

The Coming Donkey Apocalypse

What happens when DevOps goes mainstream?

May, 2015 – DevOpsDays Austin
@cote

Slides: <http://pivotal.io/devopsdays-austin>

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Conclusions

- DevOps is well enough understood, goal-wise at least
- It's probably useful to conflate continuous delivery, cloud, and DevOps at this point
- Adoption is growing, with estimates of 25% G2000 penetration by 2016
- The donkeys are coming!
- Let's get ready to welcome them and make them thrive:
 1. Clearly explain how technology enables it all
 2. Work with legacy
 3. Keep up the land-grab: product, business, sales, etc.

Hello!



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- Former industry analyst at 451 Research and RedMonk
- Corporate Strategy & M&A at Dell
- Podcasts: cote.io/podcasts
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Fear of
nerds
nerds



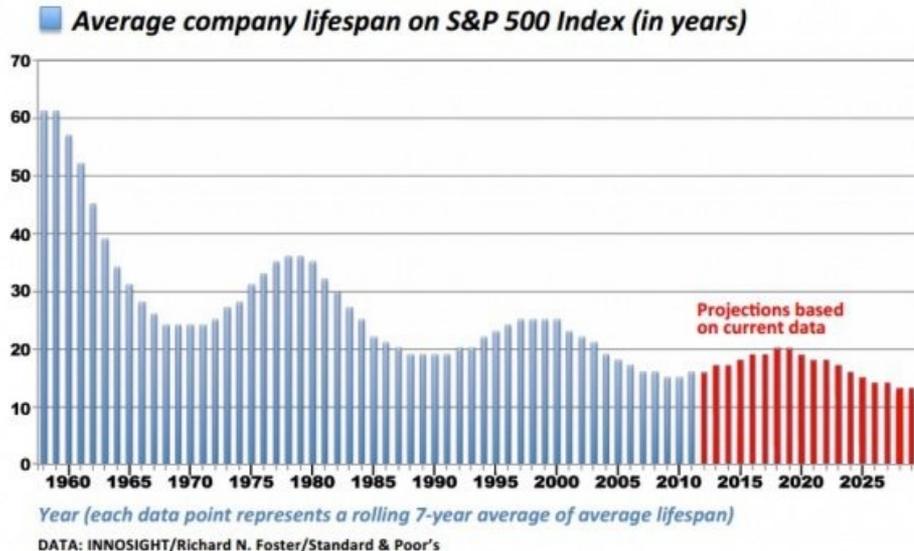
“Silicon Valley is coming....

We are going to work hard to make our services as seamless and competitive as theirs.”

-Jamie Dimon, CEO@JPMC,
2015 letter to shareholders

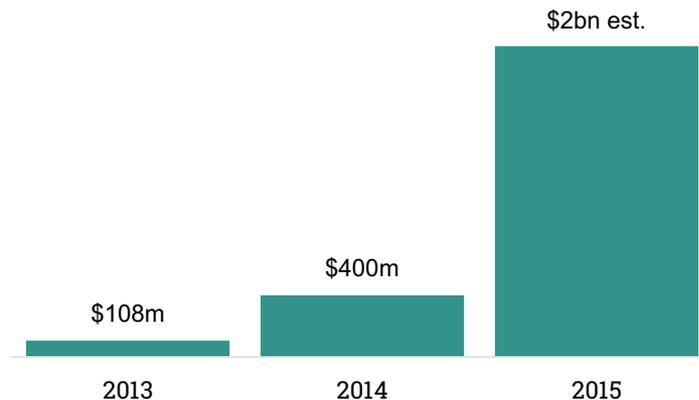
The goal is now well defined

Moving from this...



...to this

Uber's rumored net revenue



Source: "[Creative destruction in the S&P500 index](#)," Jan 2014; "[Uber Expands Funding Round as Revenue Growth Accelerates](#)," *Wall Street Journal*, Feb 2015. See more discussion in "[The Three Horsemen of the Digital Apocalypse Considered](#)."

Know your equestrian metaphors



Unicorns

- Flies around in clouds doing magic
- Streams things & doesn't seem to need money
- Gets most of the attention
- Stuff of legend



Horse, destrier class

- Makes lots of money
- Has (and needs) lots of resources
- Ridden by kings - market makers



Donkey

- Hard working beast of burden
- Gets no respect
- Has to do more with less
- Most of us, probably

Sources: [“Getting away from unicorn job descriptions”](#); [“About Stranger”](#); [out of stock t-shirt](#). See also, [“Continuous Delivery Among the Donkeys.”](#) Feb 2015.

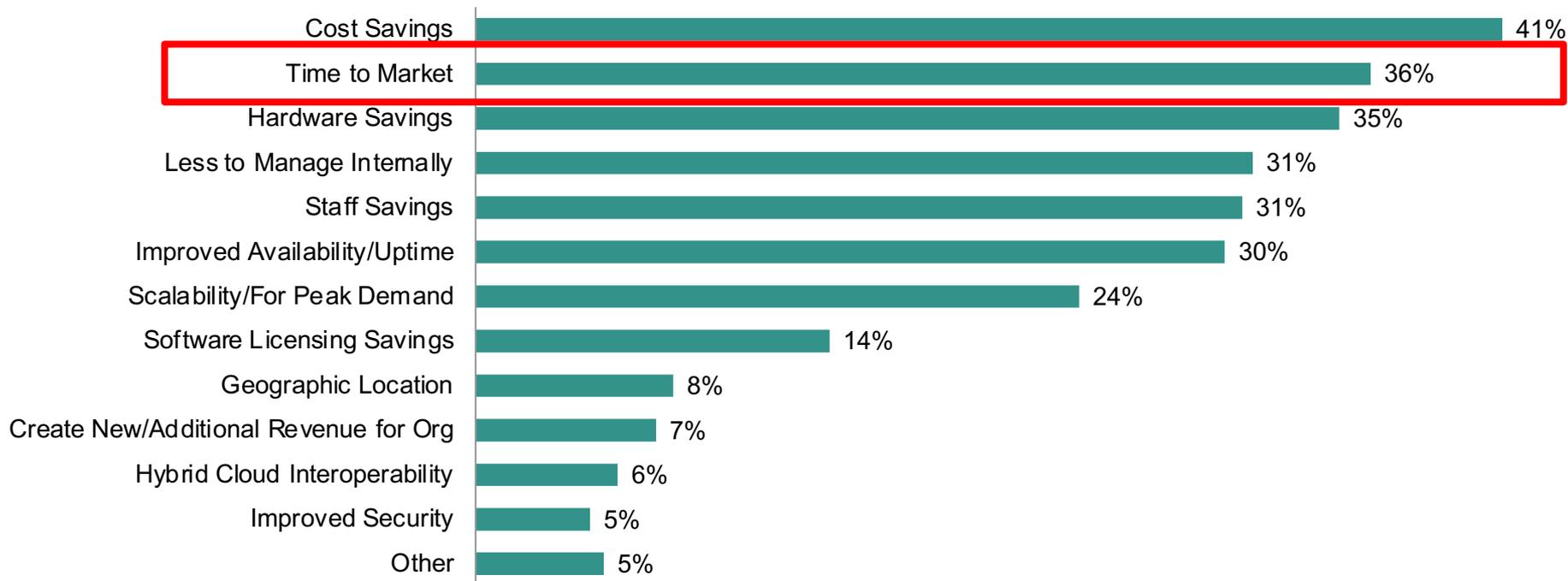
“The donkey is real people with real problems”

- [@dasikakn](#), my colleague

But How?

But How?

Why do cloud? To move faster.

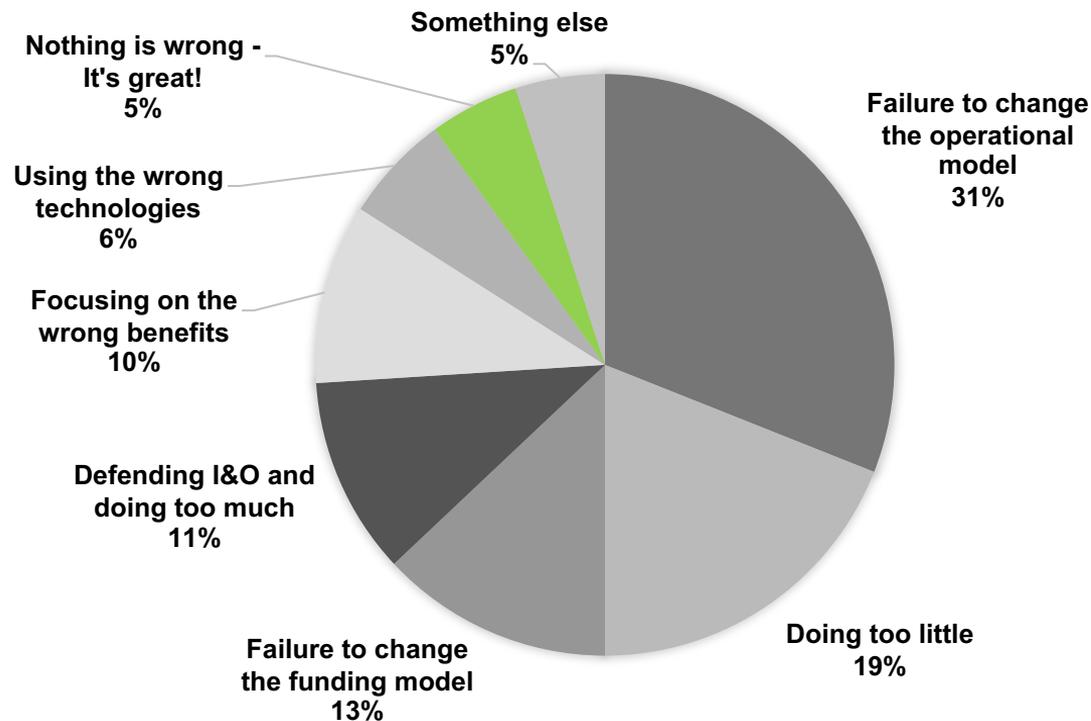


Notes: n=717. Q. What were the key factors in building the business case for cloud-computing investments at your organization? Please select your top three.

Source: "[Voice of the Enterprise: Cloud Computing Q4 2014](#)," 451 Research.

Focus on product development, not COTS

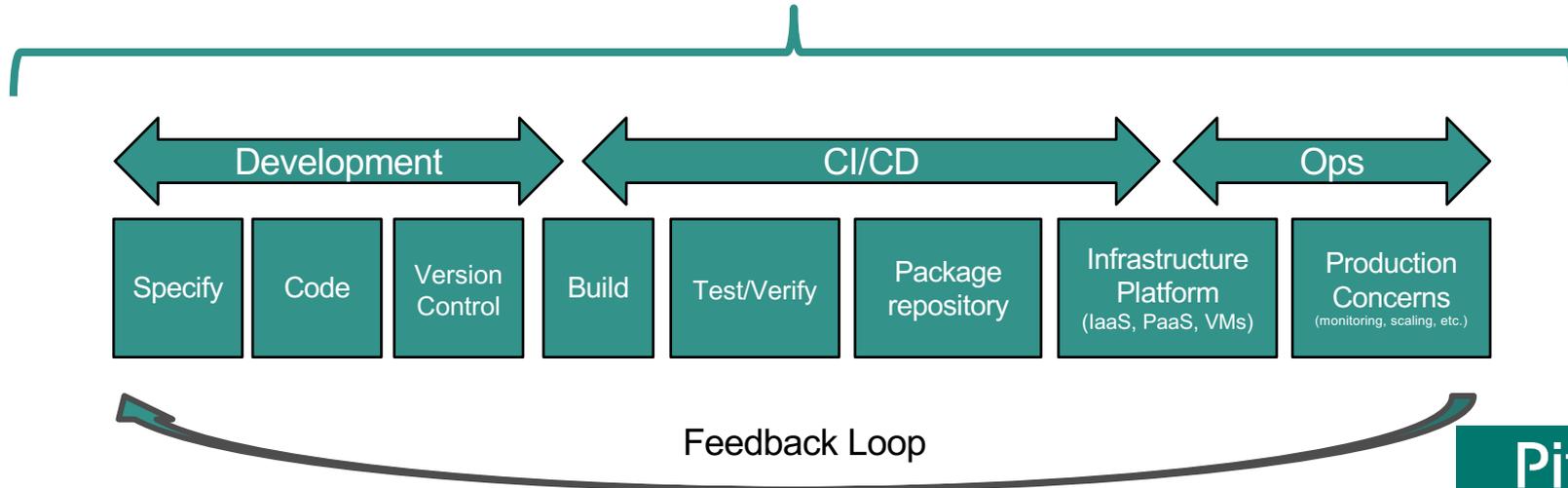
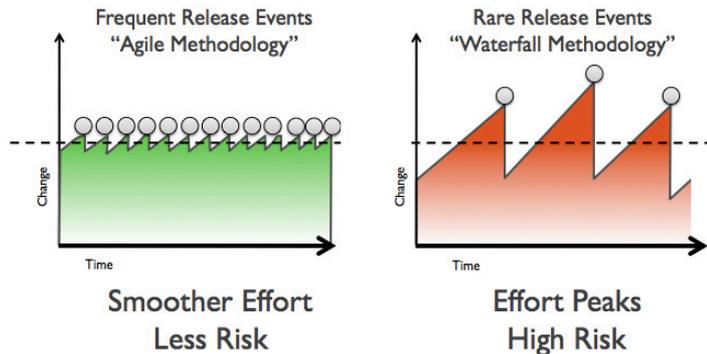
"What is going wrong with your private cloud?"



Sources: ["Problems Encountered by 95% of Private Clouds,"](#) Gartner, Feb 2015. See also [451 commentary on cloud for net-new applications](#) and [survey data on cloud pain points](#).

DevOps == continuous delivery

(More or less)



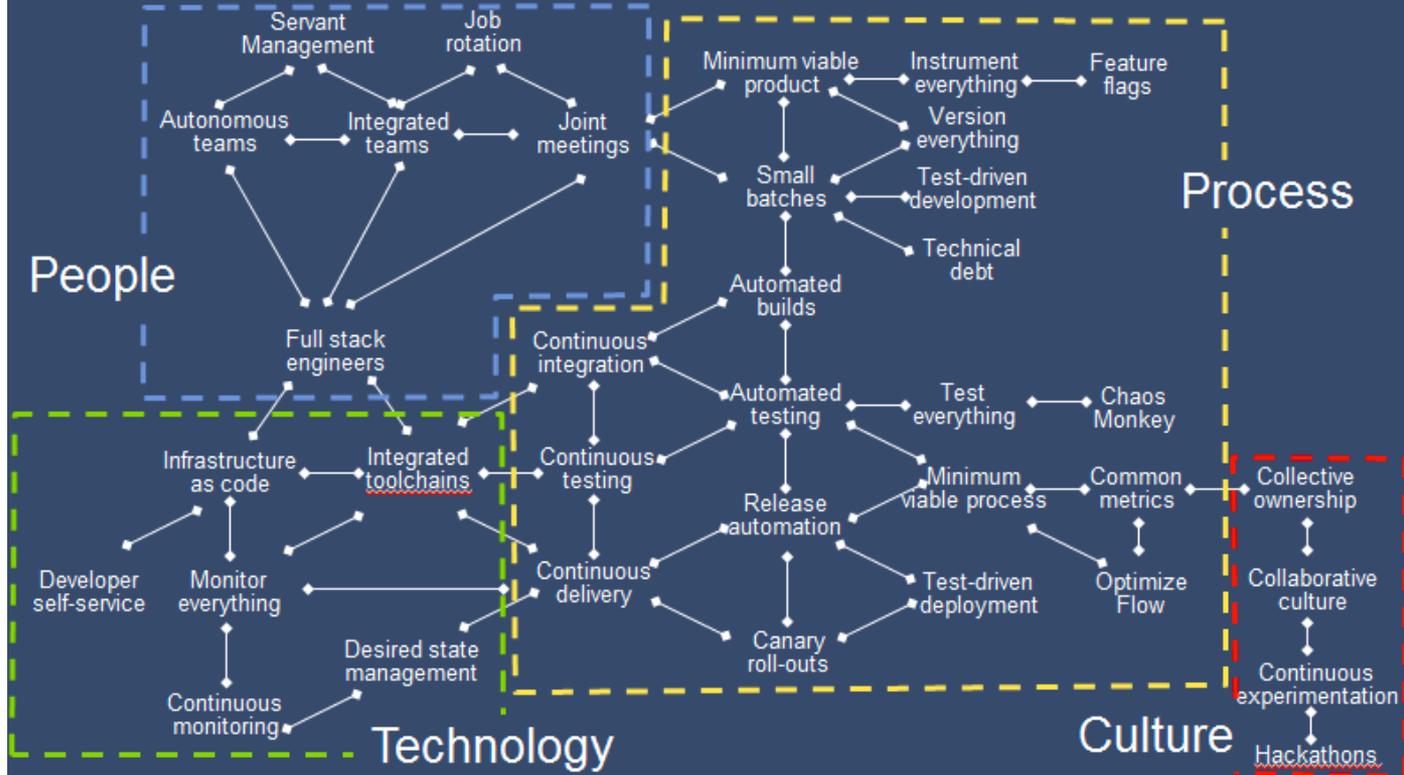
Goals that lead to DevOps

1. Delivering software that runs on the Internet (mobile, web, etc.)
2. The pipeline is the factory, from concept, to code, to production
3. Faster turns, while maintaining quality, uptime, performance
 - Lean approach to entire process
 - Shorten time to customer value
 - Keep the site up, resilience vs. failure

Consequence: requires Development & Operations to combine

Sources: see [The Practice of Cloud System Administration](#), chapter 8 for an in-depth definition and discussion. Also, see Damon Edward's 2012 piece "[Use DevOps to Turn IT into a Strategic Weapon.](#)" Also, [The Phoenix Project](#) for a story of DevOps in the style of [The Goal](#). See also [John's Willis' DevOpsDays Paris talk more technical-based drivers.](#)

Key DevOps Patterns and Practices



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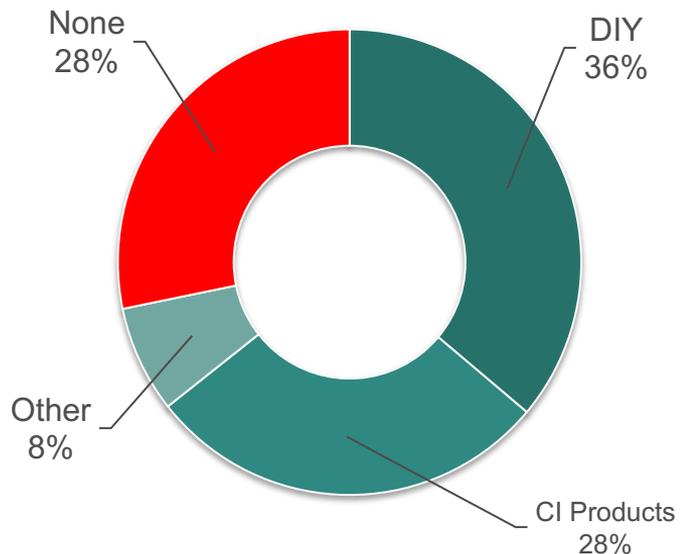
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How's it
going?
dojudj

Adoption is still likely low

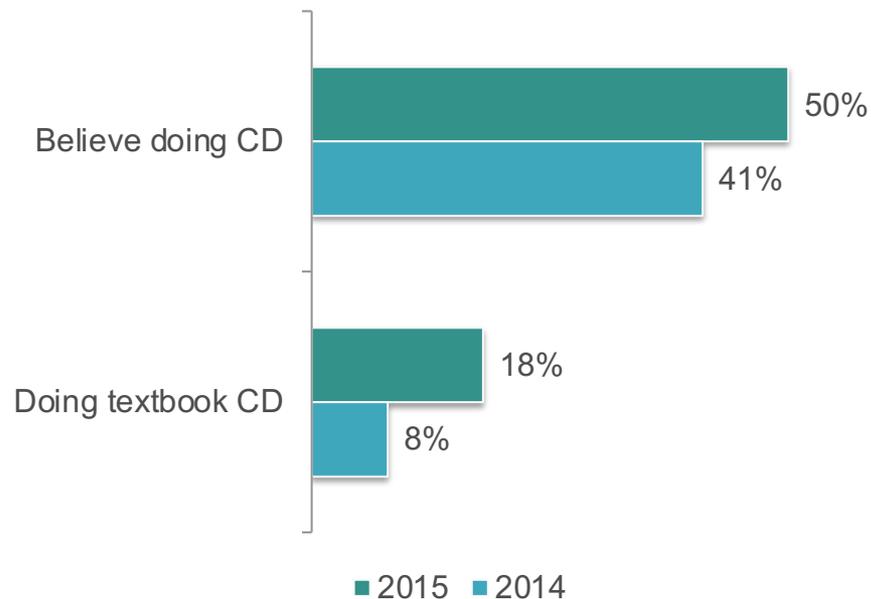
What build automaton or CI/CD tools are you using?

(451 Research study, 2014)



Use of CD is growing

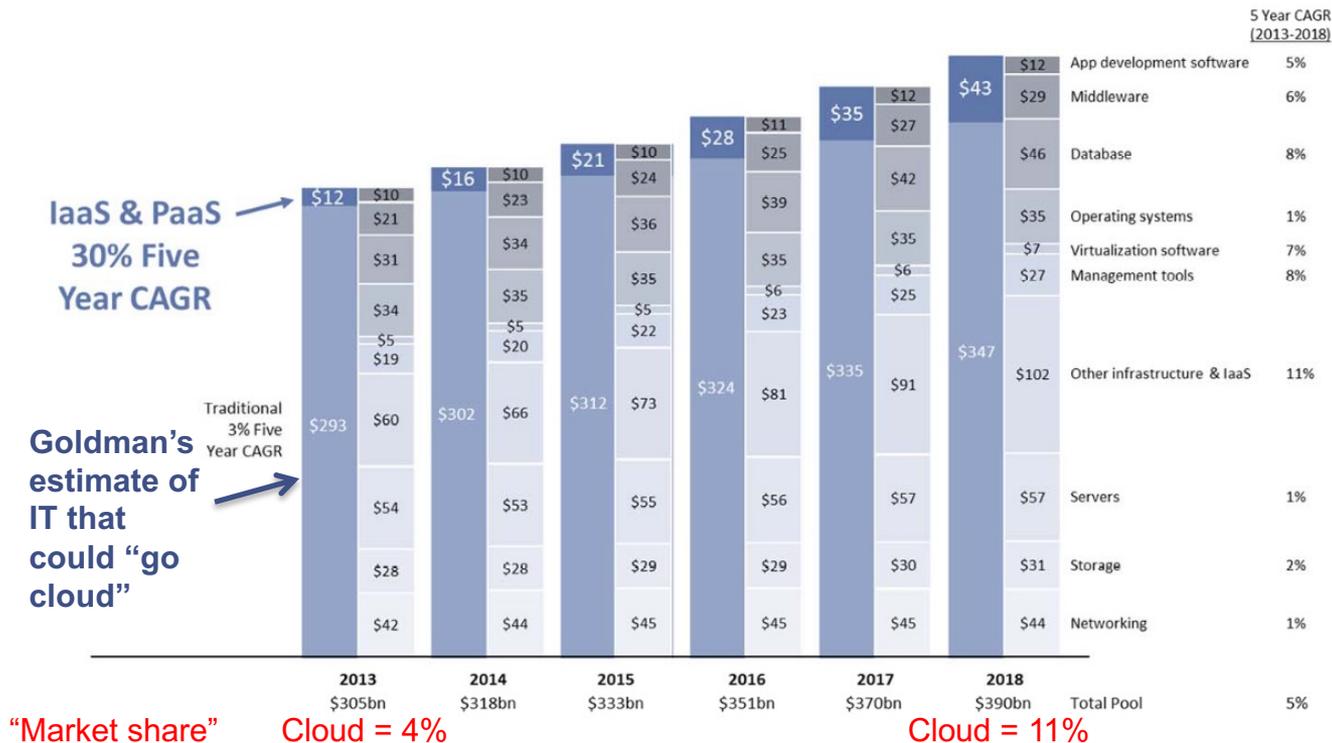
(DZone studies)



Sources: [2014Q1 451 Research DevOps Study](#), n=201. In second study (n=300), 38% used “build and continuous integration tools”; ["DZone's 2014 Guide to Continuous Delivery,"](#) n=500; [The DZone Guide to Continuous Delivery, Vol. 2,](#) Feb, 2015, n=900.

Projections show growth shifting to the new stack

Exhibit 2: Cloud platform TAM and total "pool" of enterprise spend cloud platform vendors can potentially disrupt (\$bns)

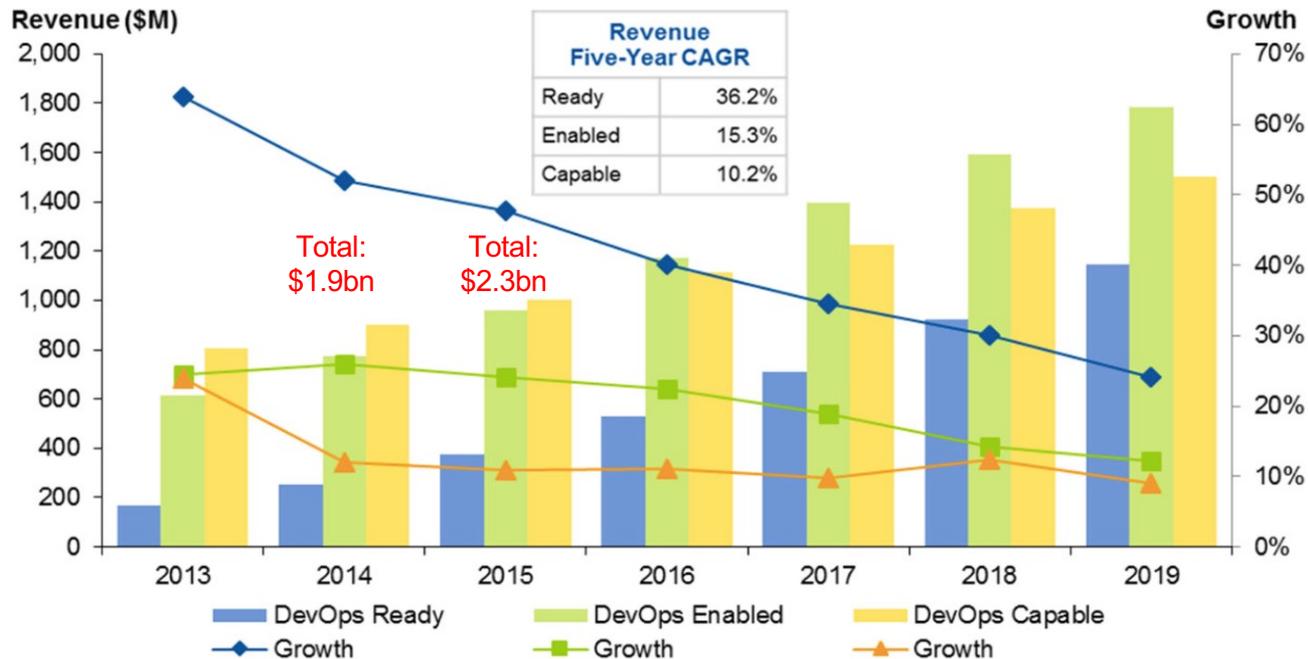


Source: Gartner 4Q14 and December 2014 forecast, Goldman Sachs Investment Research. Traditional includes infrastructure software and data center spend (excluding enterprise communications applications). Note: "Other infrastructure software" includes data integration and data quality tools, security, storage management and IaaS.



Gartner predicts 25% G2000 DevOps penetration by 2016

Figure 2. Estimated DevOps Market Size and Growth for DevOps-Ready, DevOps-Enabled and DevOps-Capable Tools



Sources: [“Market Trends: DevOps — Not a Market, but a Tool-Centric Philosophy That Supports a Continuous Delivery Value Chain,”](#) Gartner, Feb 2015; [“Gartner Says By 2016, DevOps Will Evolve From a Niche to a Mainstream Strategy Employed by 25 Percent of Global 2000 Organizations,”](#) Gartner, March 2015.

Day of the

Donkey

Donkey



“We estimate that, by 2018, 90 percent of I&O organizations attempting to use DevOps without specifically addressing their cultural foundations will fail.”

- [Ian Head, Gartner, April 2015](#)

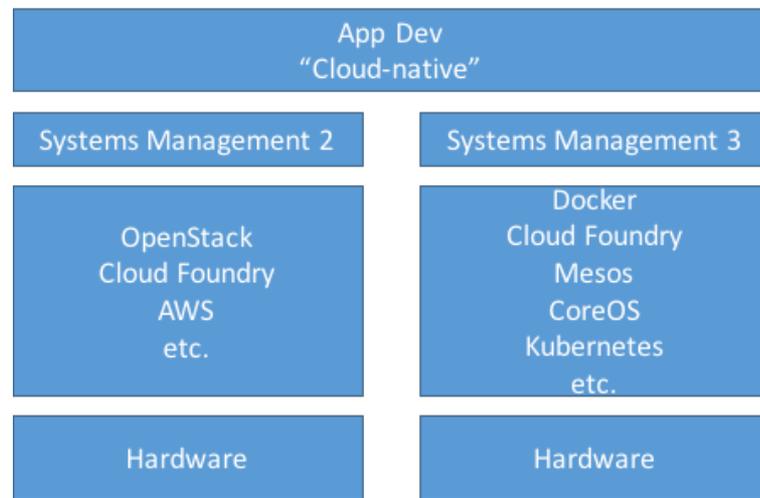
How can we
help?
peibj

Many areas

- Obviously, keep up the “culture” thing, play with “process”
- Providing more examples of company success, esp. horses and donkeys
- Three areas I care about:
 1. Clearly explain how technology enables it all
 2. Work with “legacy”
 3. Keep up the land-grab: product, business, sales, etc.

Clearly explain how technology enables it all

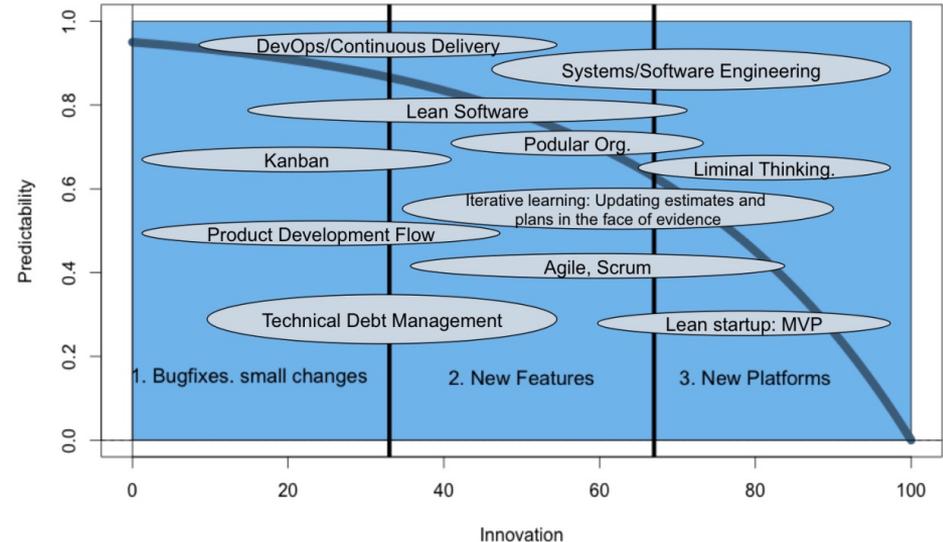
- We get it: tools without culture is bad, survival is not mandatory, and so forth
- Still, you're gonna need:
 - Automation, CI
 - Project management
 - Good dev tools & frameworks
 - A good cloud platform to run it all in
 - What else?



Example of new stacks

Work with legacy code, process, & people

- Horses and donkeys have a lot of existing code
- Develop project approaches, architectural practices, and technologies to work with that legacy code
- Be honest about re-write, don't touch, or careful interop
- Things are crazy out there, you can help



E.g.: Explore/Exploit, bimodal IT, Cutter model, stranglers and SOA-cum-microservices

Keep up the land-grab

- A software defined business sounds like it needs “business”
- How does your company make money? What is the entire value stream?
- How can you program the organization?
- How can it program *you*?



Thanks!

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Slides, free cloud-native book, free PaaS time,
Sputnik give-away, and more

<http://pivotal.io/devopsdays-austin>