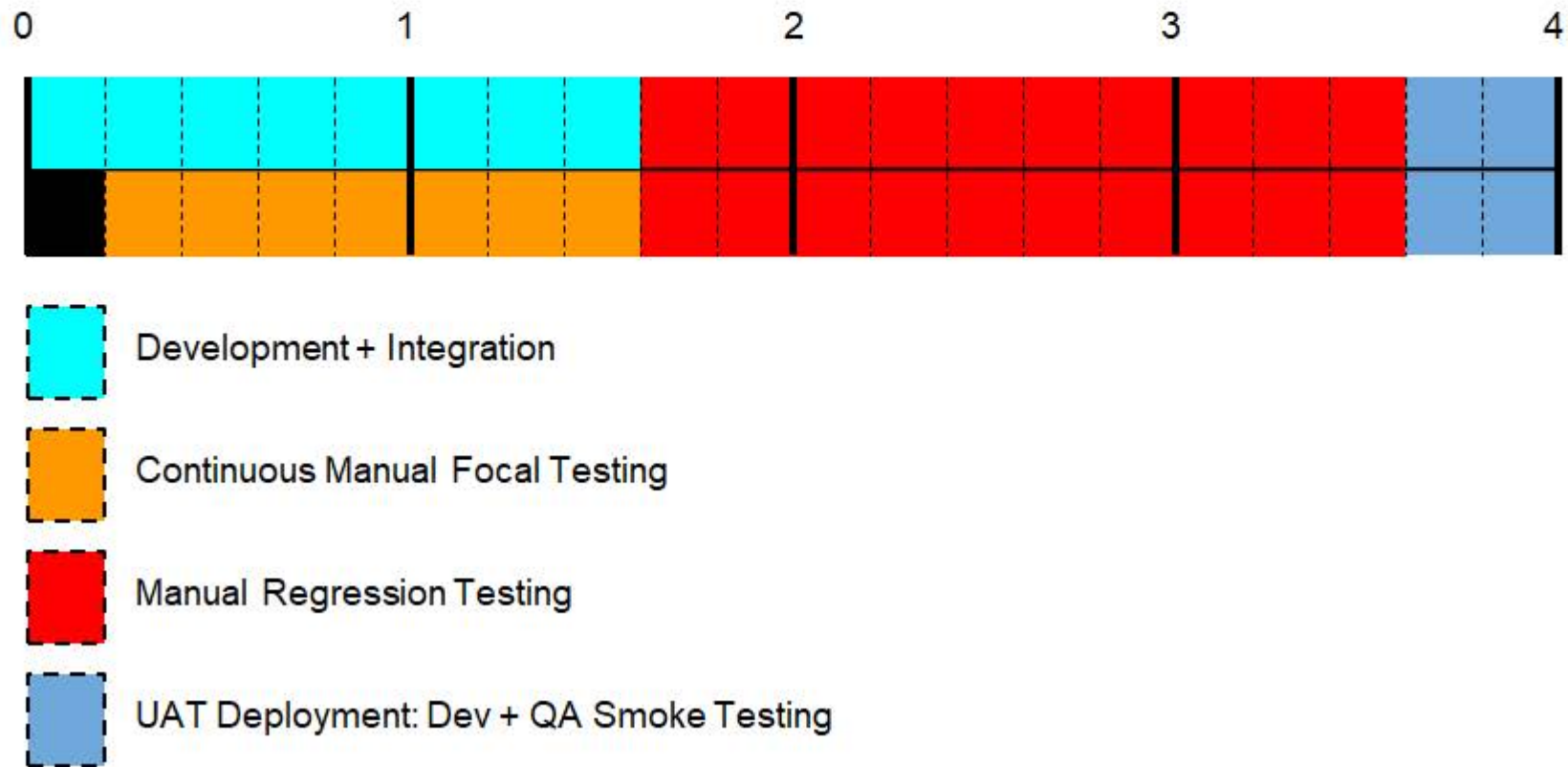
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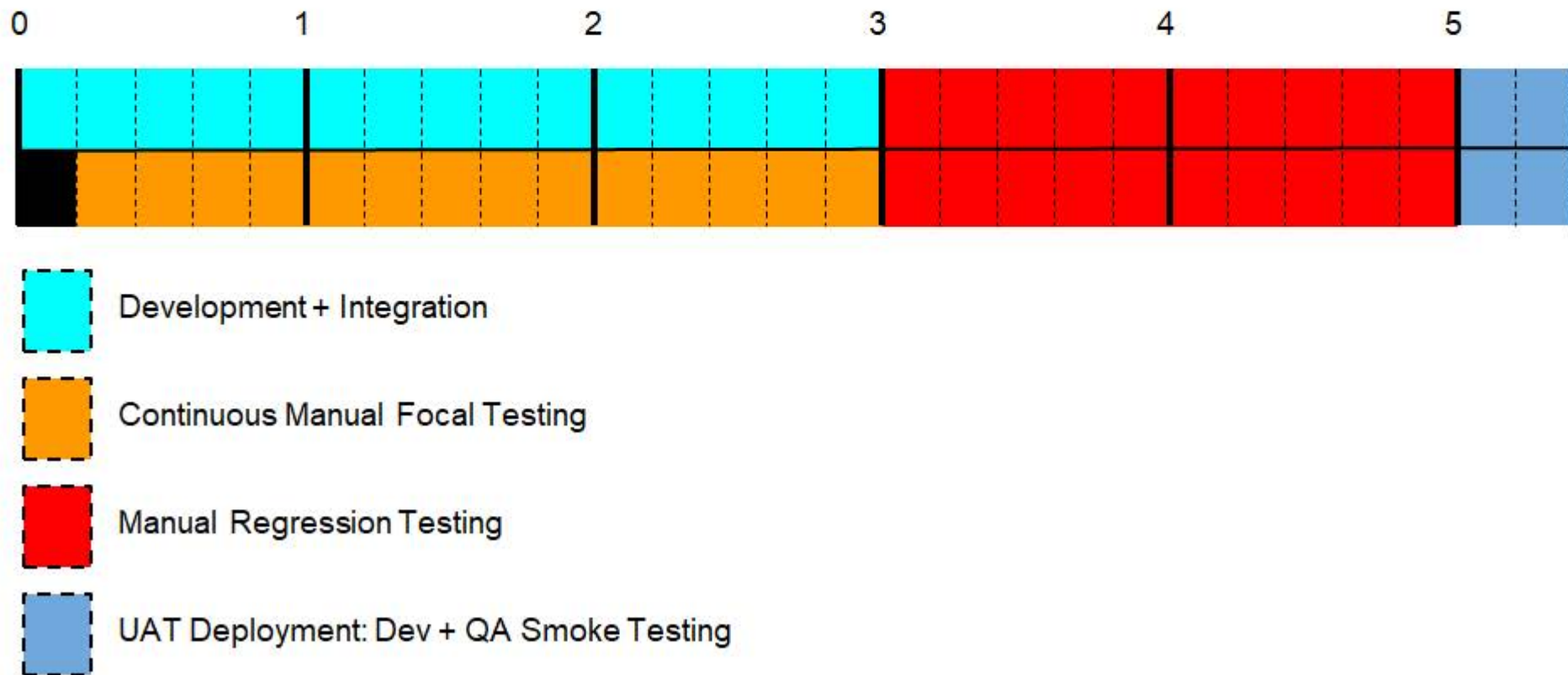
Crawling

Version 2.7-3.0 - 1 Month Sprint



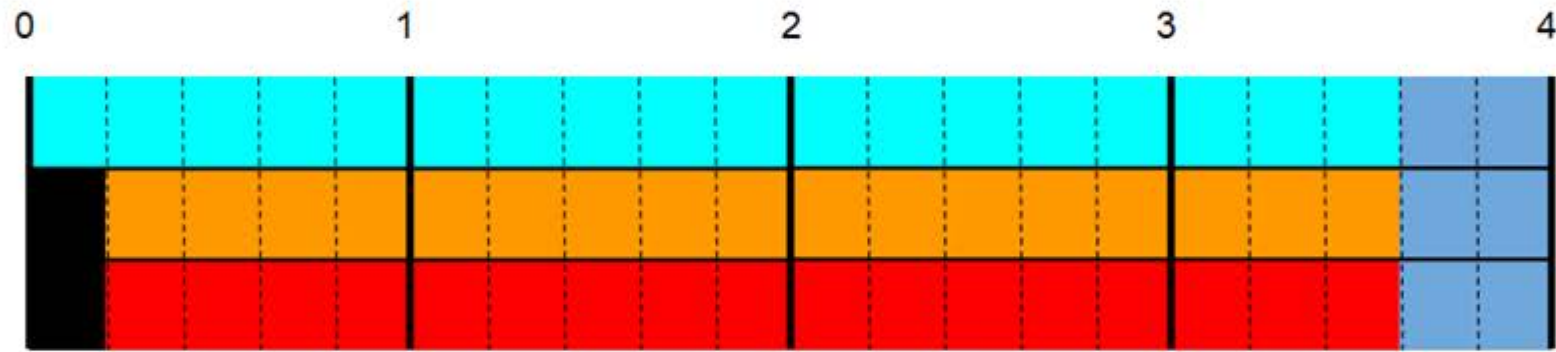
Stumbling

Version 3-1-3.2 - 5 Week Sprint



Walking Upright

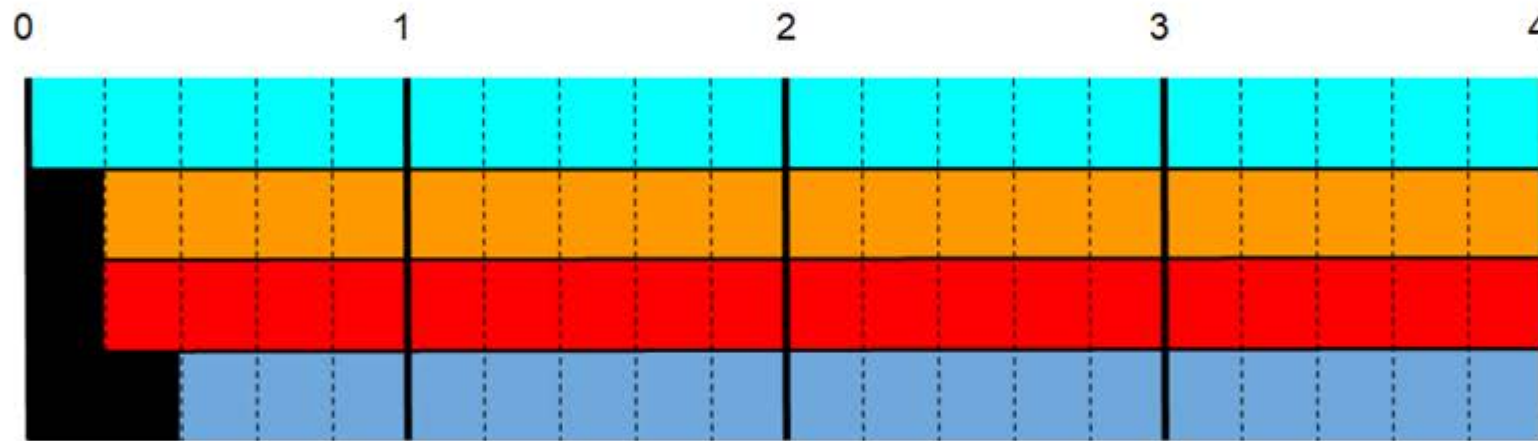
Version 3.3-3.5 – 1 Month Sprint



-  Development + Integration
-  Continuous Manual Focal Testing
-  Continuous Automated Regression Testing
-  UAT Deployment: Dev + QA Smoke Testing

Running

Version 3.6+ - Flow



-  Development + Integration
-  Continuous Manual Focal Testing
-  Continuous Automated Regression Testing
-  Continuous UAT + Production Deployment

Bone, Brain, Muscle. What's Next?

Management - The “Heart”



ROLE OF MANAGER



GO SEE



TEACHING PROBLEM SOLVING



MANAGER AS SCRUMMASTER?



MANAGEMENT

IMPROVEMENT SERVICE

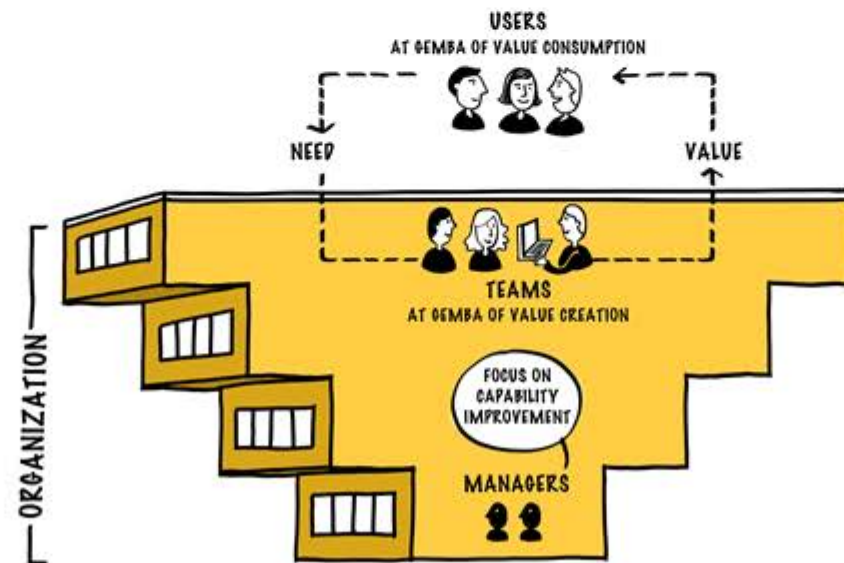


SELF-MANAGEMENT

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Why The “Heart”?

- The heart beats continuously, silently, supporting everything the “system” does without thought, behind the scenes.
- We inverted Management from the “Brain” to the “Heart”



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How We Got There

- Buy-in from Senior Management and CEO that change was necessary. Status quo could no longer be tolerated
- Identified three highest priorities of Senior Management and CEO
 - Stability of the platform
 - Performance of the platform
 - Scalability of the platform
- “Go Slow To Go Fast” → right the ship, steer in the appropriate direction, speed up when patch work and stabilization was minimally viable
- Senior Management and CEO aligned with the concept of Capability Management, started seeing the system in its entirety instead of just at the 30,000 ft level

Some Positive Outcomes

Before

Company “reported to” and “supported” Senior Management.

Senior Management roamed development halls asking for things and disrupting the backlog. Lack of trust.

Developers were afraid to talk to Senior Management and CEO.

After

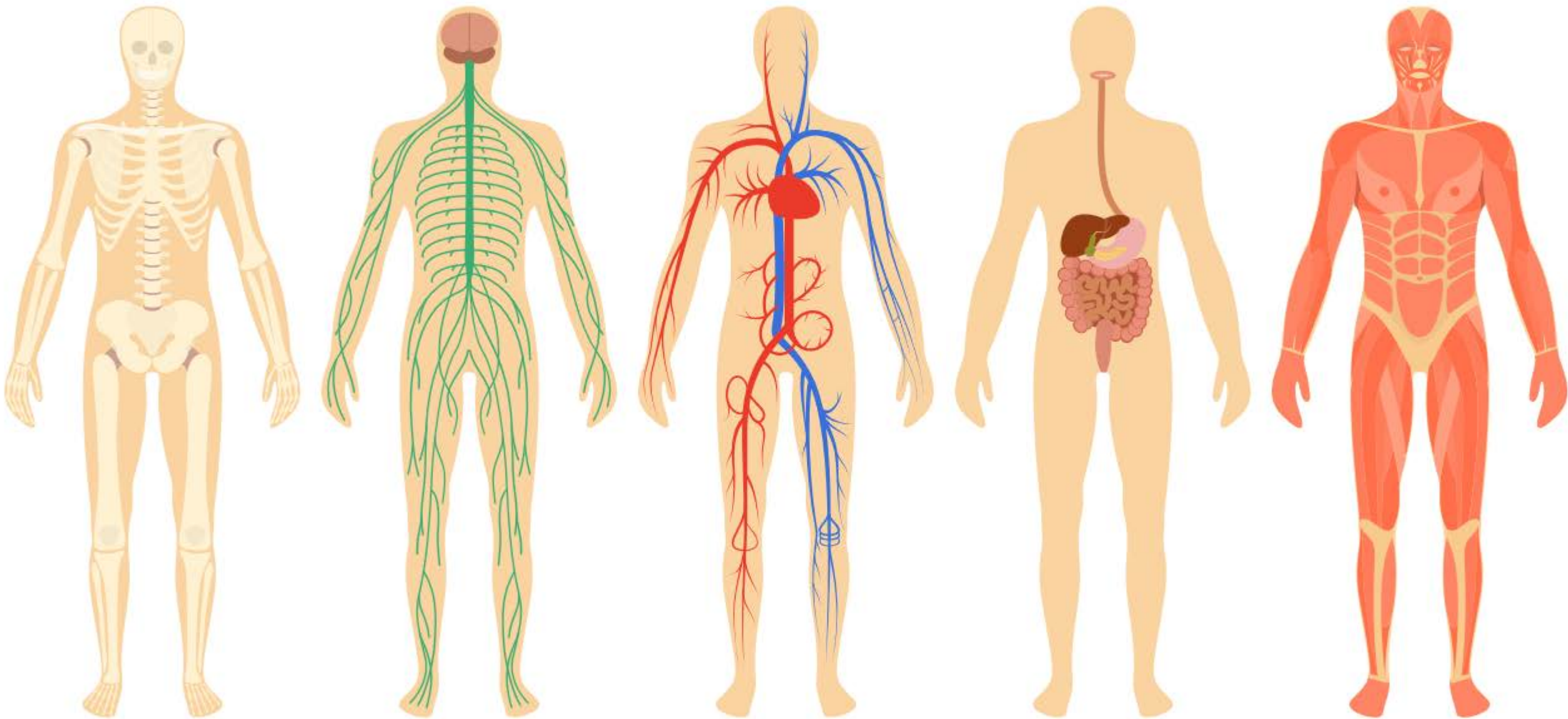
Senior Management “reported to” and “supported” the Company.

Senior Management practices Gemba aka Go See, helps the teams improve. Trust was built over time.

Developers would regularly whiteboard with Senior Management and CEO, sharing ideas, aspirations, and more.

Putting It All Together

“The Body Cannot Live Without The Mind” - Morpheus, The Matrix





Wrapping Up

Pre-LeSS

One release every 6 months

Hundreds of defects per release

Customers threatening to leave, or leaving, poor company morale, finger pointing

Scattered, unprioritized, “everything goes” backlogs

Post-LeSS

Monthly releases, which led to continuous releases + feature flags

<10 defects per release, no greater than medium severity, fixed no later than next release

Customers flocking to the product, significantly improved morale, “all-in”

Product Vision, Unity, Purpose

Questions? Comments? Fin!

- Thank You
- Domo Arigatou Gozaimasu
- Gracias
- Danke
- Merci
- Gratzi
- Xièxiè

