

Making Leaders Successful Every Day



Application Delivery Needs More Agility

Key Application Development Trends To Get There.

For **IBM**  The future of Software Delivery – Global Insights

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Forrester Research

November 2012, Melbourne - Sydney

For the first time in 8 years, CEOs identify technology as the most important external force impacting their organizations

71%

Technology

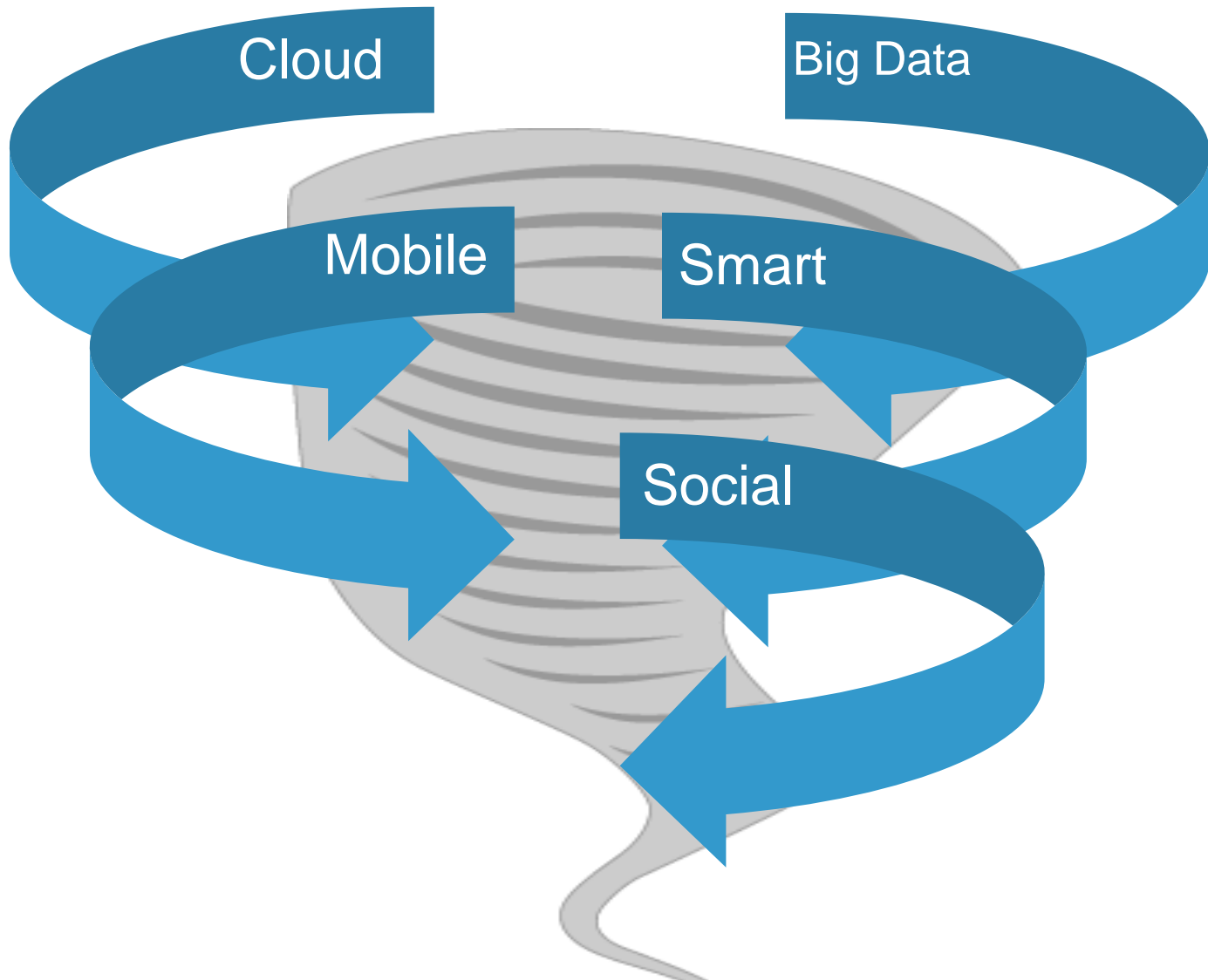
69%

People Skills

68%

Market Factors

Source: IBM Institute For Business Value - Leading Through Connections 2012 – Insights from global CEO study. 1709 CEOs Interviewed.

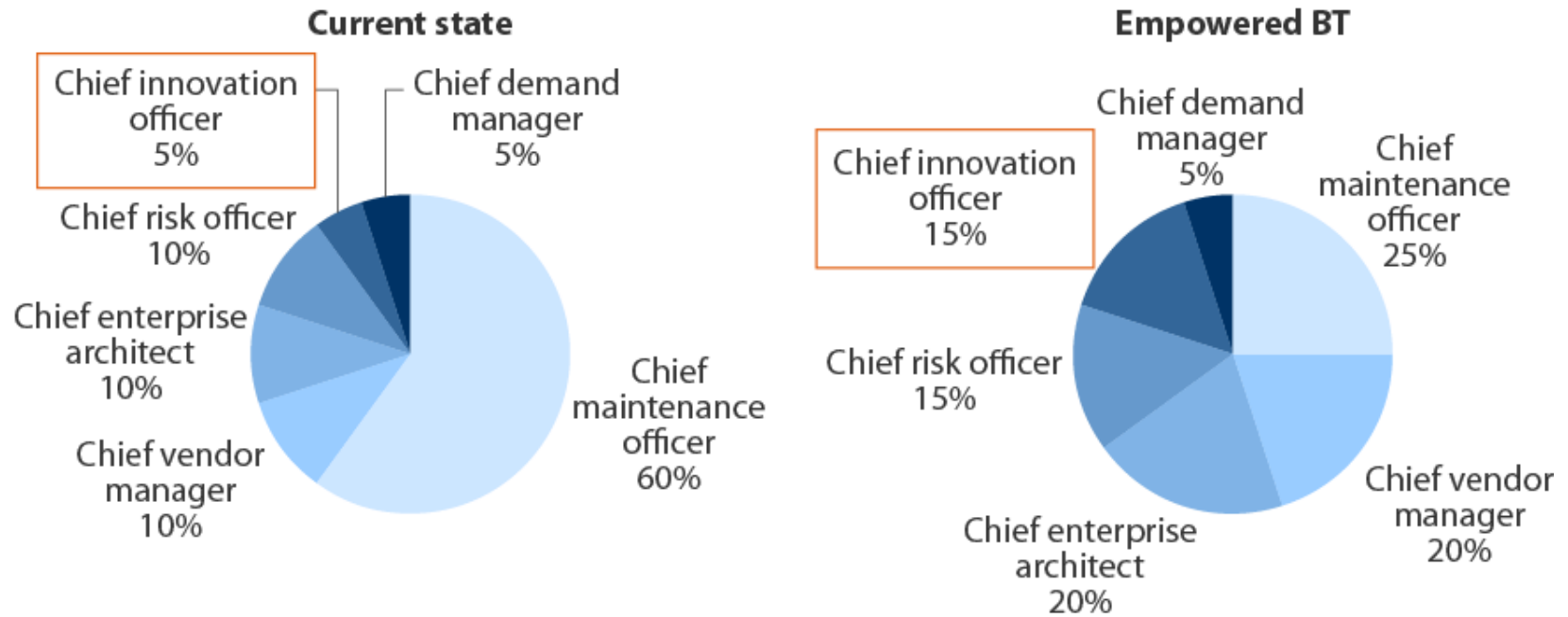


A Technology Storm Changing Your Business
As Well As Your IT !

Agenda

- › **Systems of Engagement: The source of Application Delivery Change**
- › **Why Agile is the right answer**
- › **Holistic Change needed to Achieve Agile results**

CIOs will triple the time spent on innovation



The biggest innovation comes from Systems of Engagement



Customers



Partners



Employees



Smart products

TAKE AWAY Nr1:
“One Size Application Delivery Approach Won’t Fit All”

- Serving customer, partners, and employees
- Enabled by smartphones, tablets, and smart products
- Focused on in-the-moment tasks and decisions

- Delivering in an individual’s personalized context
- Providing analytics-driven experiences
- Leveraging social and cloud technologies

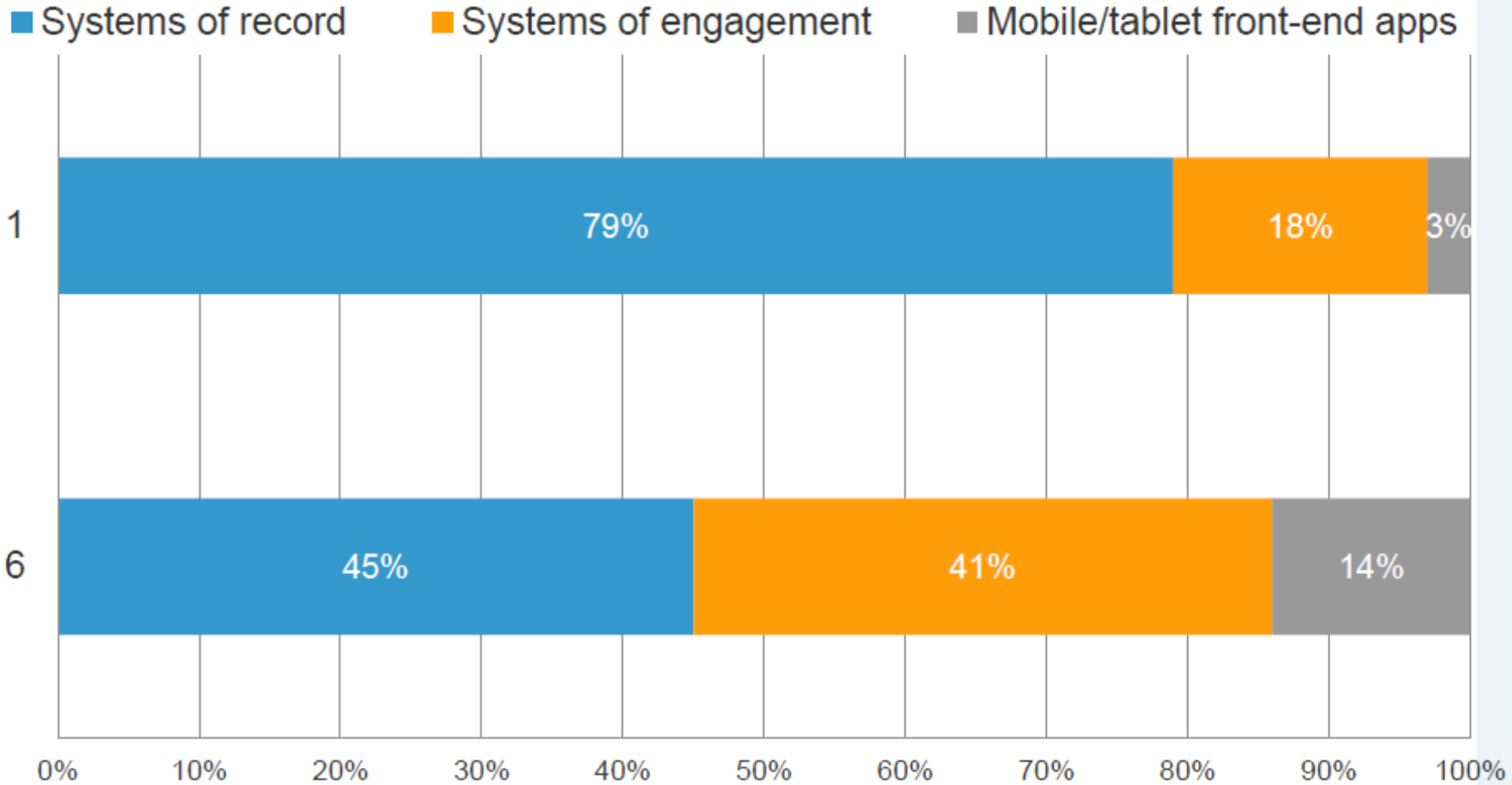
Systems of record host processes

- Targeting employees
- Supported by ERP packages and large databases
- Recording transactions and accounting data as part of core business processes
- Maintain state, status, and history

**Short, Frequent,
Iterative,
Delivery Cycles**

Long Development and Deployment Cycles

Changing face of IT spending (Forrester Estimates)

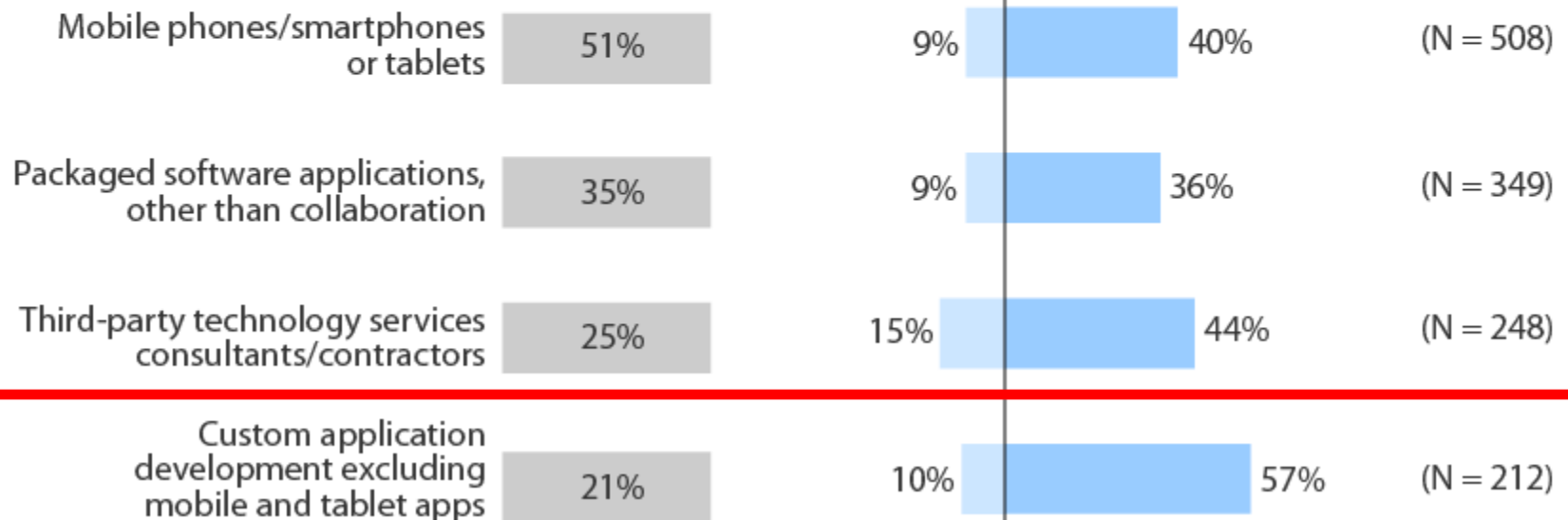


Systems Of Engagement Increase The Need Of Custom Application Development

9-1 Executives spend their department's money directly on a range of technologies and services

"Which types of technology do you expect your group/department will directly purchase in 2012?"

"How do you expect your group's/department's spending on the following technologies and services to change in 2012?"



Base: 1,004 North American and European business decision-makers in firms with 1,000+ employees

Source: Forrsights Business Decision-Makers Survey, Q4 2011

May 2012 "Forrsights: Business Execs Increase Direct IT Spend To Support Systems Of Engagement"

But So Does Mobile (Cont.)

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Decrease Increase

Mobile/tablet application development 20%

6% 73% (N = 197)

Technology staff that reports directly into you

(N = 200)

**TAKE AWAY Nr2:
The New Normal: Custom Applications Grow vs
Packaged Apps**

Business process outsourcing 57% (N = 152)

Applications or infrastructure outsourcing 13%

9% 53% (N = 135)

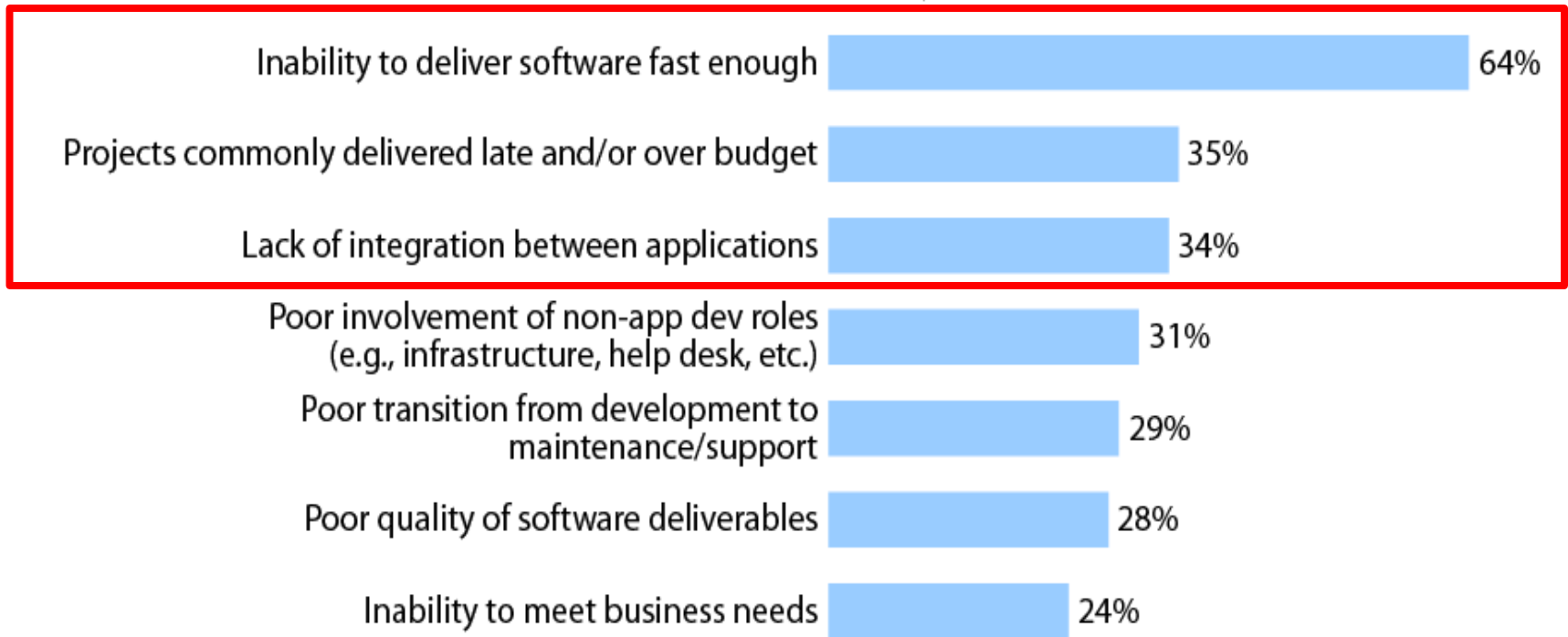
Base: 1,004 North American and European business decision-makers in firms with 1,000+ employees

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But Sadly...IT has challenges coping with pre-digital disruption, with digital disruption can only get worse.....

“What problems do your current application development and project management organizational structures cause?”

(Select all that apply)

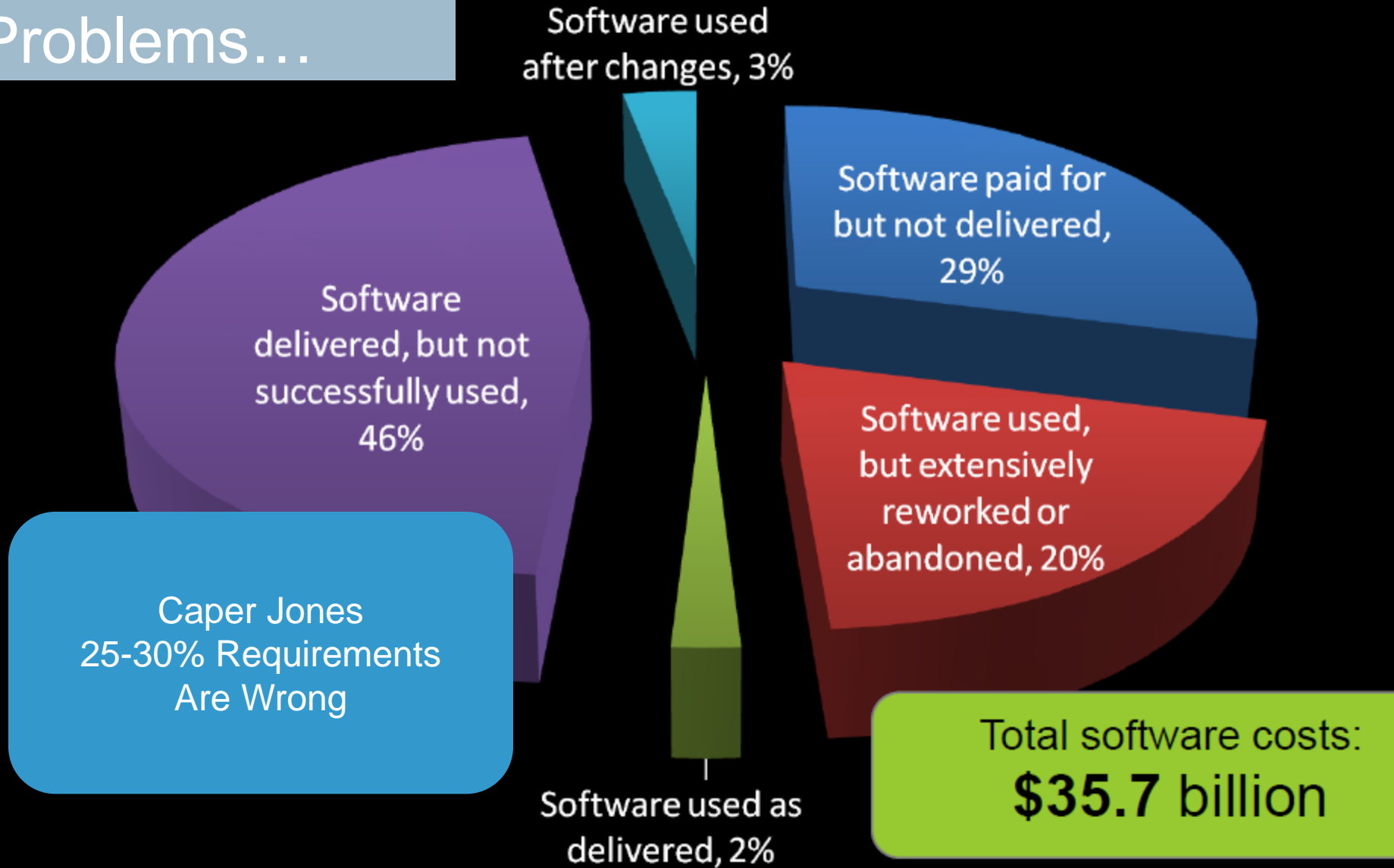


Base: 105 professionals directly involved with the development or support of software applications

Source: Q1 2011 Global Application Development And Delivery Organization Structure Online Survey

App Quality?
Huge
Problems...

The result



The way forward for ***ANY*** IT Application Delivery Organization is to focus on these themes

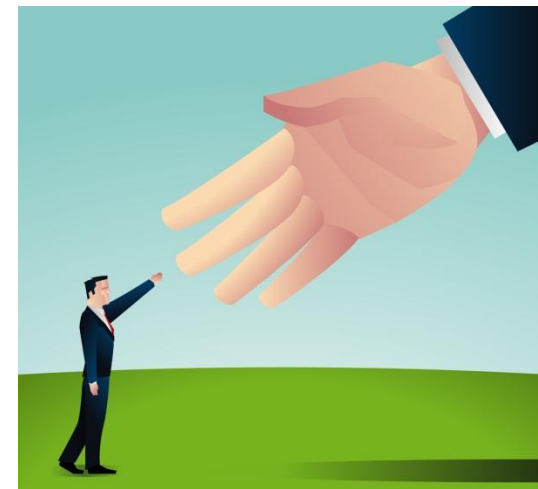
Take
Away
3



Increased velocity



Quality !



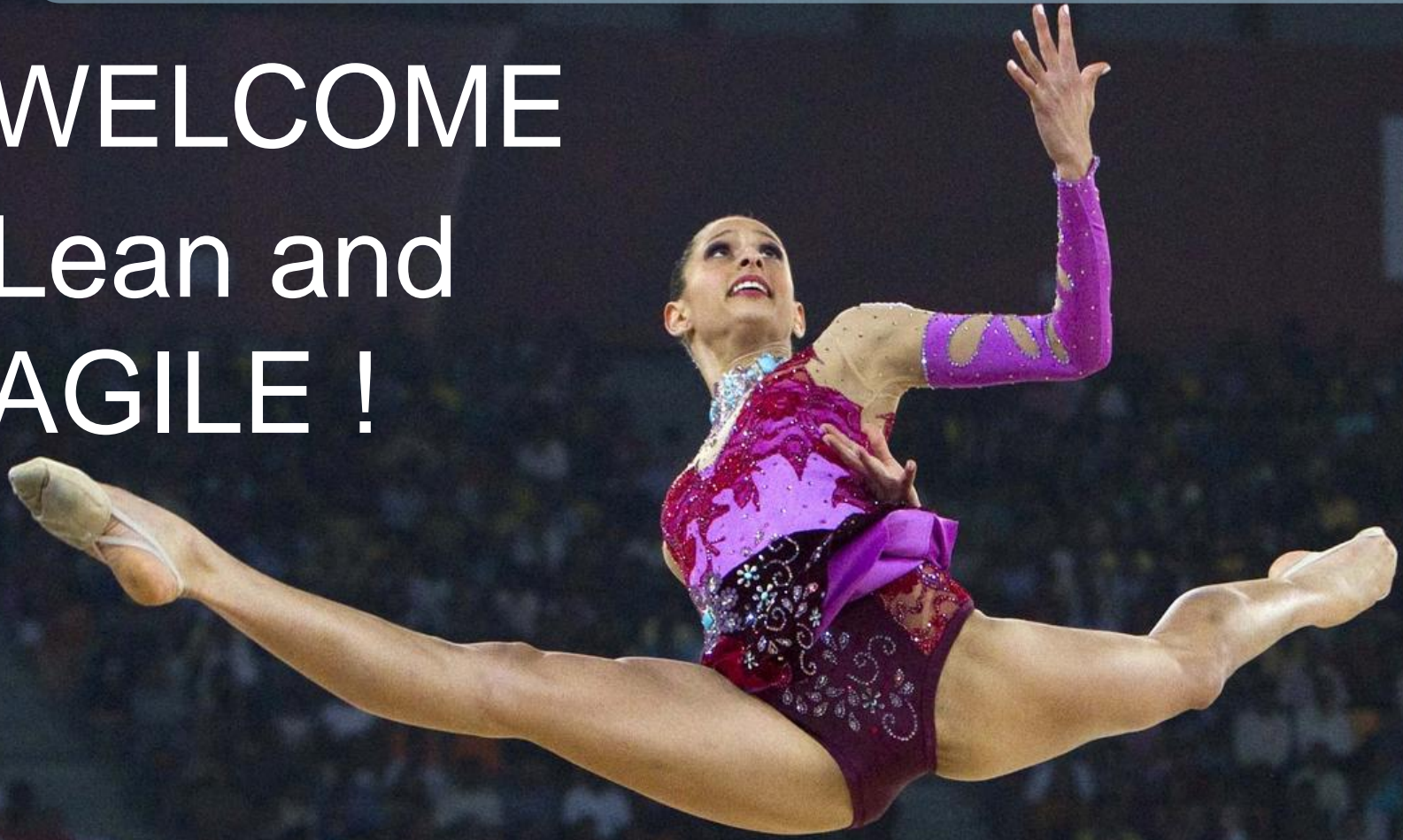
Collaboration



Adaptability

“There is always a better way to do things, and currently, Agile is the best way!” Forrester Research - Justify Agile with shorter, faster, development. February 2012.

**WELCOME
Lean and
AGILE !**



Data Shows Quality, Change, Speed are top claimed benefits for Agile

“What are the perceived benefits in your organization of using Agile?”
(Select up to three)



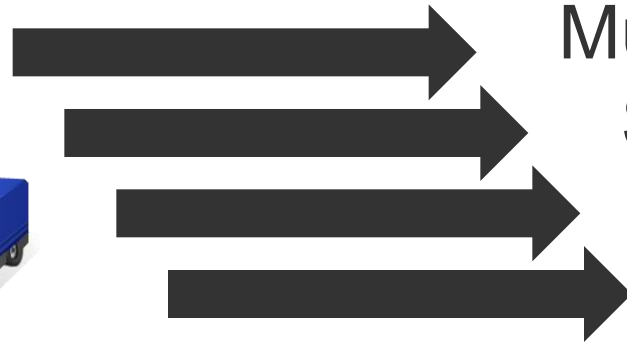
Base: 205 IT professionals from organizations that are implementing or have implemented Agile
(multiple responses accepted)

Breaking larger problems in smaller ones: easier to manage, forecast and measure



One large, monolithic project

TO



Multiple releases

Smaller increments

Fewer features

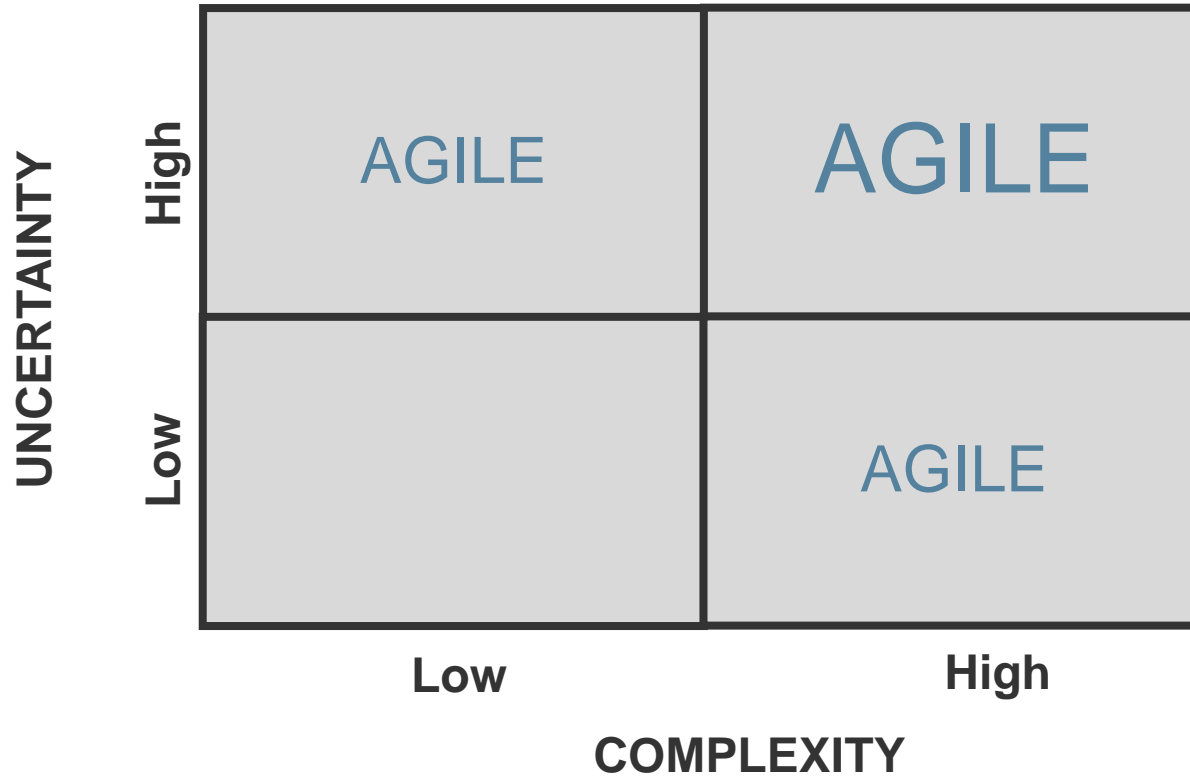
Higher quality

Faster delivery by getting the “Right Things” done



- › **Continuous Business Feedback**
- › **Short Iterations**
- › **Focus on Minimal Viable Products**
- › **Cross Functional Teams**
- › **Automate Core Development and Delivery Steps**
- › **....**

Agile Development is a great way to address innovating “differentiating” Applications. . .

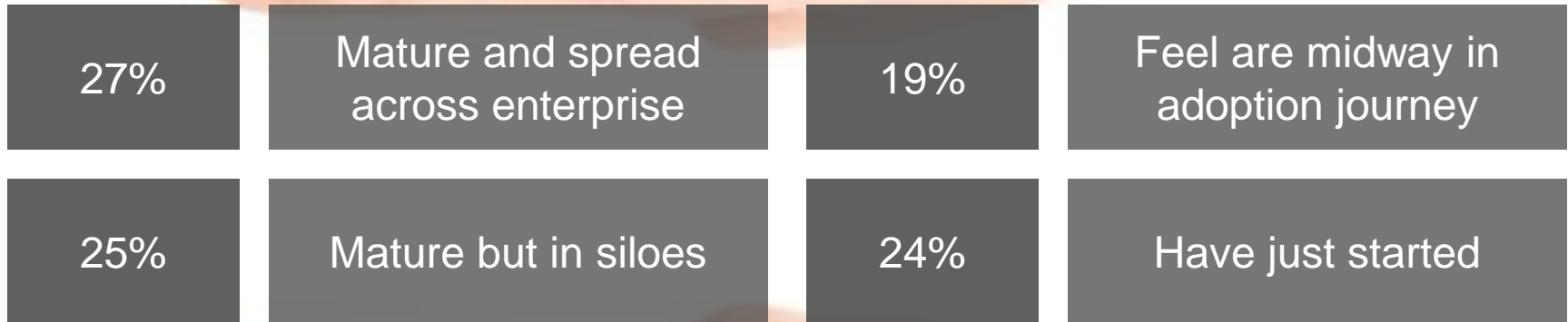


Agile practices' sweet spot: Innovations that involve a lot of unknowns and unclear upfront requirements.

Agile adoption is in good health, but scaling Agile is another story...

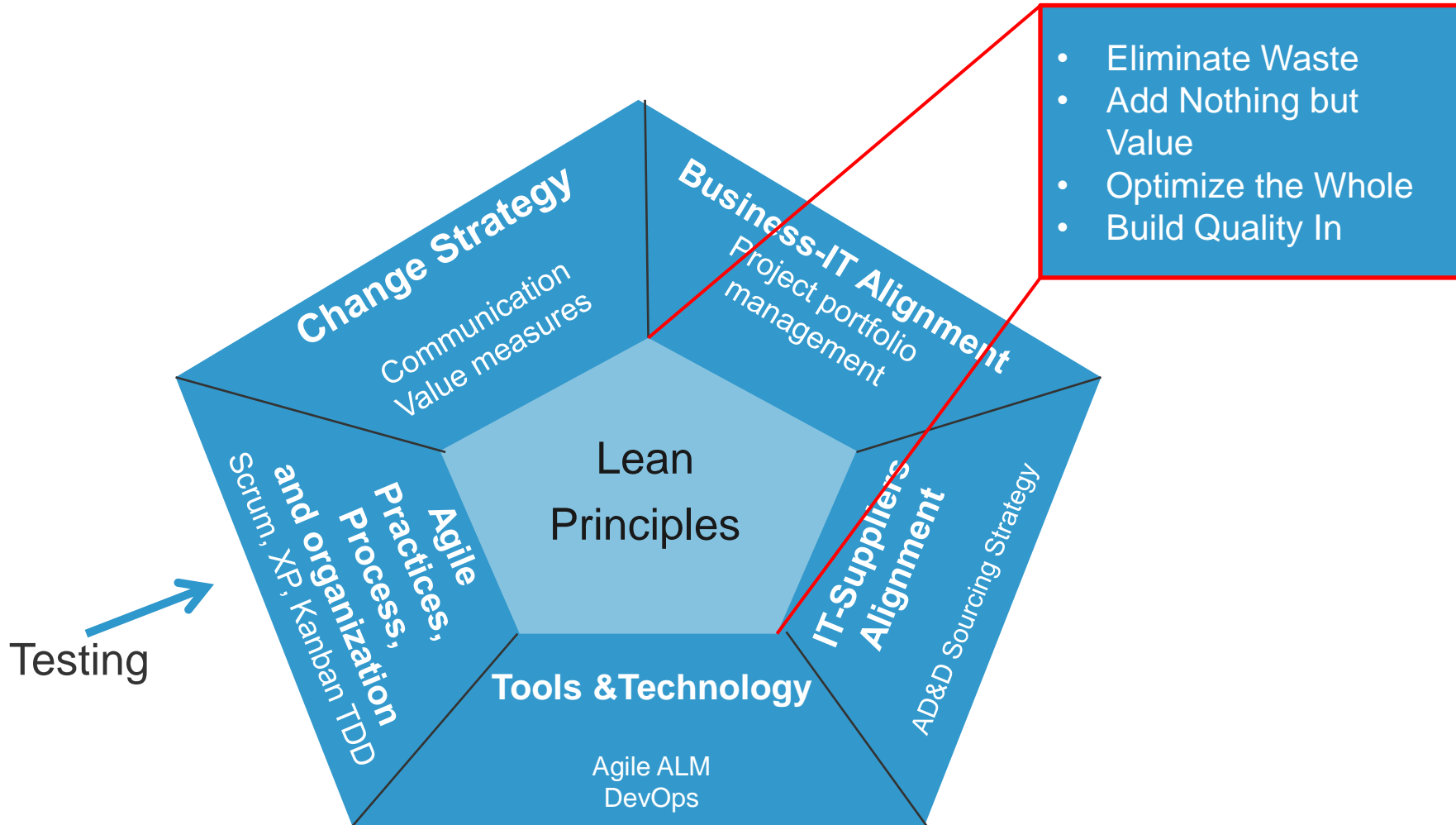
**OVER 40% OF ORGANIZATIONS
ARE DOING SOMETHING WITH
AGILE!**

BUT



Base: 205 IT professionals from organizations that are implementing or have implemented Agile

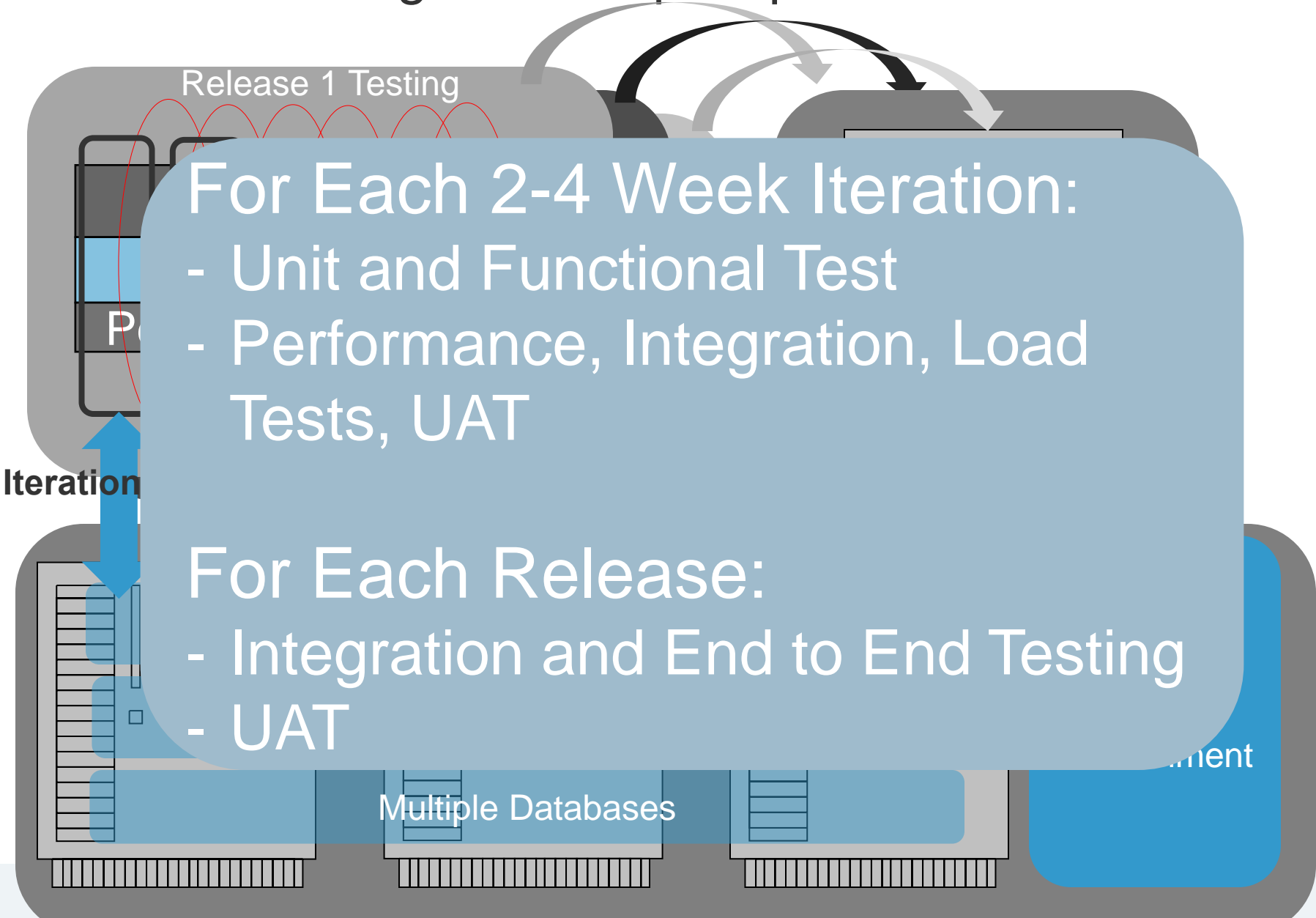
To Scale Agile Adoption At Enterprise Levels, A Well Concerted Transformation Program based on Lean is needed...



Accelerated Delivery Disrupts Traditional Testing Approaches !!

- Testing in an accelerated environment without impacting Agile team performance is not easy !
- Large centralized testing teams vs embedded testers.
- Test managers vs Testing practice leaders, coaches and change agents.
- Much more Automation and done in a smarter way (e.g: GUI automation not enough!!).
- New and Modern practices such as Test Driven Development (TDD) vs testing at the end.

“Iterative” testing increases challenges on “non functional” testing and complex production environments



For Each 2-4 Week Iteration:

- Unit and Functional Test
- Performance, Integration, Load Tests, UAT

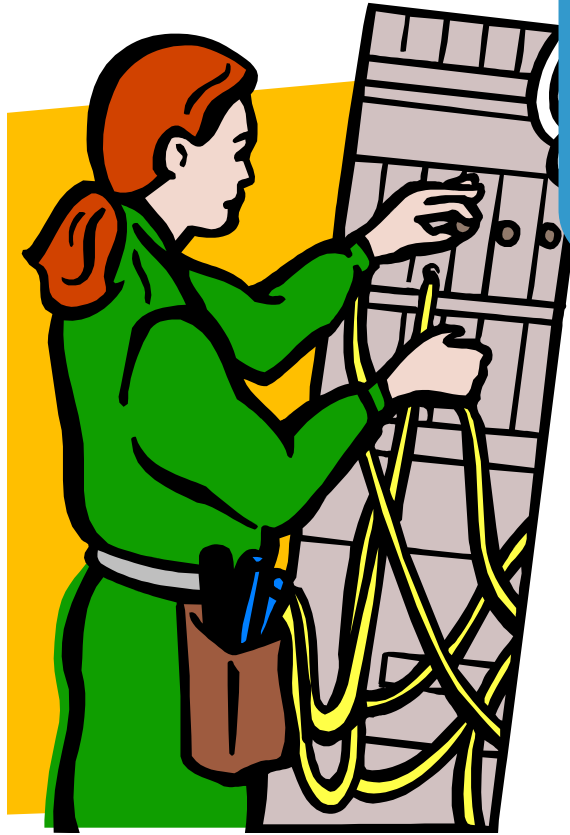
For Each Release:

- Integration and End to End Testing
- UAT

Multiple Databases

Environment

As Agile matures, so does Testing automation

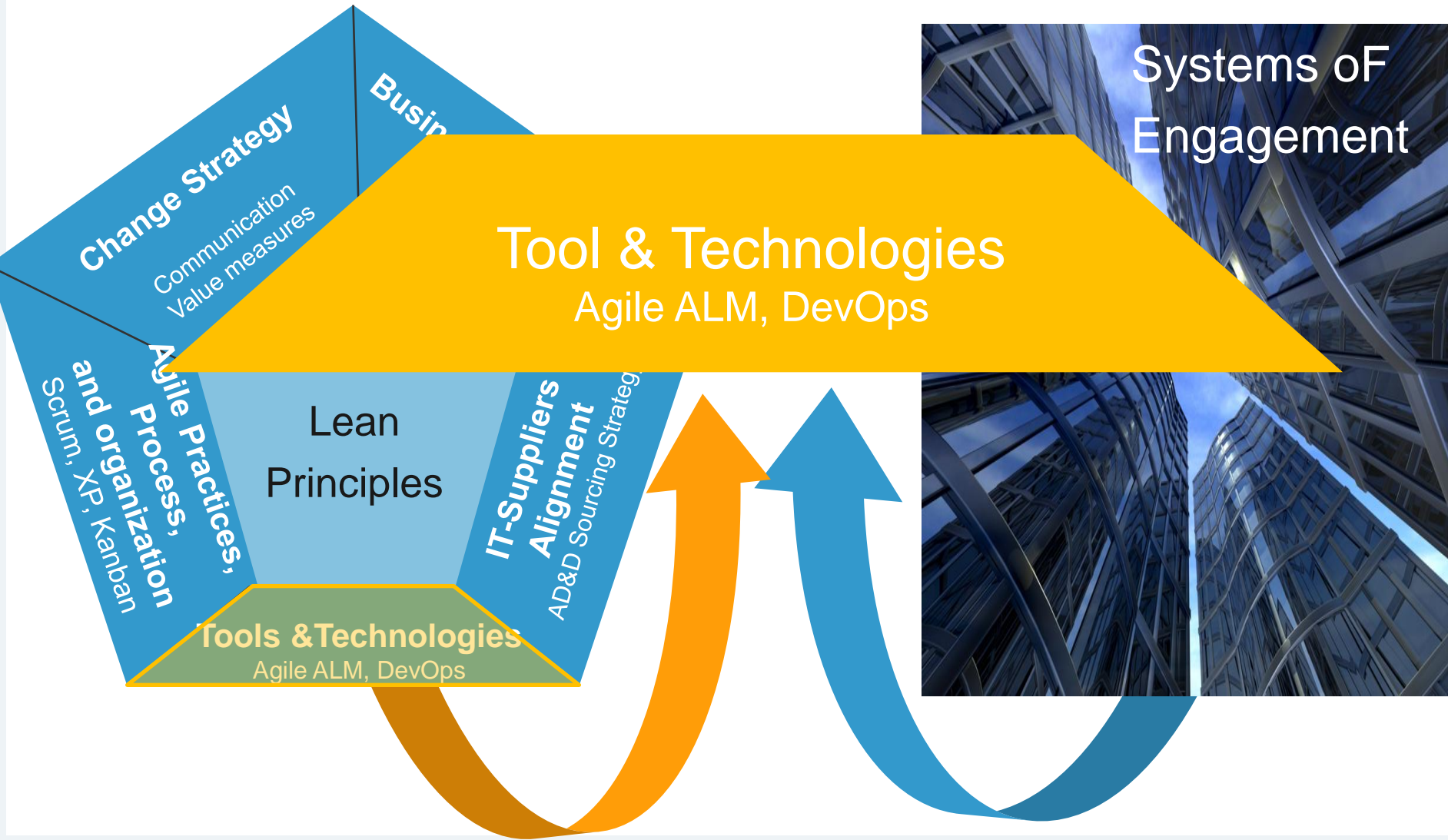


Take Away 4:
Testing Makes or Brakes Your Agile
Adoption



Building Automatic Tests becomes a SW Development Job !

How is ALM coping with all this ?



Application lifecycle Management is changing to



Smaller
Teams
(3-10)



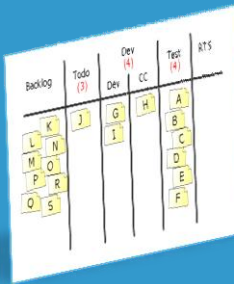
MvP



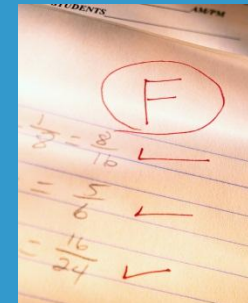
Visual
Reqs over
Text
Social/
Feedback



Frequent
Release
(6+/Year,
Business)

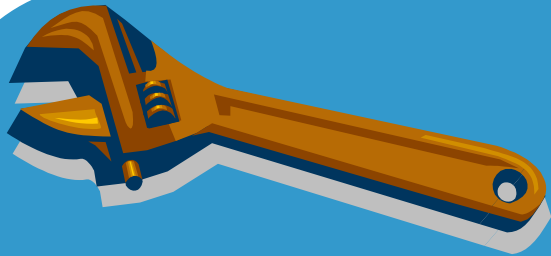


Pull
Models
(eg:Kanban)



Quality /
Testing
Upfront

ALM tools are evolving as well



- Simpler
- Collaborative
- Supportive
- Not Prescriptive
- Planning & Reporting
- Test Mngt
- Value-Flow
- Metrics
- DevOps
- More Automation:
 - › Builds
 - › Testing
 - › Releases

This is a generational shift....you need to act now !

- The age of one size fits all Application Development and Delivery is over – prepare to be multidisciplinary in the way you develop, deliver and deploy apps.
- Systems of Engagement embed all the innovation coming: digital, mobile and social. They complement systems of record, they do not replace them !
- Agile and Lean: everyone doing it, most are at scaling point. It's the best practice out there to support your new coming business needs.
- Testing in an accelerated world requires automation, new practices, new testing skills, and tools.
- Link your transformation to Agile to Business transformation, don't loose the train !....

Thank you

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