

Agile Infrastructure

or, The Silver Bullet du jour, or, Mutual
Hatred Between Development and
Operations

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Hello!

- RedMonk is an industry analyst firm
- Our research is **free** at RedMonk.com
- We work mostly with vendors, advising & Consulting
- Broad focus on software
- Bottom-up-approach to understanding software

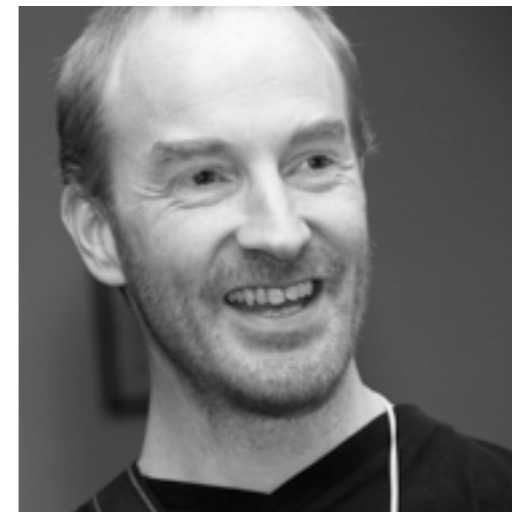
Michael Coté



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Stephen O'Grady



Tom Raftery



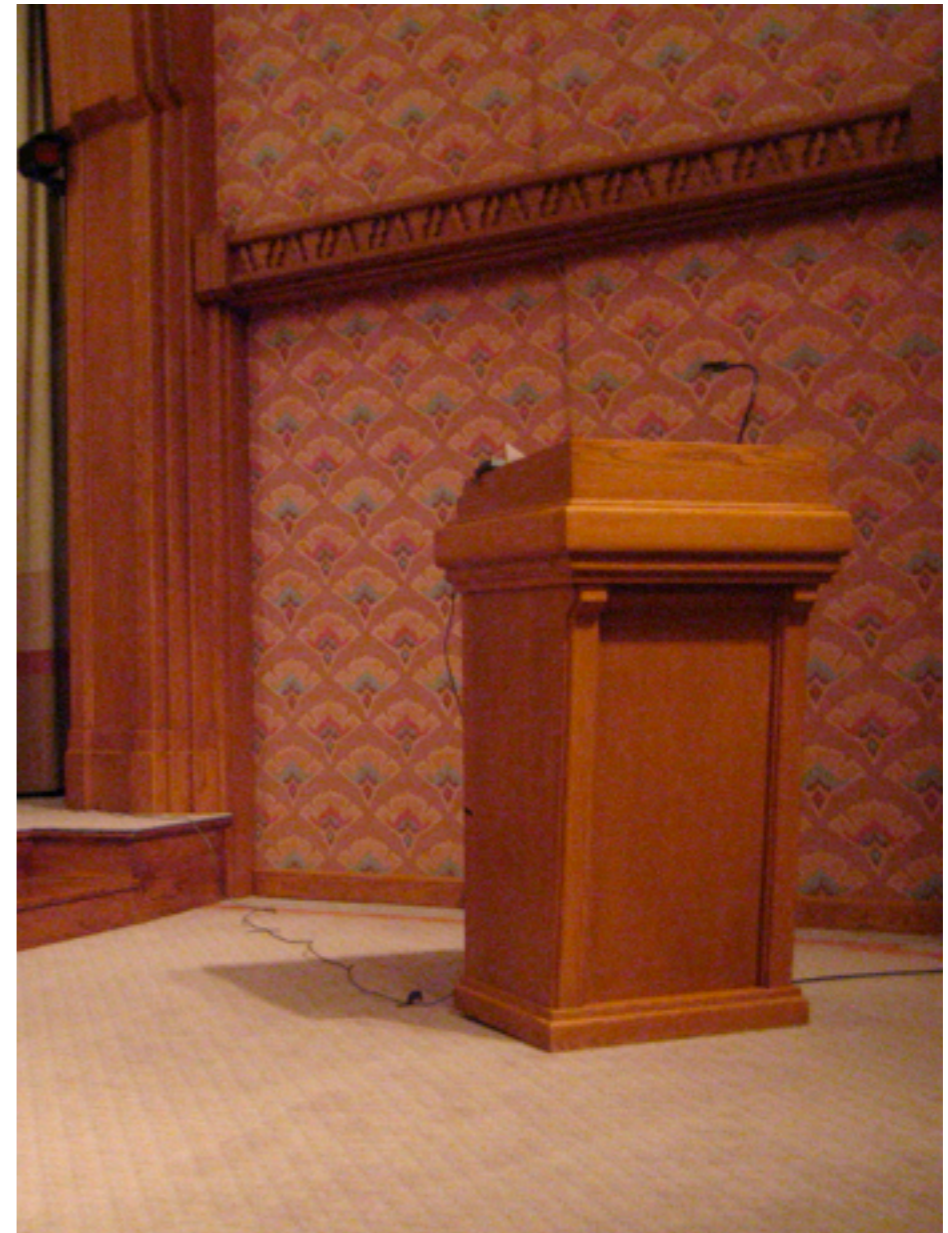
Conclusions

- “Cloud computing” is an operations innovation
- The agile community must start working with operations - think of infrastructure as part of the code base
- Finally, there are new ways to make users happy



Expectations

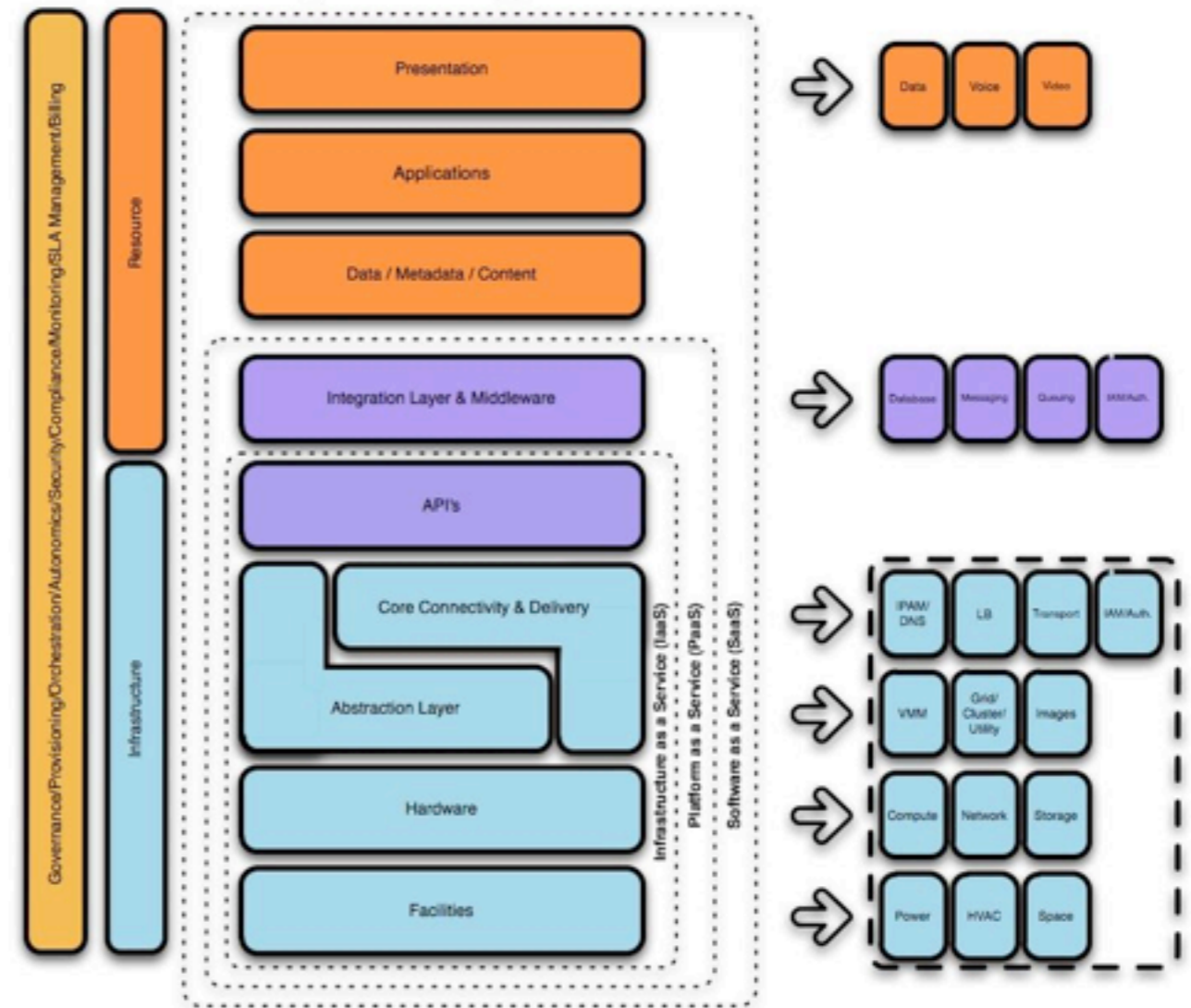
- Cloud computing is like early SOA: it's silly-putty
- We'll take a simple definition and go with it
- What Agile should do



The 3 *aaS's of Cloud

- SaaS, PaaS, and IaaS
- There are many more *aaS's
- Applications, Middle-ware, servers

Cloud Taxonomy & Ontology - Draft v1.3 - Hoff



* Christofer Hoff

Things to point at

- IaaS - Amazon EC2, S3, etc



- PaaS - Force.com, Microsoft Azure, IPP



- ~~Sun Cloud~~, Eucalyptus, Rackspace, & reborn hosters & HPC



- Automation & provisioning people



The three aaSes

- The technical innovation is faster provisioning & management with less human intervention
- Originally: hosted on the Internet, removing on-premise needs
- Leading to a faster path of getting software to users
- Hopefully: making users happier

"Well, there'll be 4 wheels. Seats for people to sit in. A trunk for luggage. And an engine in front."



Operations as bottle-neck

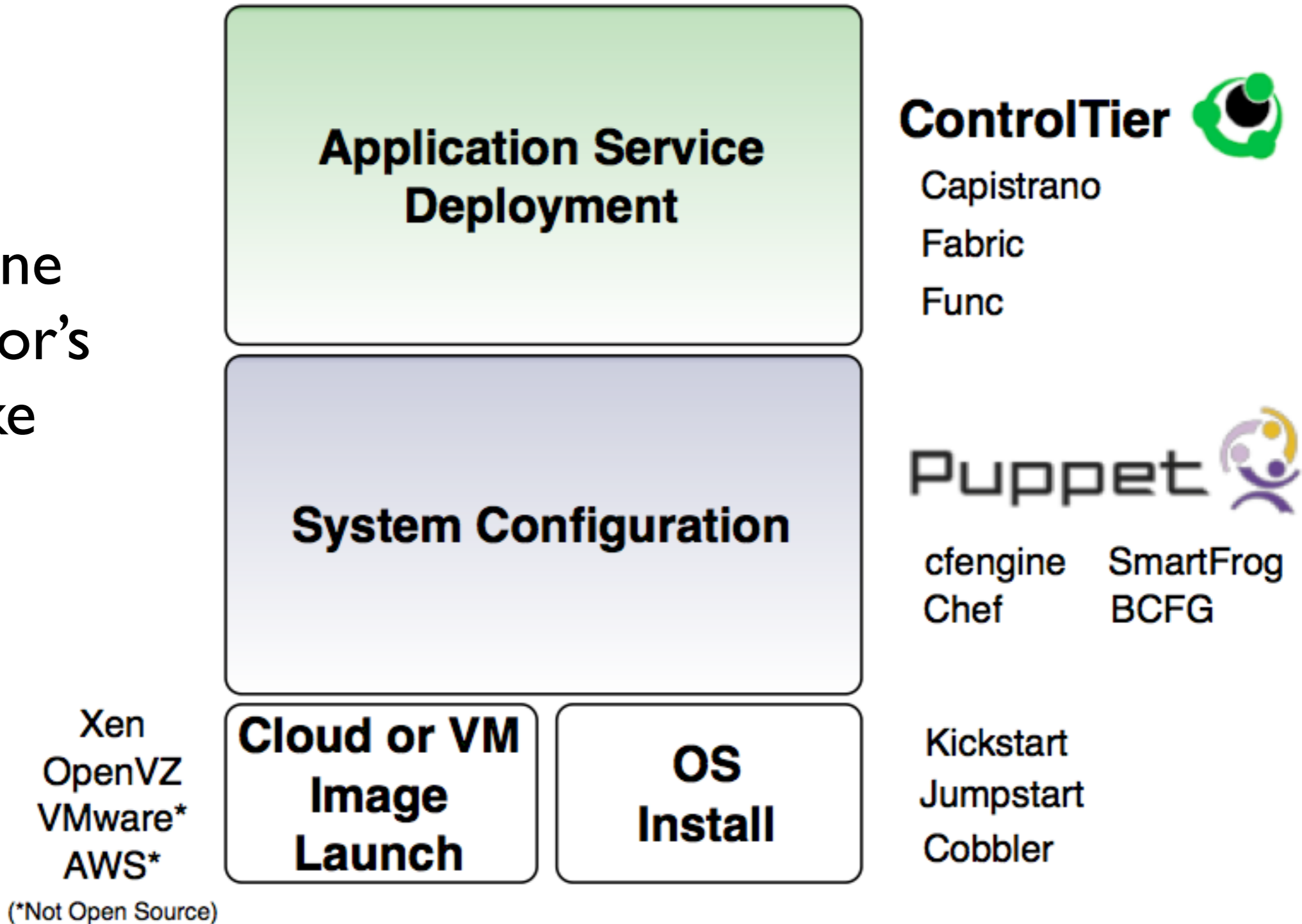
- While Agilists have been innovating, operations has used process as armor
- “Change management” means “preventing change”
- But, they can't be blamed
- They need help

Infrastructure as code

- Cloud computing relies on software that works with the infrastructure
- Developers must code appropriately, e.g., elasticity, sloppy distributed systems
- The “throw it out the window” test - backup is easy, *recovery* is the real problem

“Fully Automated Provisioning”

* One vendor's take



Source: <http://www.dtosolutions.com/fully-automated-provisioning/>

Know your *friend*

- Learn what/how operations people talk & worry about
- Service desks, automation, service catalogs
- Just read a summary of ITILv2, esp. *Service Support*

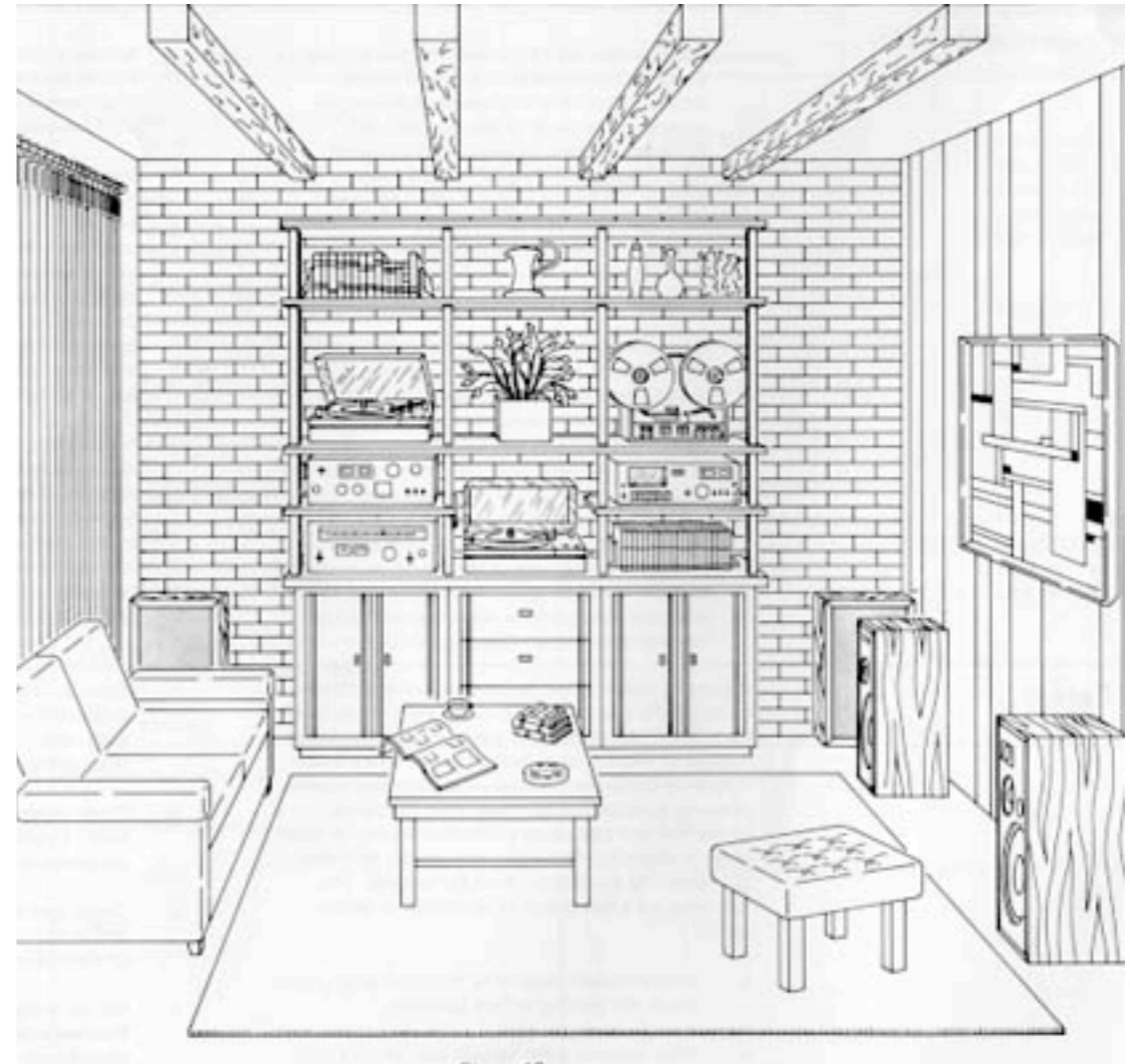


Benefiting users

- SaaS & Pass - Less to manage
- “Apps” vs. “applications” - new features, faster
- Closer to the end-user

Less to manage

- This probably means delivering as a SaaS
- Perhaps in a PaaS
- Virtual appliances & private clouds



“Apps” vs. “applications”

“What we are looking to do is find other small areas that we can build **a nice small app** that’s done really well **that can help hundreds of thousands** of the QuickBooks millions.”

*-Brian Sweat, Product Manager at Alterity, Inc.
(<http://www.riaweekly.com/2010/01/26/riaweekly069/>)*

Flexible
&
Cheap

Marketplaces
&
Feature delivery

User
Expectations

Beyond tracking suffering

“I can actually **look at [a feature] and say, ‘nobody uses feature X.’** It's not even being looked at. And it really **helps us shape the future of the app** which, on a desktop product, we don't have a lot of data like that.”

-Brian Sweat, Product Manager at Alterity, Inc.

(<http://www.riaweekly.com/2010/01/26/riaweekly069/>)

User
analytics

Aggregate
analytics

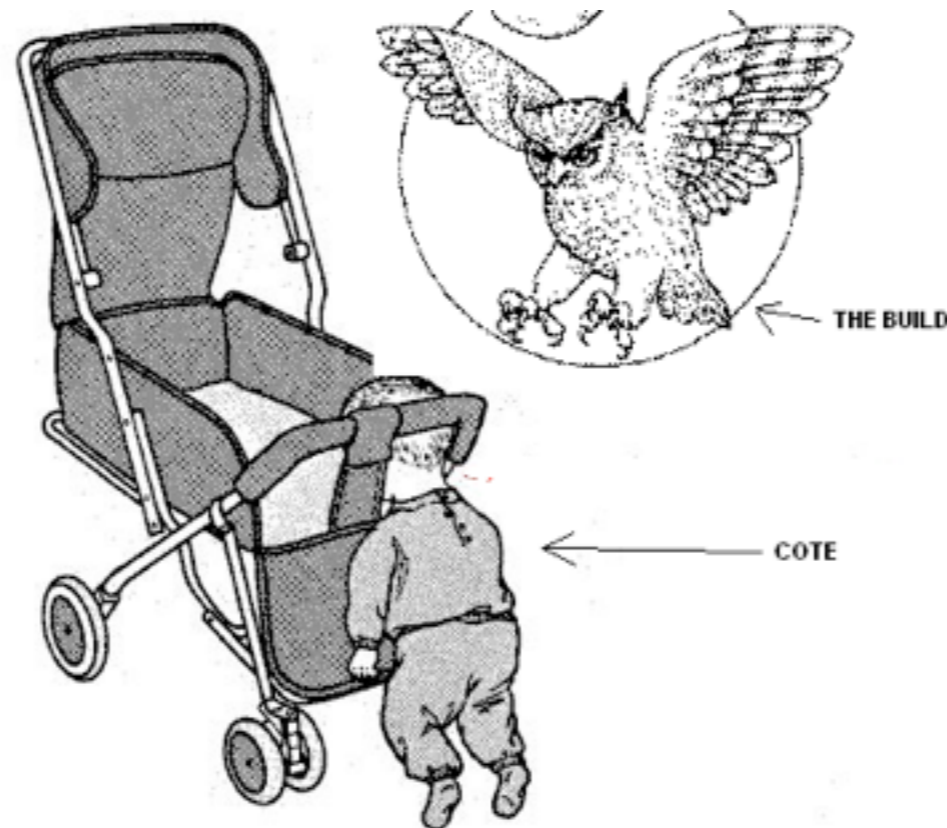
Feature
analytics

The Crazy aaS Dream

One day, the Agile development team will go complete the iteration.

Every story works, and the apps is shippable.

Minutes after the review meeting, operations clicks a button, & the users start using the new features.



Thank you!

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