Virtuous Cycle(s) of Velocity
What I Learned About Going Fast at eBay and Google

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Background

CTO at KIXEYE
  • *Making awesome games awesomer (and scalabler and reliabler)*

Director of Engineering for Google App Engine
  • *World’s largest Platform-as-a-Service*

Chief Engineer at eBay
  • *Multiple generations of eBay’s real-time search infrastructure*
Lessons to Learn

People

Technology

Culture
People: Hire and Retain the Best

Hire ‘A’ Players

- *Difference between top and bottom performers is not 1.5x; it’s 10x (!)*
- (+) *Google hiring process*

Virtuous Cycle

- *A players bring A players*
- *B players bring C players*
- *Constantly raise the bar*
People: Respect People

Most valuable and irreplaceable asset

People are not cogs, not fungible

- (-) eBay “Train seats”
  - Destroyed incentives, personal pride, long-term ownership

- People are an asset, not a cost center

Environment should treat people as valued

- (+) Google workplace
Virtuous Cycle of People

- Hire ‘A’ Players
- Treat Well
- Keep and Retain
- Raise the Bar
Technology: Services

- Small team
- Well-defined interface
- Completely independent
- Autonomy and responsibility
Technology: Quality Discipline

Tests help you go faster

• Tests have your back
• Confidence to break things, refactor mercilessly
• Catch bugs earlier, fail faster

“Don’t have time to do it right”?
• WRONG – Don’t have time to do it twice (!)
Vicious Cycle of Technical Debt

Quick-and-dirty → Technical Debt → “No time to do it right”
Technology: Quality Automation

Quality Tooling

- Make it easy to do the right thing
- Mocking / testing frameworks
- Monitoring
- Canarying

Quality cannot be an afterthought

- Quality (reliability, scaling) is a Priority-0 feature
- Google (+) vs. old eBay (-)
Virtuous Cycle of Quality

- Testing
- Solid Foundation
- Faster and Better
- Confidence
Culture: Accountability and Ownership

Give people and teams autonomy

Hold them accountable for their success

Keep commitments
  • *Say what you are going to do, then do it*
Culture: Collaboration

One team across engineering, product, operations

- Otherwise, playing strategy instead of solving the problem
- Otherwise, CYA and hiding the ball
- (+) Google co-location

Solve problems instead of pointing fingers
Culture: Quality over Quantity

Less is more
- More wood, fewer arrows
- Solve 100% of one problem rather than 50% of two
- Release one great feature instead of two iffy ones

Whole user / player experience
- Think holistically about the full end-to-end experience of the user
- UX, functionality, performance, bugs, etc.
Culture: Experimentation

*Engineer* successes

- Launch is only the first step
- (+) KIXEYE game development

Many small experiments sum to big wins

- (+) eBay site speed + machine-learned ranking
Culture: Failure Tolerance

Learn from mistakes and improve

- *What did you do* -> *What did you learn*
  - *Take emotion and personalization out*
  - *(+) Google blame-free post-mortems*

Encourage iteration and velocity

- “*Failure is not falling down but refusing to get back up*” – Theodore Roosevelt
Virtuous Cycle of Culture

- Honesty
- Trust
- Faster and Better
- Risk-Taking
Join us!

KIXEYE is hiring …