

Scaling Agile Is Hard, Here's How You Do It !

Diego Lo Giudice, Vice President, Principal Analyst

April 9, 2014. Optional Conference, Budapest

Agenda

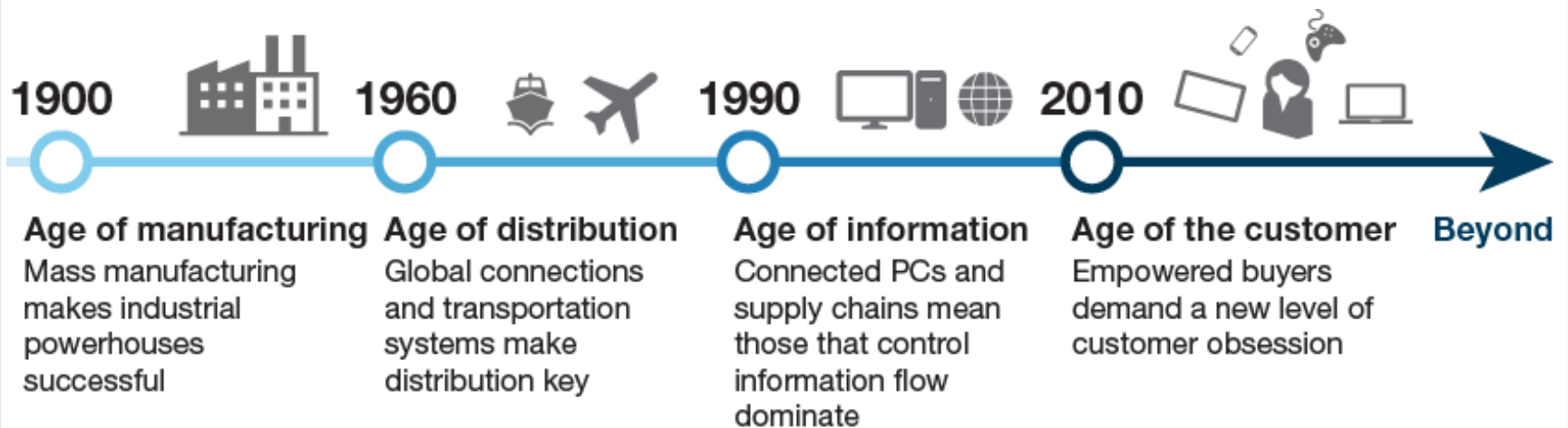
- ▶ *Is Agile still worthwhile?*
- ▶ *How are Organizations Doing It?*
- ▶ *You've adopted Agile in the upstream, what's next? Agile in the downstream*
- ▶ *Key steps to scale your Agile adoption in the age of the customer*

Agenda

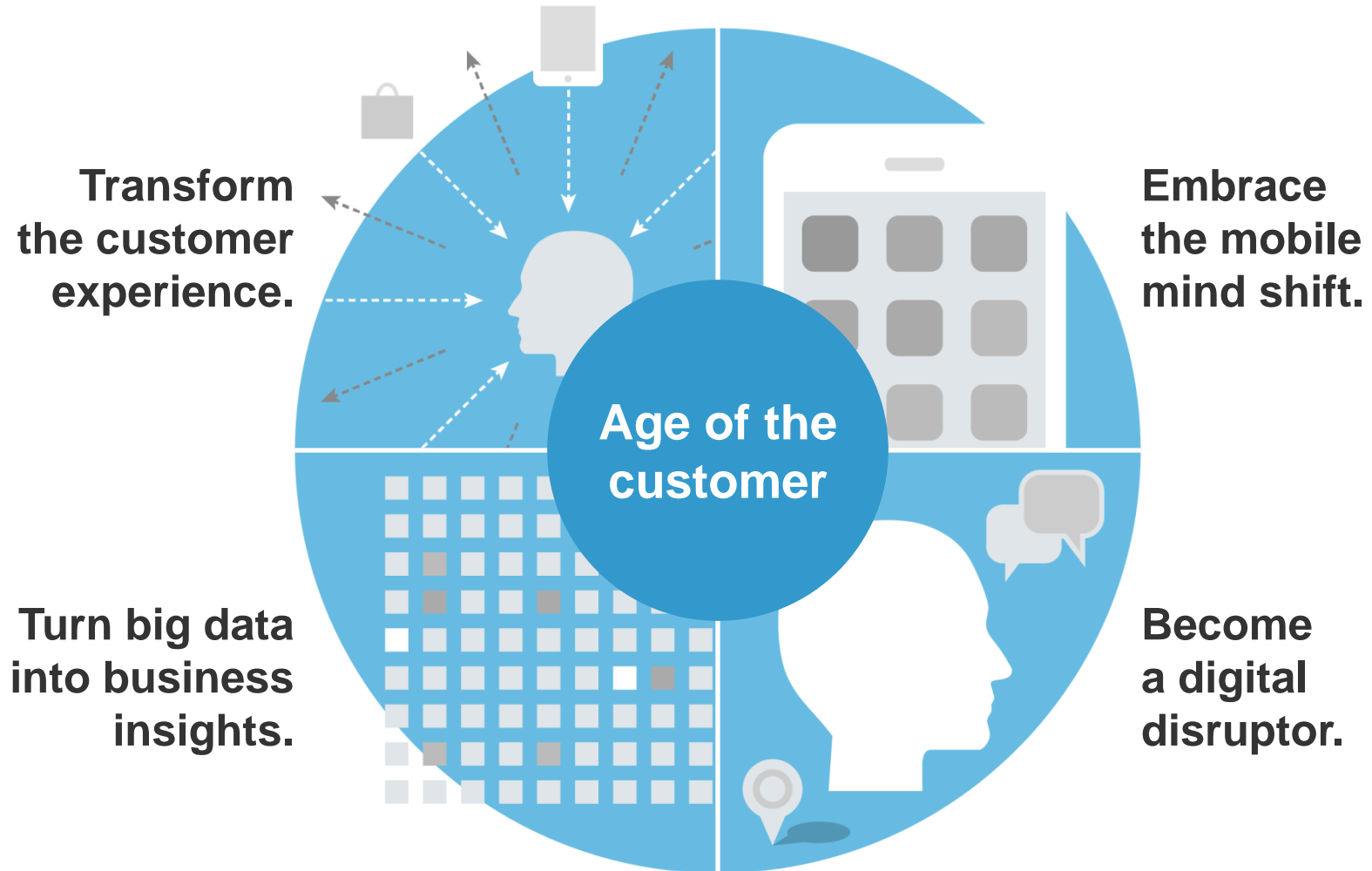
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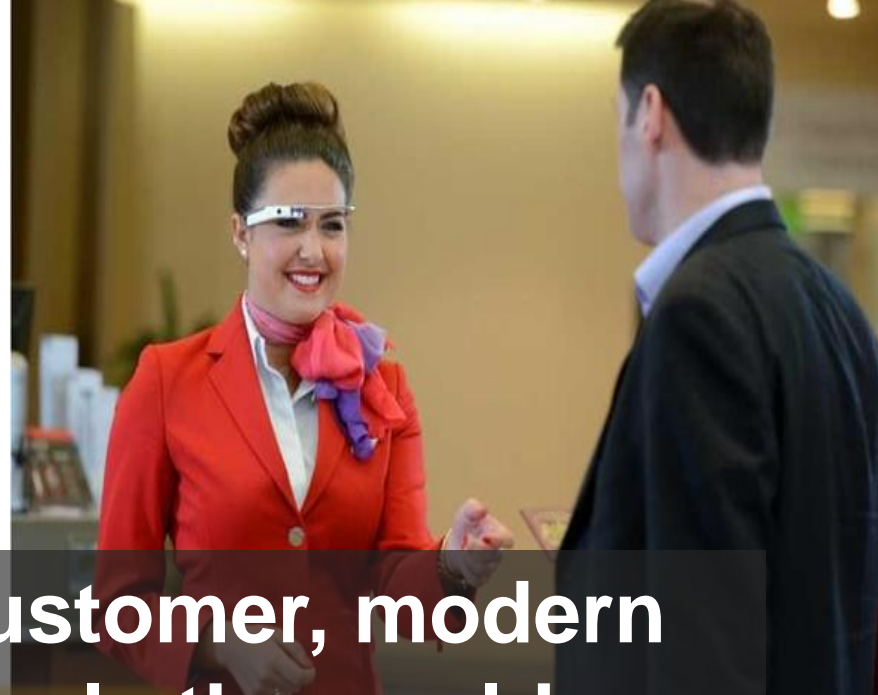


Empowered customers have given rise to a new era

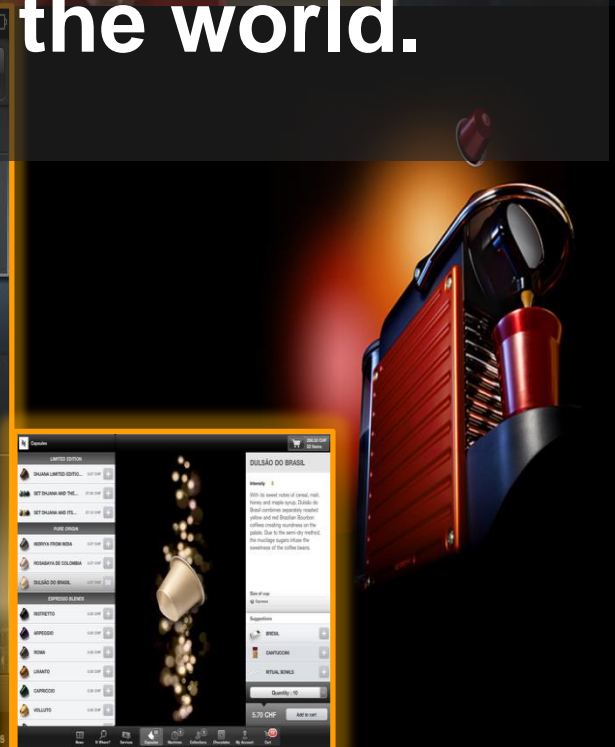


Four market imperatives

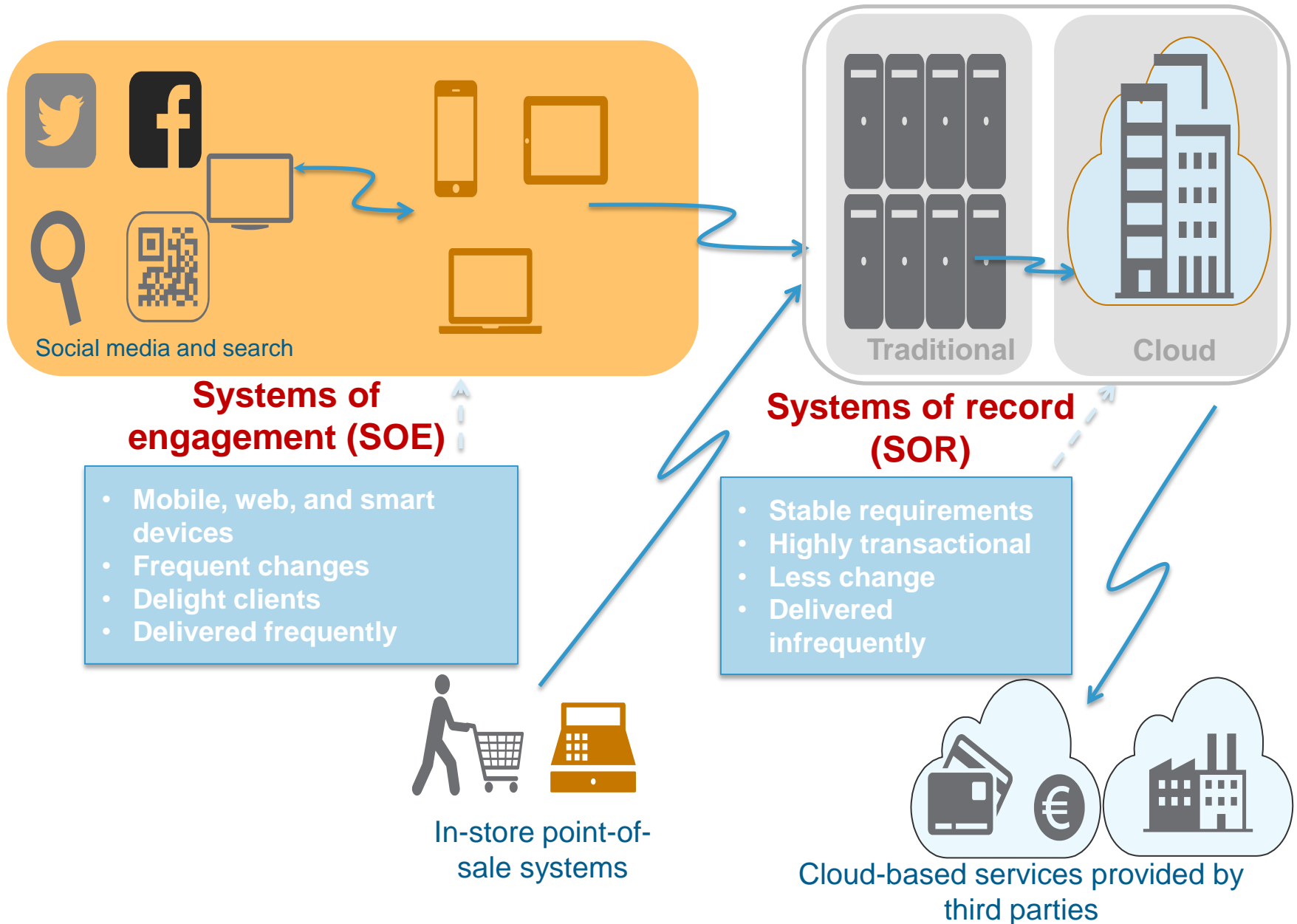




In the age of the customer, modern applications will rule the world.



But what are modern applications?



Modern applications require modern delivery capabilities to . . .

- › Deal with unknown requirements.
- › Deliver software faster.
- › Embed market feedback fast.
- › Improve customer experience.
- › Design and develop great software applications.
- › Keep quality high and test smarter.

Adopting modern management techniques is *a must!*

Agenda

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Forrester Agile Survey, Q3 2013

Directors/managers: 47%
VPs/other execs: 15%

20,000-plus — 40%
5,000 to 19,999 — 11%
1,000 to 4,999 — 19%

Tech industry: 34%
IT end users: 58%
Financial services: 13%
Manufacturing: 8%
Insurance: 7%
Government: 8%
Healthcare: 5%

Base: 149 IT professionals from organizations that are planning to implement or have implemented Agile (percentages do not total 100 because of rounding); Source: Q3 2013 Global Agile Software Application Development Online Survey; *November 2011 Global Agile Software Application Development Online Survey

Agility approaches keep growing

2011*

Scrum: 82%

Lean: 33%

Kanban: 37%

DevOps: 10%

Waterfall: 44%

TDD: 37%

2013

Scrum: 90%

Lean: 48%

Kanban: 42%

DevOps: 22%

Waterfall: 54%

TDD: 27%

Base: 149 IT professionals from organizations that are planning to implement or have implemented Agile (percentages do not total 100 because of rounding); Source: February 5, 2014, "How Can You Scale Your Agile Adoption?" Forrester report; Q3 2013 Global Agile Software Application Development Online Survey; *November 2011 Global Agile Software Application Development Online Survey



**Agile
upstream**

32%*

13%†



**Agile
downstream**

*Do standup, burndown/burnup, and short iterations; product owner; and constant feedback.

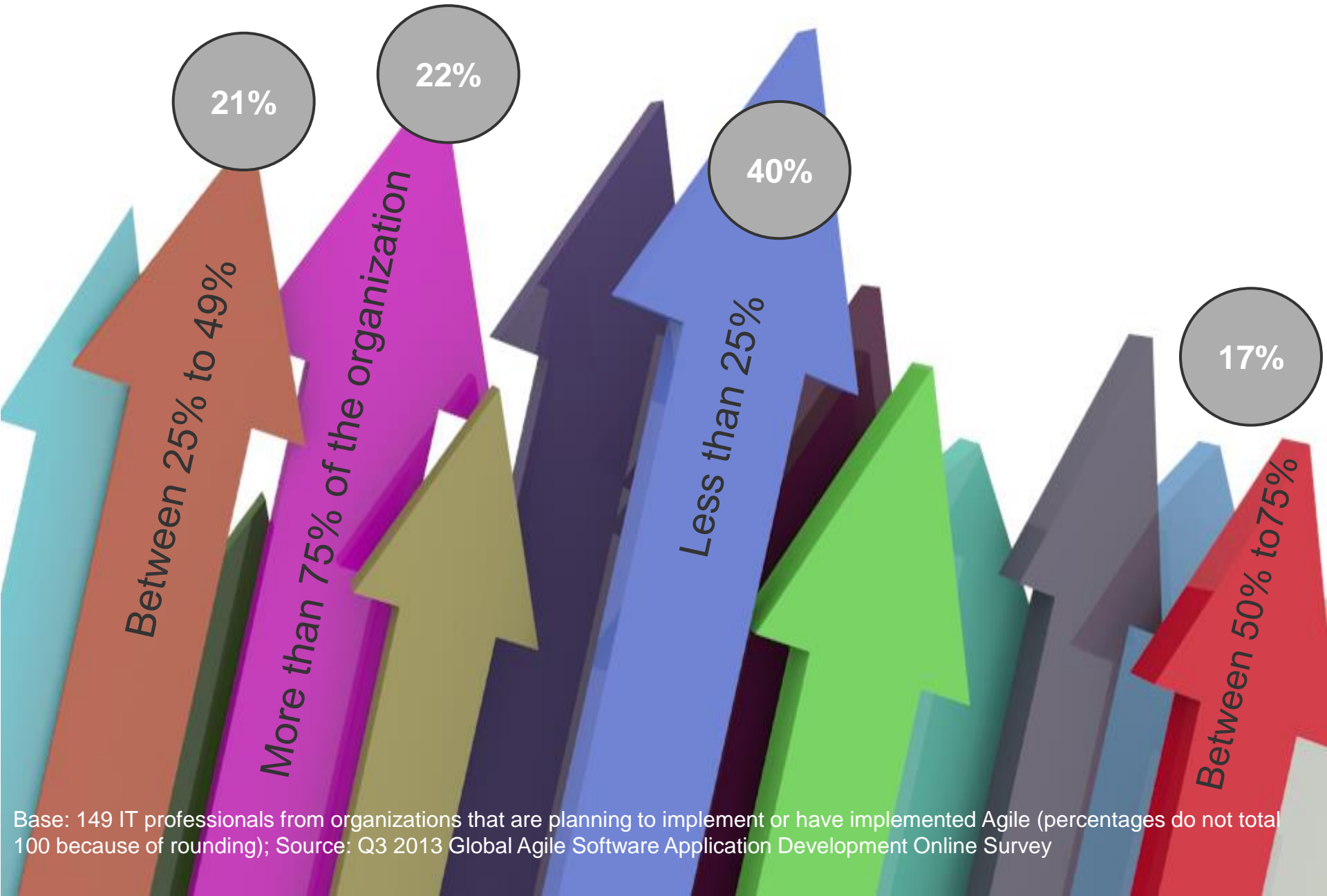
†Do upstream plus continuous integration, continuous delivery, and test-driven development.

Top three expected benefits of Agile meet the upstream of the SDLC and the end-to-end delivery cycle for SOEs

- 
- More opportunities for midcourse corrections: 11%
 - Better business alignment: 20%
 - Greater predictability of releases: 28%

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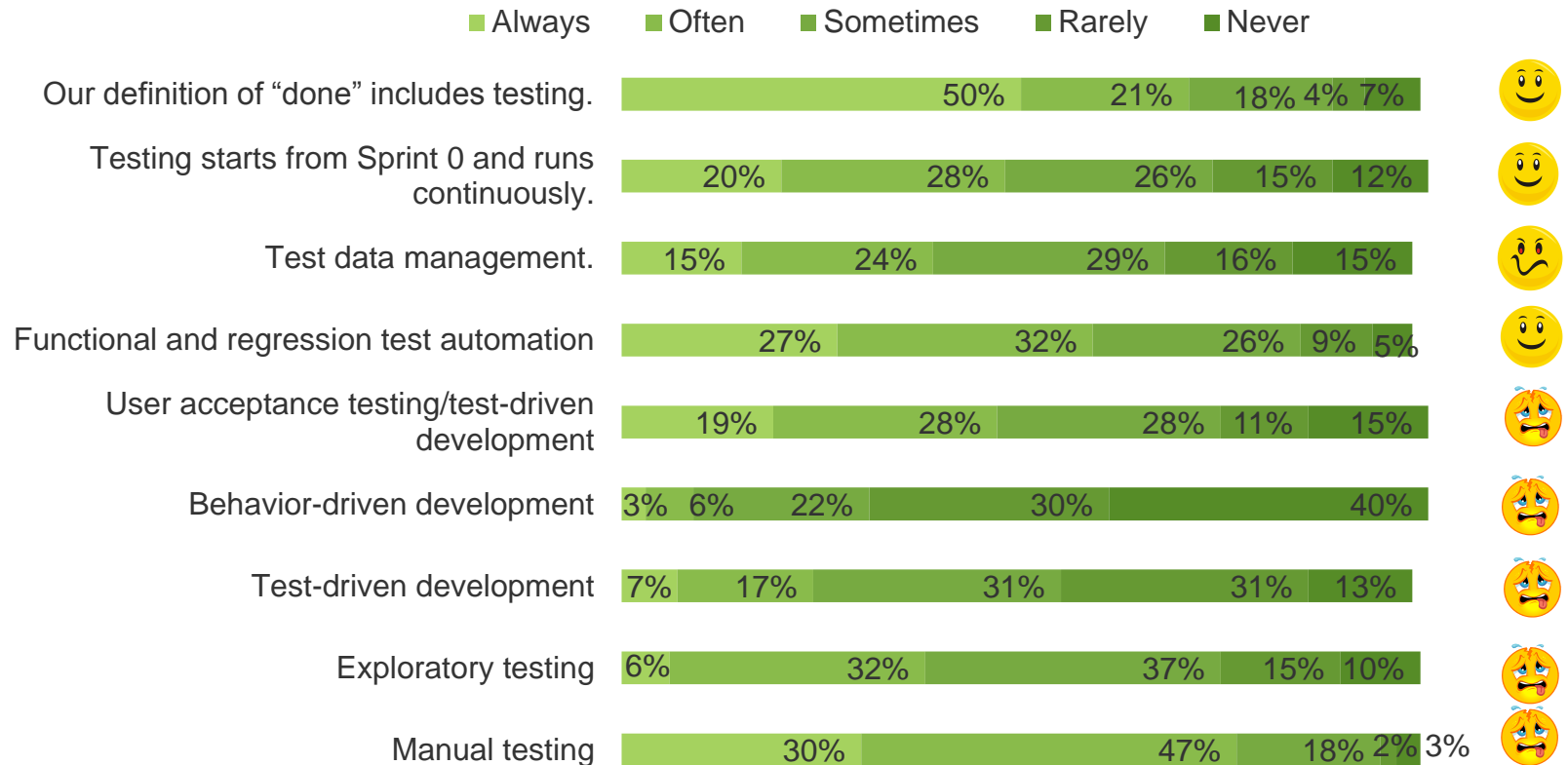
Scaling Agile is hard, but possible



Base: 149 IT professionals from organizations that are planning to implement or have implemented Agile (percentages do not total 100 because of rounding); Source: Q3 2013 Global Agile Software Application Development Online Survey

Agile testing is difficult, and not many do it properly

“How often does your organization execute the following test practices?”

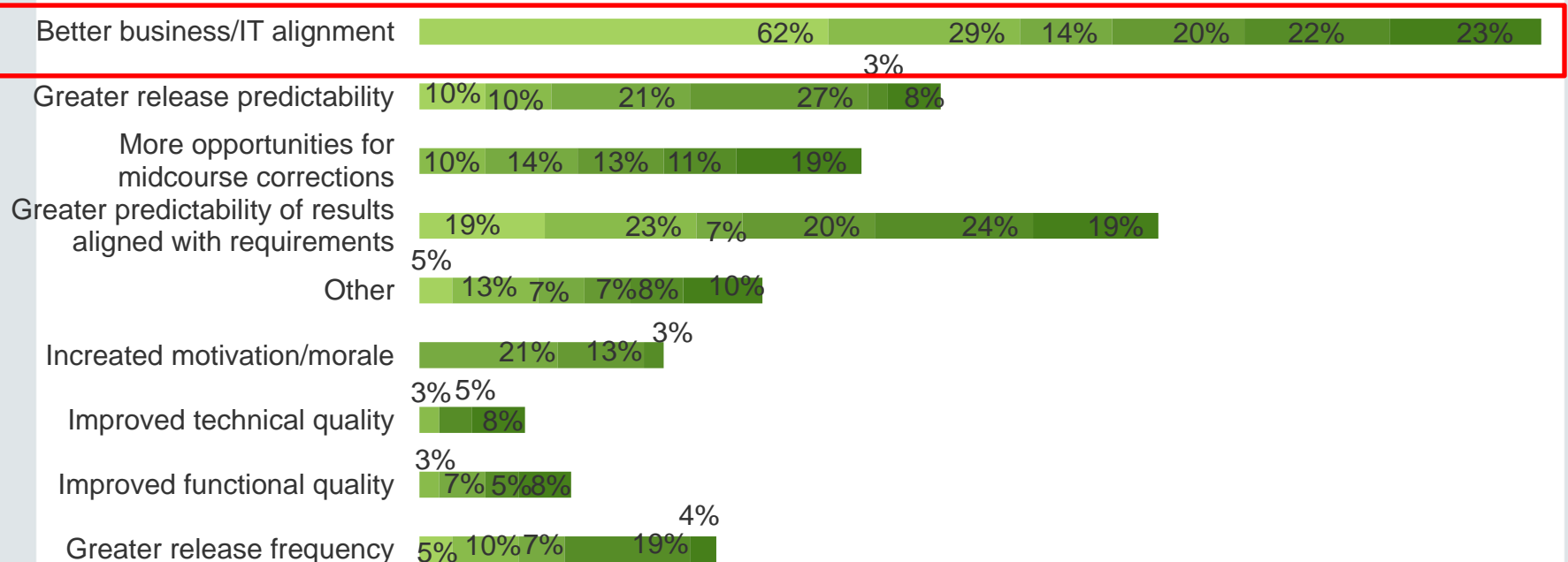


Base: 149 IT professionals from organizations that are planning to implement or have implemented Agile (percentages may not total 100 because of rounding); Source: Q3 2013 Global Agile Software Application Development Online Survey

Getting experienced outside help in form of consulting, coaching, and programming has a positive effect

“What business benefits did your organization expect from each type of Agile SI?”

- I use SIs or consultants that only provide experienced Agile programmers
- I use SIs or consultants that provide overall Agile coaching and programmers
- I use SIs or consultants that provide Agile testing experts
- I don't use SIs for Agile, because I feel they don't have the skills
- I don't use SIs for Agile, because I use Agile only on my differentiating apps
- I don't care what development method my SI uses



Base: 149 IT professionals from organizations that are planning to implement or have implemented Agile (multiple responses accepted)

Source: Q3 2013 Global Agile Software Application Development Online Survey

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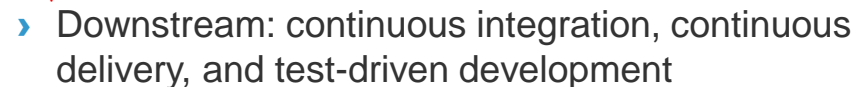
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**We've
clearly not
done
enough!**

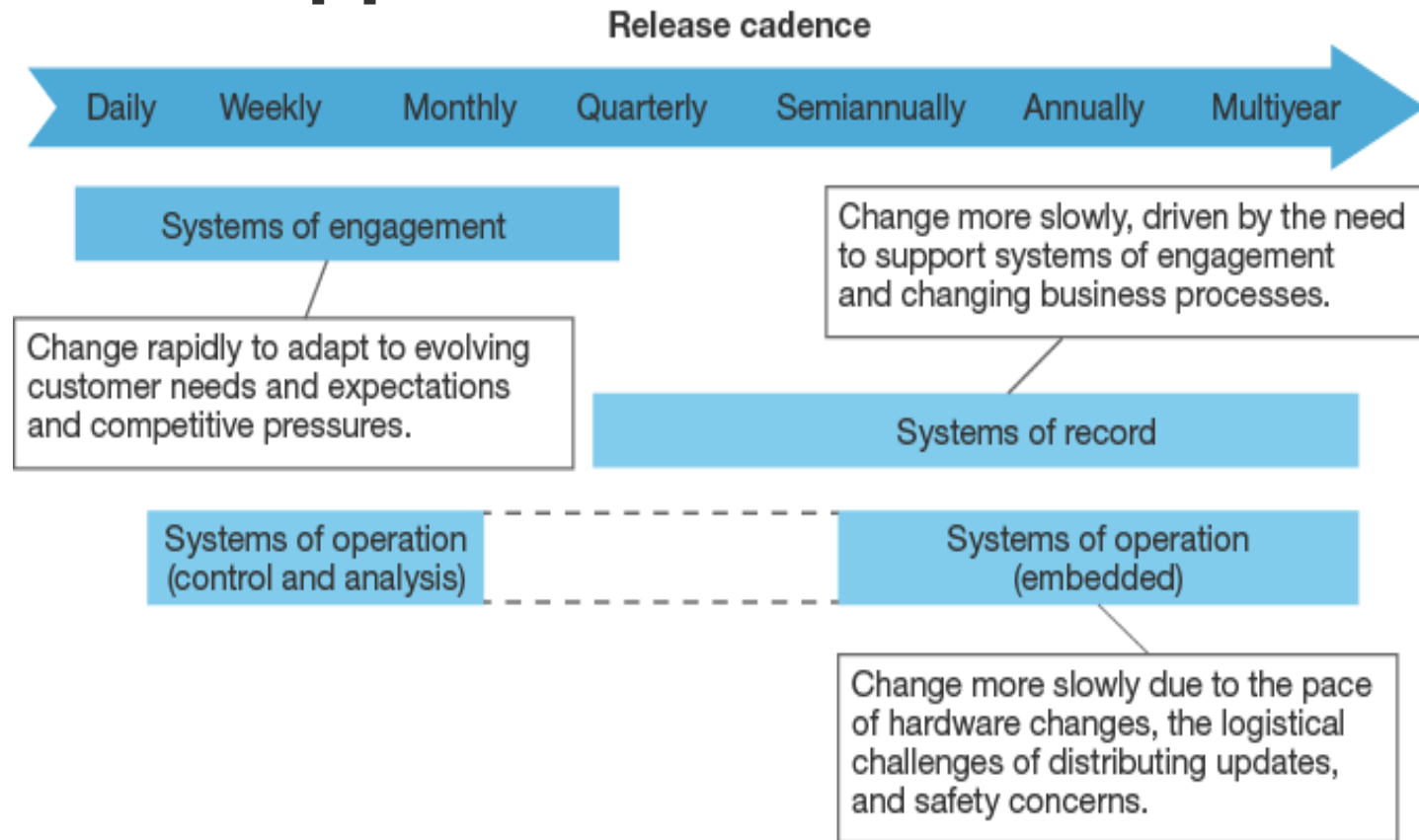


- Upstream: burndown/burnup and short iterations, product owner, and constant feedback

- Downstream: continuous integration, continuous delivery, and test-driven development

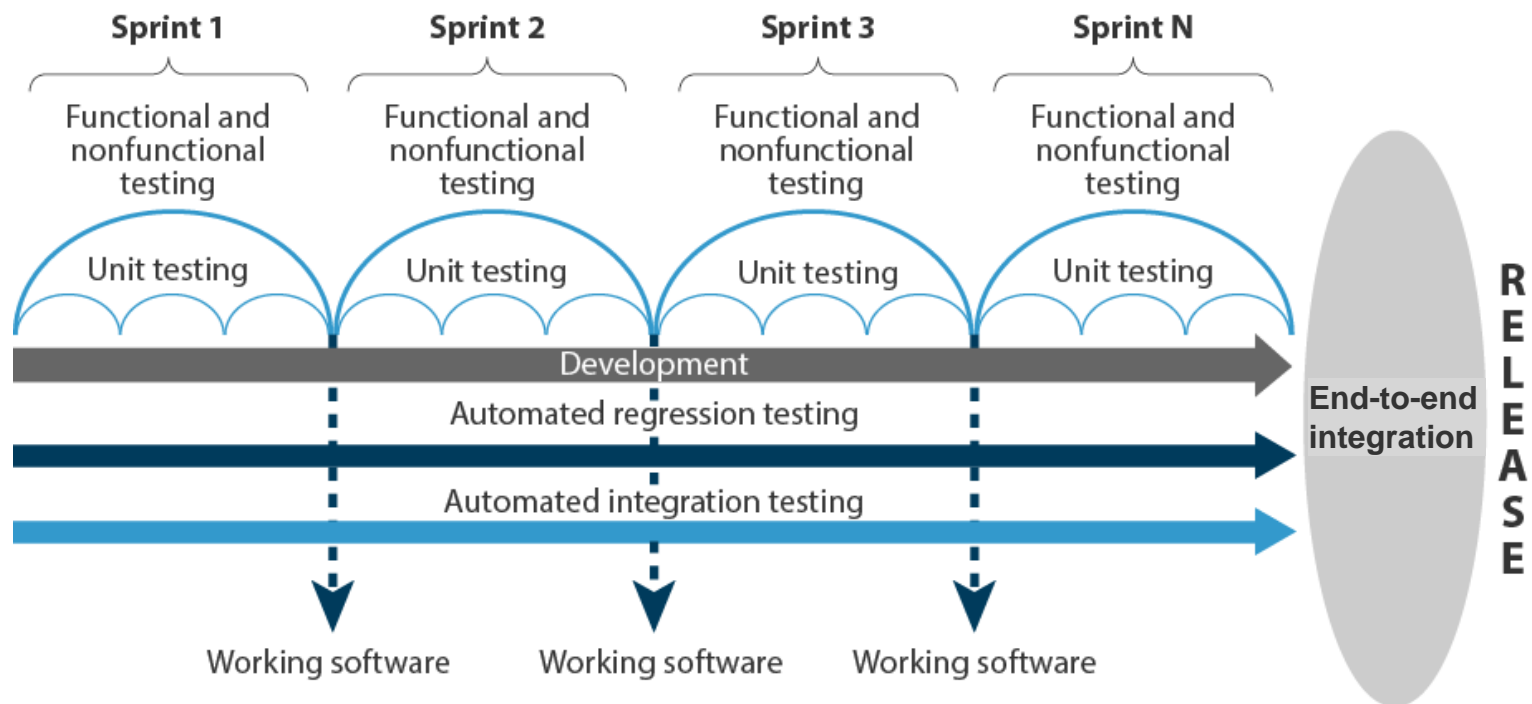


Modern applications need more frequent delivery and Agile in the downstream to make it happen



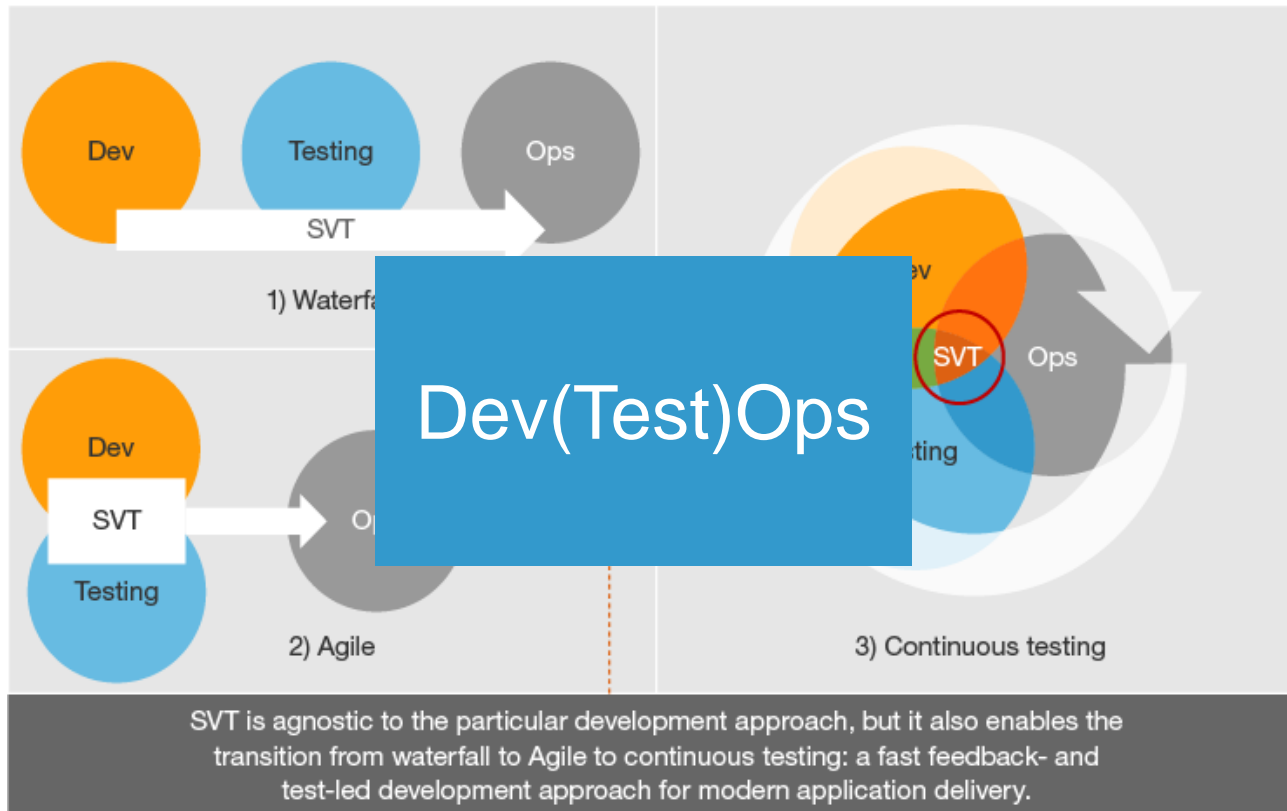
Source: February 12, 2014, "Application Delivery In The Modern Age" Forrester report

For more agility, testing needs to be automated, done continuously, early, and fast!



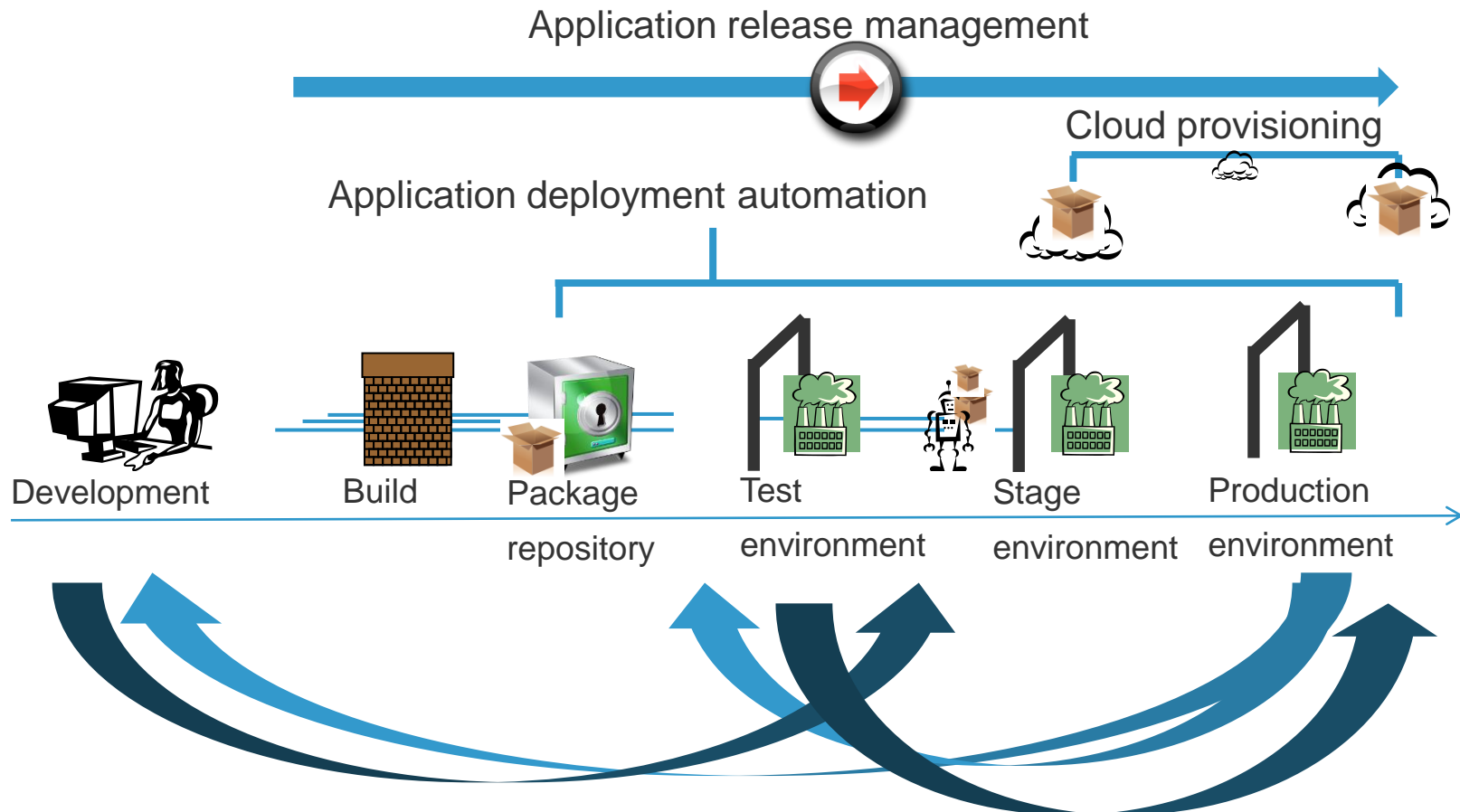
Source: January 15, 2013, “Consistent Performance In Agile Teams Must Include Testing” Forrester report

DevOps to streamline a continuous feedback loop to continuously incorporate client feedback



Source: January 27, 2014, "The Forrester Wave™: Service Virtualization And Testing Solutions, Q1 2014" Forrester report

DevOps needed to optimize and automate the delivery pipeline and throw walls down between dev-test-ops



Source: Forrester adaptation of SVT for dummies

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Scaling Agile: Here's how

32% of companies have some Agile maturity on the upstream side — what Forrester refers to as “Agile PM” (e.g., Scrum). But 13% have also adopted Agile on the downstream side or adopted Agile engineering practices like Agile testing, TDD, continuous integration/continuous development, and other XP practices.

Five Agile upstream must-haves

-  1 Have daily standups to plan and prioritize business value delivery.
-  2 Report status to all stakeholders using burndown/burnup and Kanban boards.
-  3 Put product owners from the business in charge and focus on MVP.
-  4 Break requirements into small chunks; continuously iterate and collect feedback.
-  5 Connect Agile projects to enterprise PMO planning and reporting.

Source intelligently, measure, and improve



Get the skills

If you can't hire for organic growth, find skills elsewhere; 41% of firms that use SIs have more predictable releases.



Measure progress

You can only manage what you measure. Use metrics like predictability, cycle time, percent automated, and number of bugs in production. Constantly review and adjust metrics.



Use value metrics

In the age of the customer, Agile's value is to encourage product owners to use value points to prioritize user stories so developers focus on delivering higher-value software sooner.



Learn to improve

Learning from each part improves the whole. After every step — not just in sprints — stop and ask what went well, what didn't, and what you can do to improve.

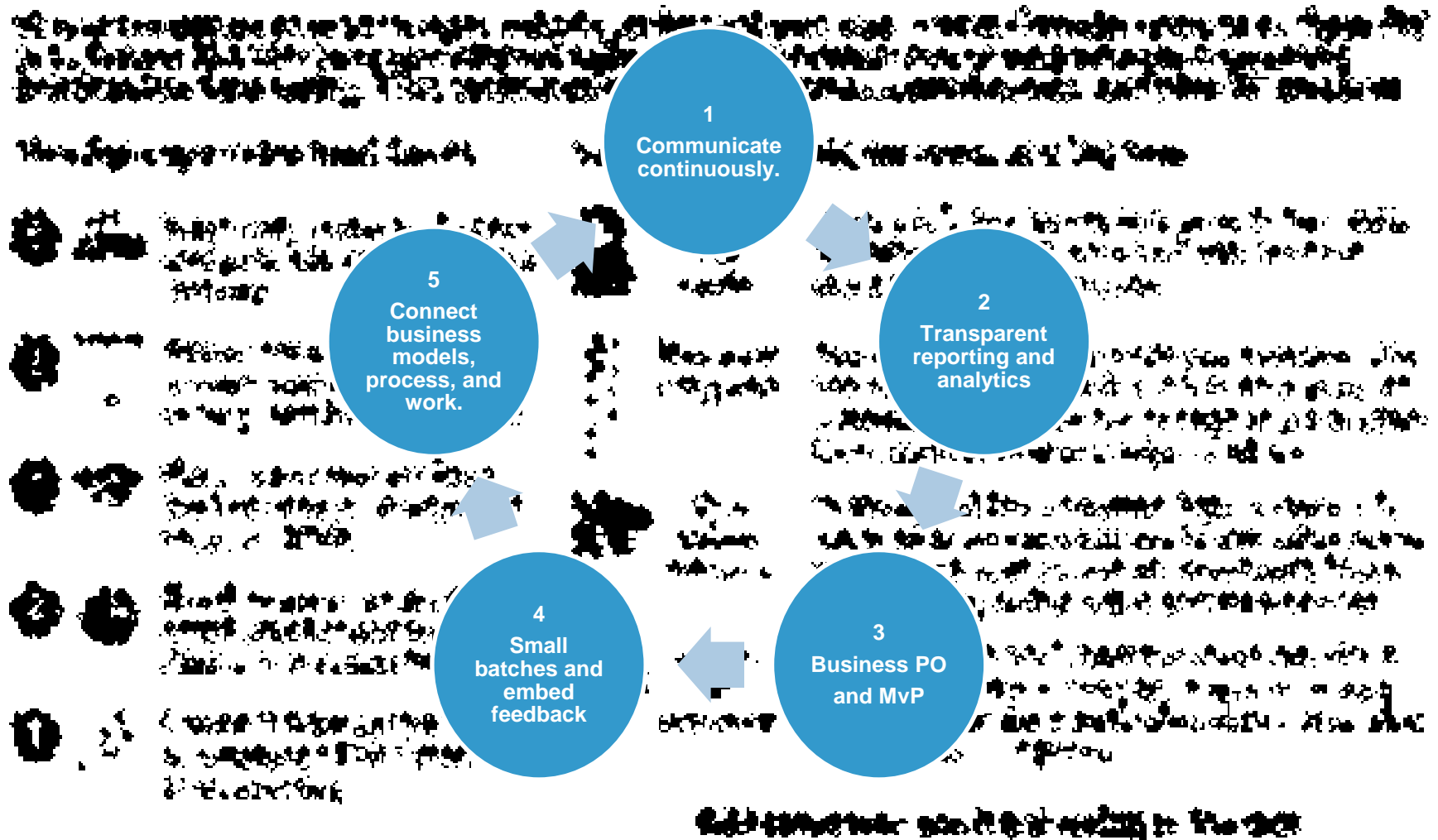
Add some lean startup thinking to the mix!

Base: 148 technology management professionals from organizations that are implementing or have implemented Agile

Source: Q3 2013 Global Agile Software Application Development Online Survey

Source: February 5, 2014, “How Can You Scale Your Agile Adoption?” Forrester report

Scaling Agile: Here's how — five must-haves in the upstream

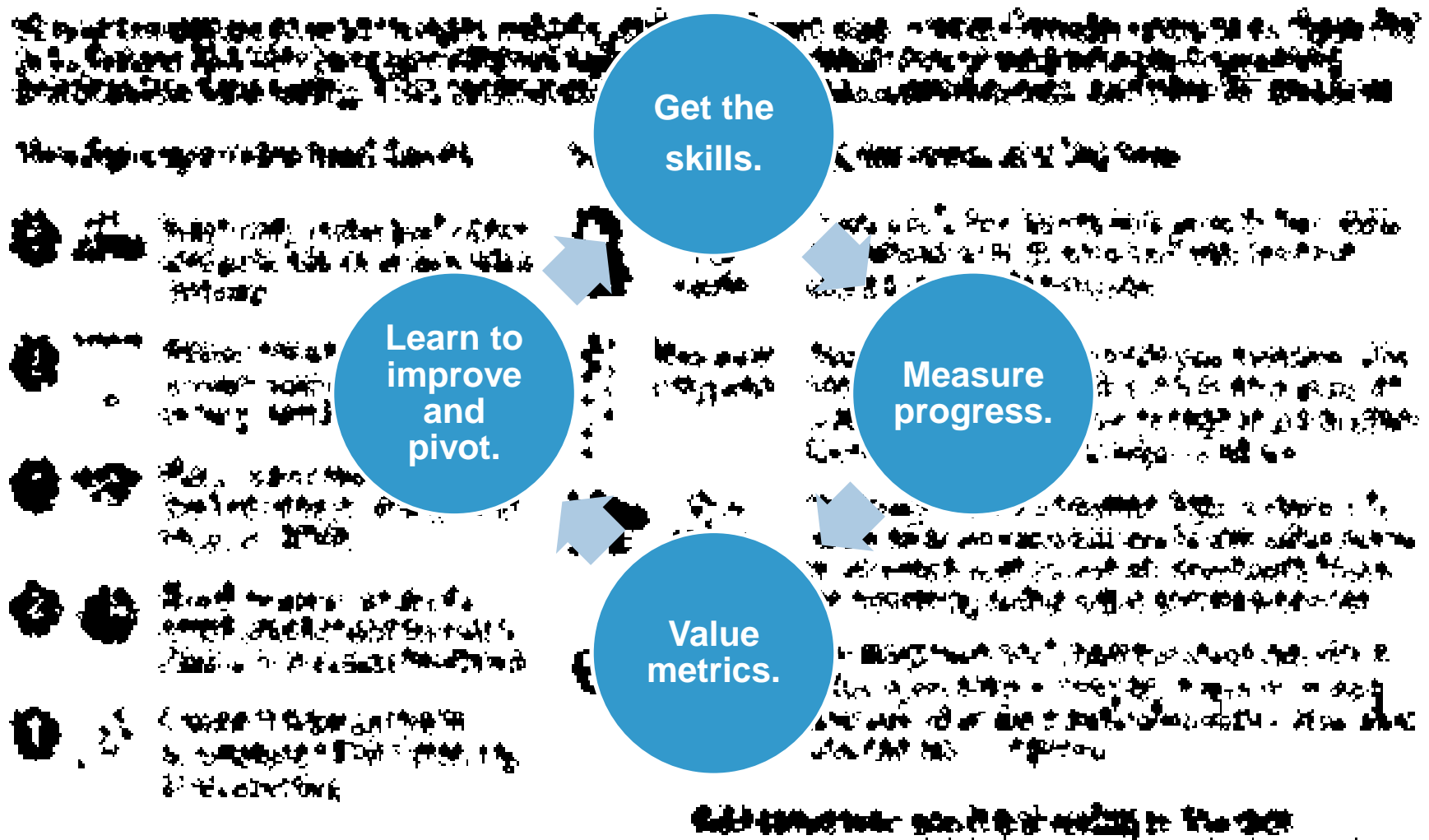


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Source: February 5, 2014, "How Can You Scale Your Agile Adoption?" Forrester report

Scaling Agile: Here's how — source intelligently, measure, and improve



Base: 148 technology management professionals from organizations that are implementing or have implemented Agile

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Source: February 5, 2014, "How Can You Scale Your Agile Adoption?" Forrester report

Scaling Agile: Here's how



Think of Agile as more of a lifestyle than a list of rules. It should permeate daily activities, not just be a static structure with lots of processes that limit people and hinder creativity. You must implement Forrester's five must-haves and iterate through downstream practices.

Integrate Agile downstream practices early on

Do

Martin Fowler says:
"Integrate work frequently — multiple times per day."

20% say that testing always starts from Sprint 0 and runs continuously.

22% practiced DevOps in 2013.



Build and integrate
Build, automate, and commit daily.

Test
Shift to the left; automate unit testing.

Deliver and deploy
Do so daily and automate more.

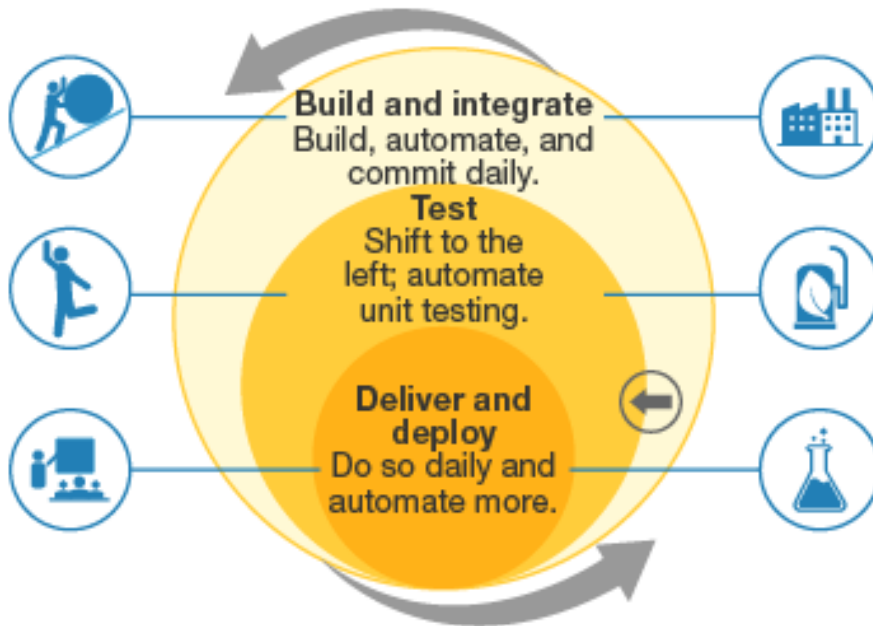


Don't

Forrester says:
"Don't build and integrate manually!"

12% say that testing never starts from Sprint 0 and runs continuously.

10% practiced DevOps in 2011.

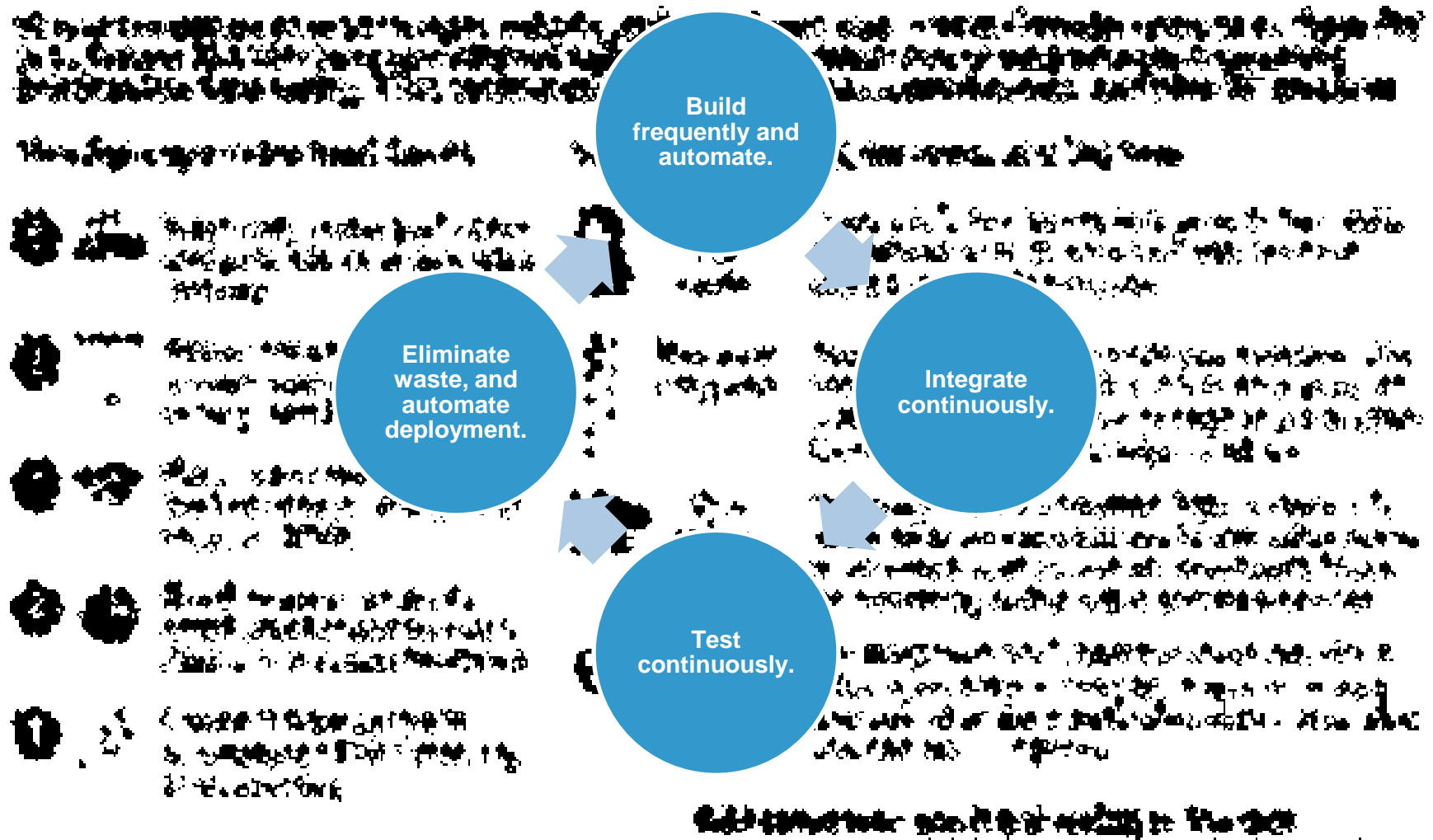


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Scaling Agile: Integrate Agile downstream practices early on



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Modern applications require modern delivery capabilities to . . .

Agile practices:
Scrum and XP

Agile manifesto
and Lean
principles

- › deal with unknown requirements.
deliver software faster.
embed market feedback faster.
improve customer experience.
design and develop great software applications.
- › keep quality high and test smarter.

DevOps:
continuous
testing, CI, and
CD

Lean Kanban:
modern
management

modern management practices.

Lean Kanban:
continuous
improvement

Lean startup:
MvP and
measure-learn-
pivot

Inject more agility in your delivery process in an Agile and Lean way and scale it

- Executive leadership is key. If you don't have it, get it.
- Injecting agility means changing the way people work. Make “change” an explicit goal.
- Assess your Agile results, make the *five must-haves* yours, and balance with downstream Agile early in the program.
 - Upstream: Connect to PPM and architecture.
 - Downstream: Connect to architecture, and adopt DevOps.
 - End-to-end: Include customer feedback in your process.

Inject more agility in your delivery process in an Agile and Lean way and scale it (cont.)

- ▶ Be ready to revolutionize how you (out)source, test, measure, and source new tooling.
- ▶ Take it in small chunks — do it incrementally and iteratively.
- ▶ Scale it where it makes business sense . . . Agile scaling is a journey not your final destination!

Thank you

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Read the following Forrester reports to go deeper on how to scale Agile

- ▶ March 4, 2014, “Modern Application Delivery Drives Digital Business Success”
- ▶ February 5, 2014, “How Can You Scale Your Agile Adoption?”
- ▶ January 27, 2014, “The Forrester Wave™: Service Virtualization And Testing Solutions, Q1 2014”
- ▶ January 15, 2013, “Consistent Performance In Agile Teams Must Include Testing”

Our Agile and Lean Playbook has a wealth of additional information on Agile

FOR APPLICATION DEVELOPMENT & DELIVERY PROFESSIONALS

The Agile And Lean Playbook

The screenshot shows a web browser window with the Forrester Research website. The search results are filtered by 'Date Range' (Past 6 months (3), Past 12 months (5), Past 18 months (11)), 'Role' (Application Development & Delivery (27), Enterprise Architecture (2), Sourcing & Vendor Management (1)), 'Methodology' (Forrsights For Business Technology (4), Total Economic Impact (TEI) (1)), and 'Analyst' (Diego Lo Giudice (19), Jost Hoppermann (4), Boris Evelson (2)). The search results list several reports, including 'REPORT: Agile Metrics That Matter' by Diego Lo Giudice, 'REPORT: Navigating The Agile Testing Tool Landscape' by Diego Lo Giudice, and 'REPORT: Consistent Performance In Agile Teams Must Include Testing' by Diego Lo Giudice. A red box highlights the 'REPORT: Navigating The Agile Testing Tool Landscape' entry. A blue callout box is overlaid on the bottom left of the screenshot.

REFINE YOUR RESULTS

Date Range
Past 6 months (3)
Past 12 months (5)
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REPORT: Agile Metrics That Matter
Benchmarks: The Agile And Lean Playbook
Diego Lo Giudice | September 9, 2013
Tomorrow's great application development and delivery (AD&D) leaders will be those who focus on delivering constant value and incremental improvement to their businesses. As changes to development...
Downloads: 339 | Rating: ★ ★ ★ ★ ★

REPORT: Navigating The Agile Testing Tool Landscape
Revamp Your Testing Tool Strategy For Agile Development
Diego Lo Giudice | July 18, 2013
As your developers shift to Agile practices, they will invariably perform more testing themselves. So where does that leave your quality assurance (QA) professionals? They need to adapt by getting...
Downloads: 333 | Rating: ★ ★ ★ ★ ★

REPORT: Consistent Performance In Agile Teams Must Include Testing
Performance Management: The Agile And Lean Playbook
Diego Lo Giudice, Margo Vestal | January 15, 2013
...testing, including what practices to use, what skills...
...ation, and how to leverage testing tools. Testing is a...

REPORT: Survey Results: How Agile Is Your Organization?
Diego Lo Giudice | April 30, 2012
Downloads: 42

Vendor
IBM (1)
Microsoft (1)
Wipro (1)

And soon coming Modern Application Delivery Playbook: Agile, ALM, Continuous Delivery. Stay tuned!