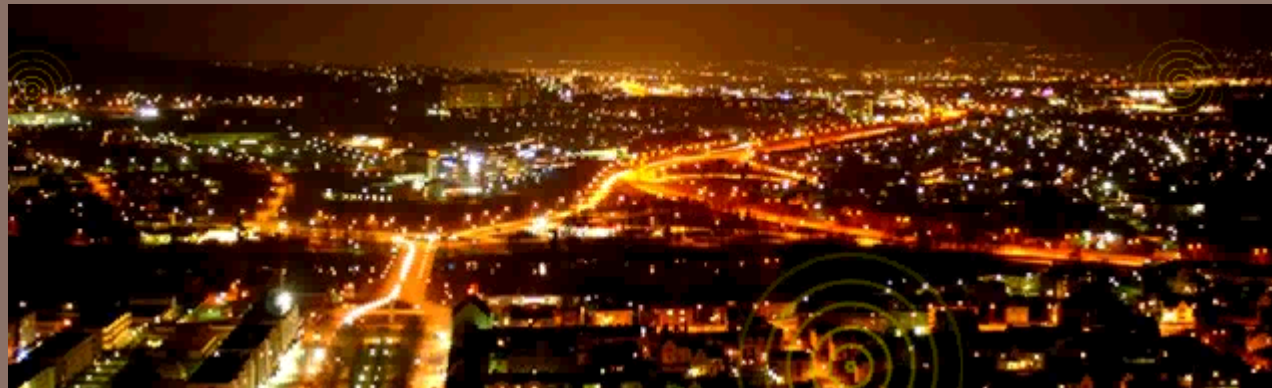


“AGILE AND PERFORMANCE TESTING?” A CONTRADICTION OF TERMS?



Mieke Gevers



European Testing Conference 2016

Agenda



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1. Performance testing
2. Manifesto
3. Performance testing & Agile
4. Stories
5. Conclusion



Performance Testing



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- what do we do
- how do we do it
- when we do it



Performance testing



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- What ~ Value:
 - assess user satisfaction?
 - validate assumptions?
 - estimate capacity?
 - assist in performance tuning?
 - generate marketing statements?
 - Inform & assist developers?
 - evaluate release readiness?
 - prove readiness to stakeholders?



Performance Testing Definition



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Performance testing proves that the SUT meets (or does not meet) its performance requirements or objectives, specifically those regarding response time, throughput, and utilization under a given (usually, but not necessarily, average or normal) load.



- How ~ Tools & tools and tools....
 - Junit
 - Jmeter
 - OpenSTA
 - Java Explorer
 - Profiler
 - Performance TT
 - ...





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□ When ~



Manifesto for Agile Software Development



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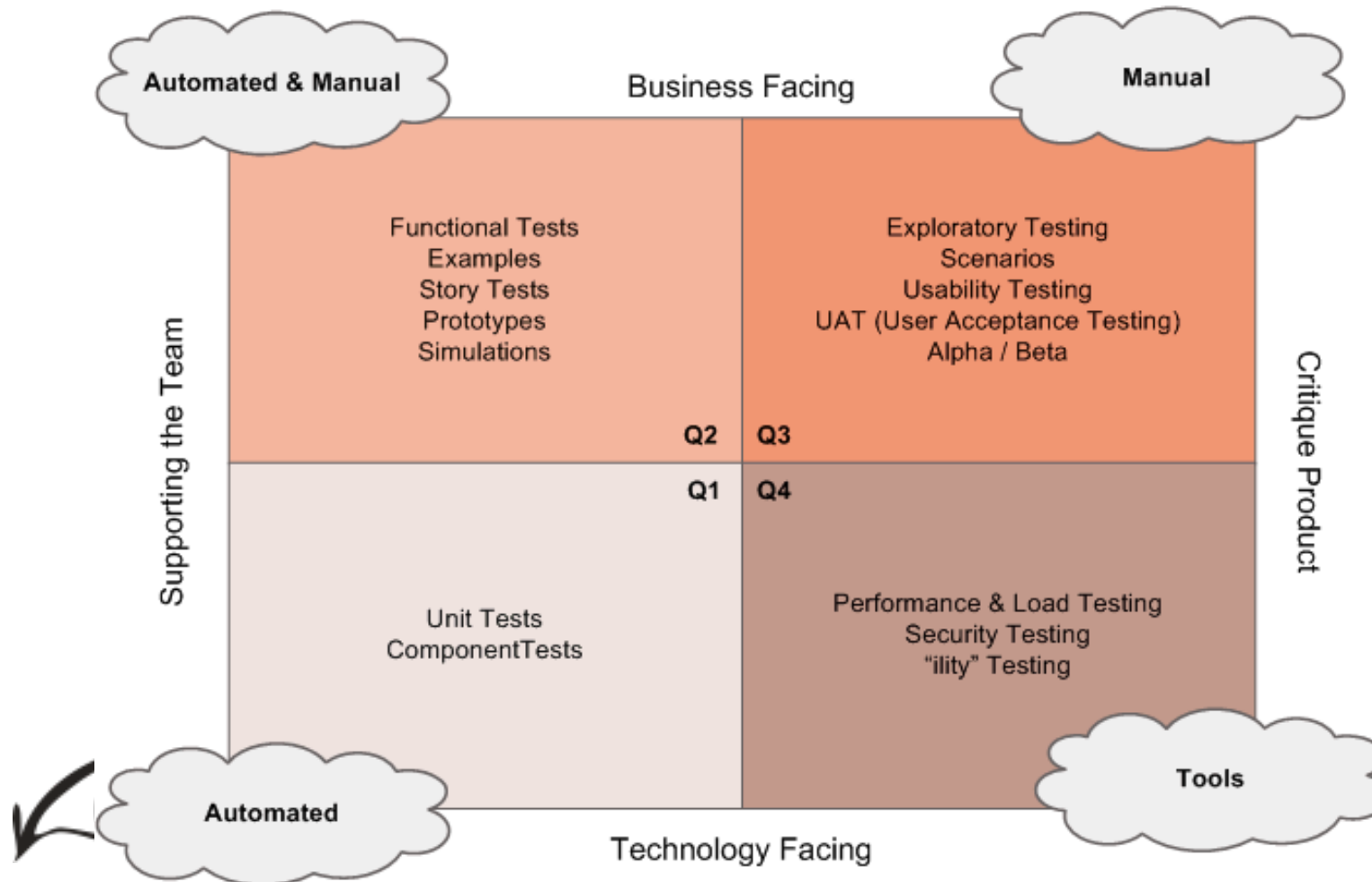
We are uncovering better ways of developing software by doing it and helping others to do it.

Through this work we have come to value

- **Individuals and interactions** over processes and tools
- **Working software** over comprehensive documentation
- **Customer collaboration** over contract negotiation
- **Responding to change** over following a plan



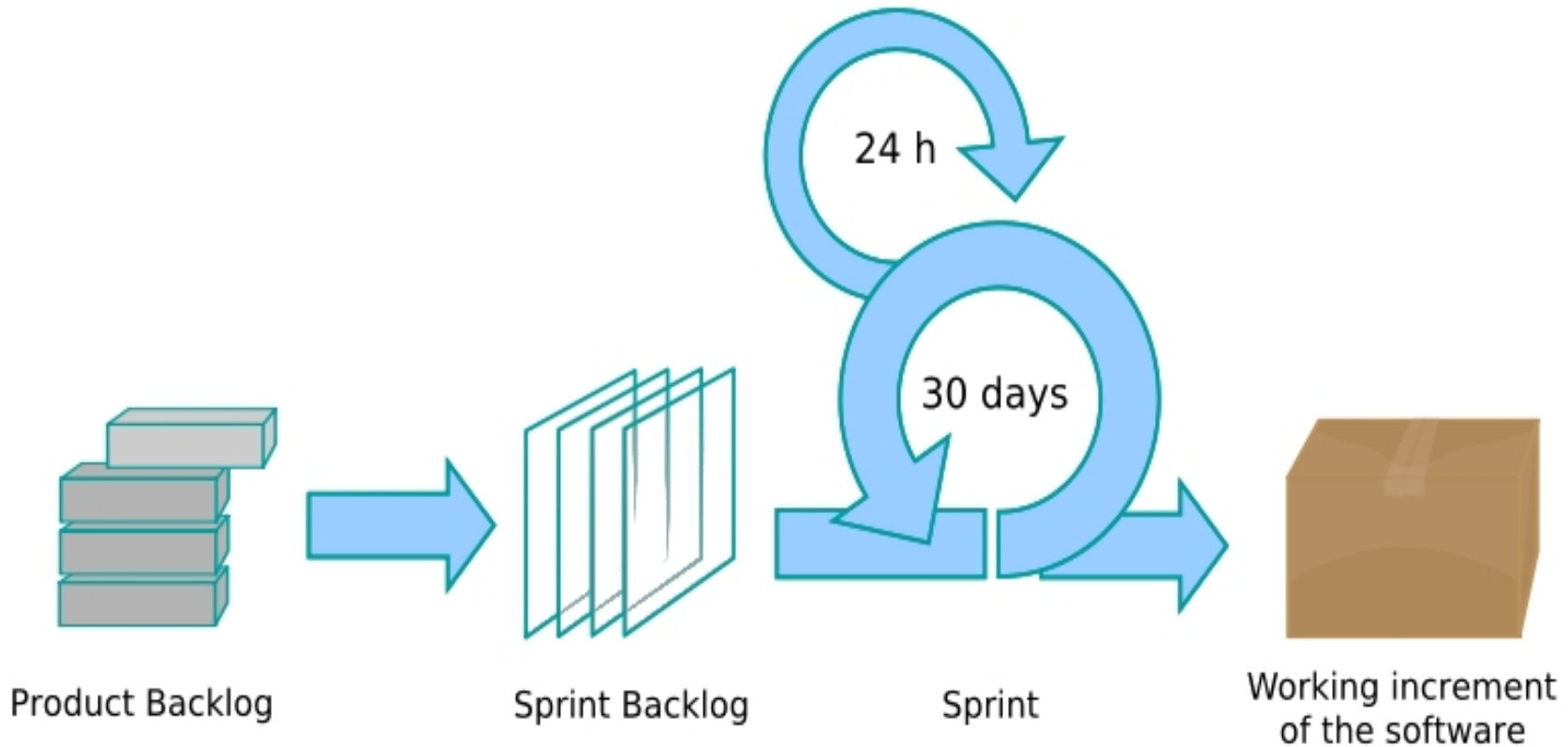
Agile Testing Quadrants

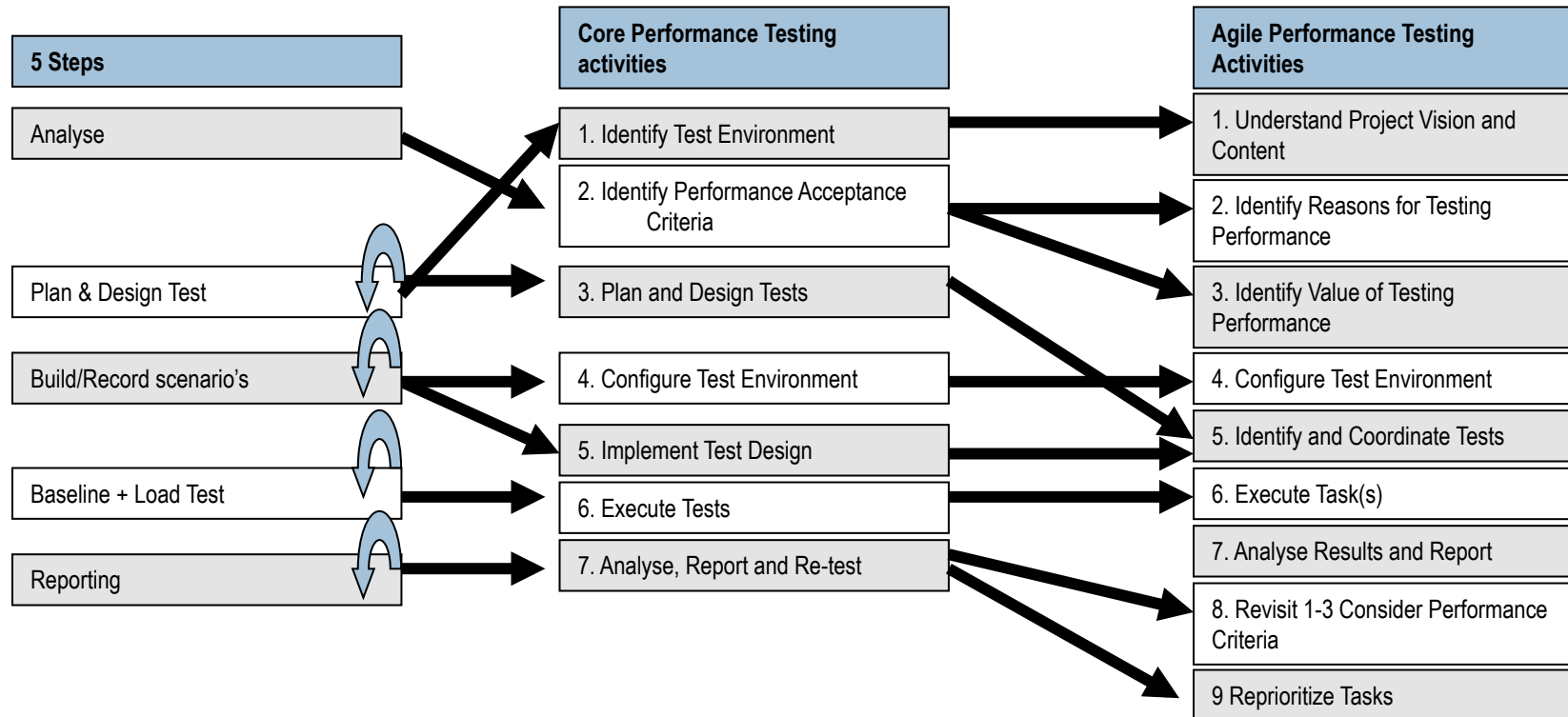


Agile ~ Performance Testing

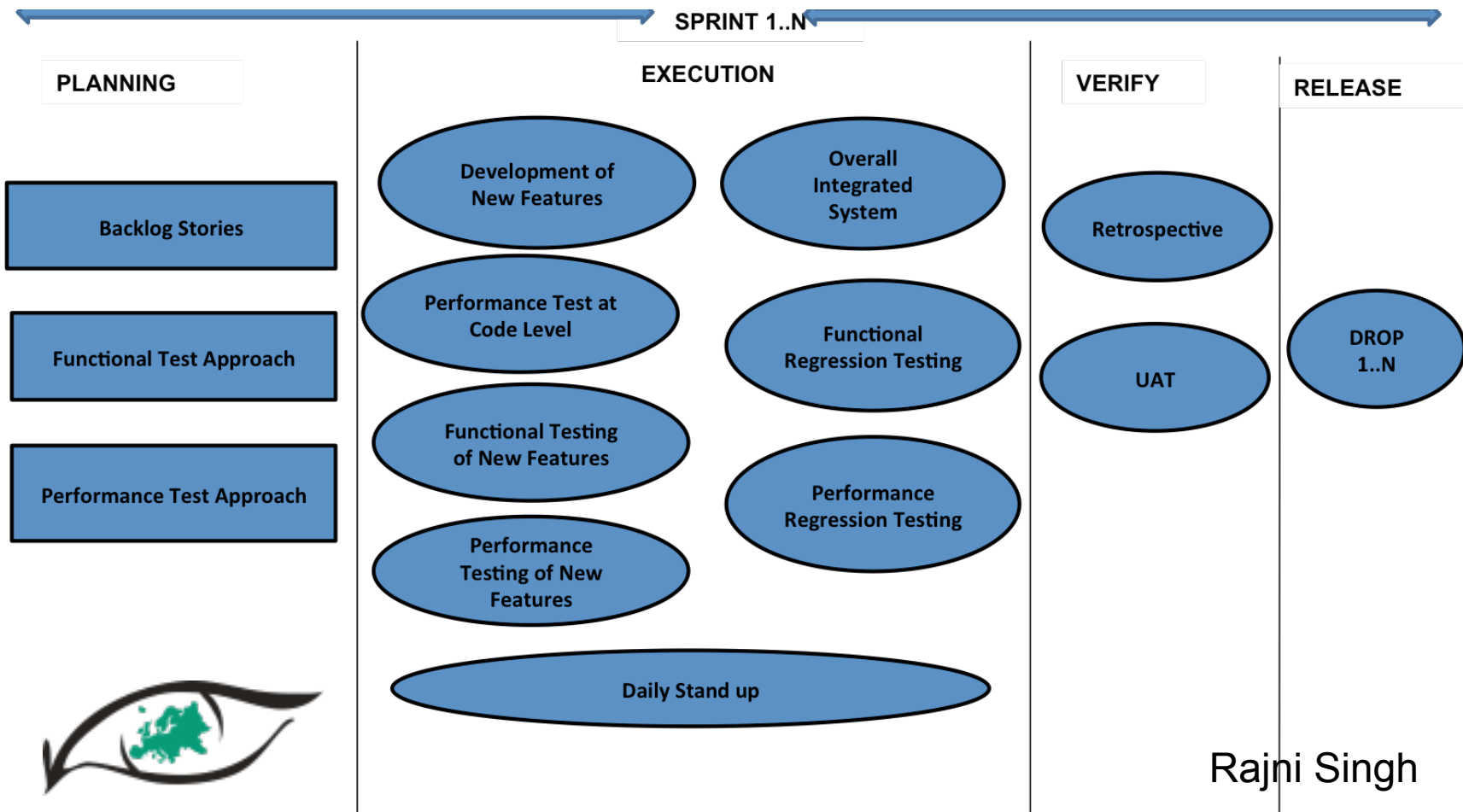


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patterns & practices: Performance Testing
Guidance for Web Applications





- Performance User Stories
 - Agile project Cloud
 - Agile project Mobile (Citrix)
 - Agile project Enterprise Software



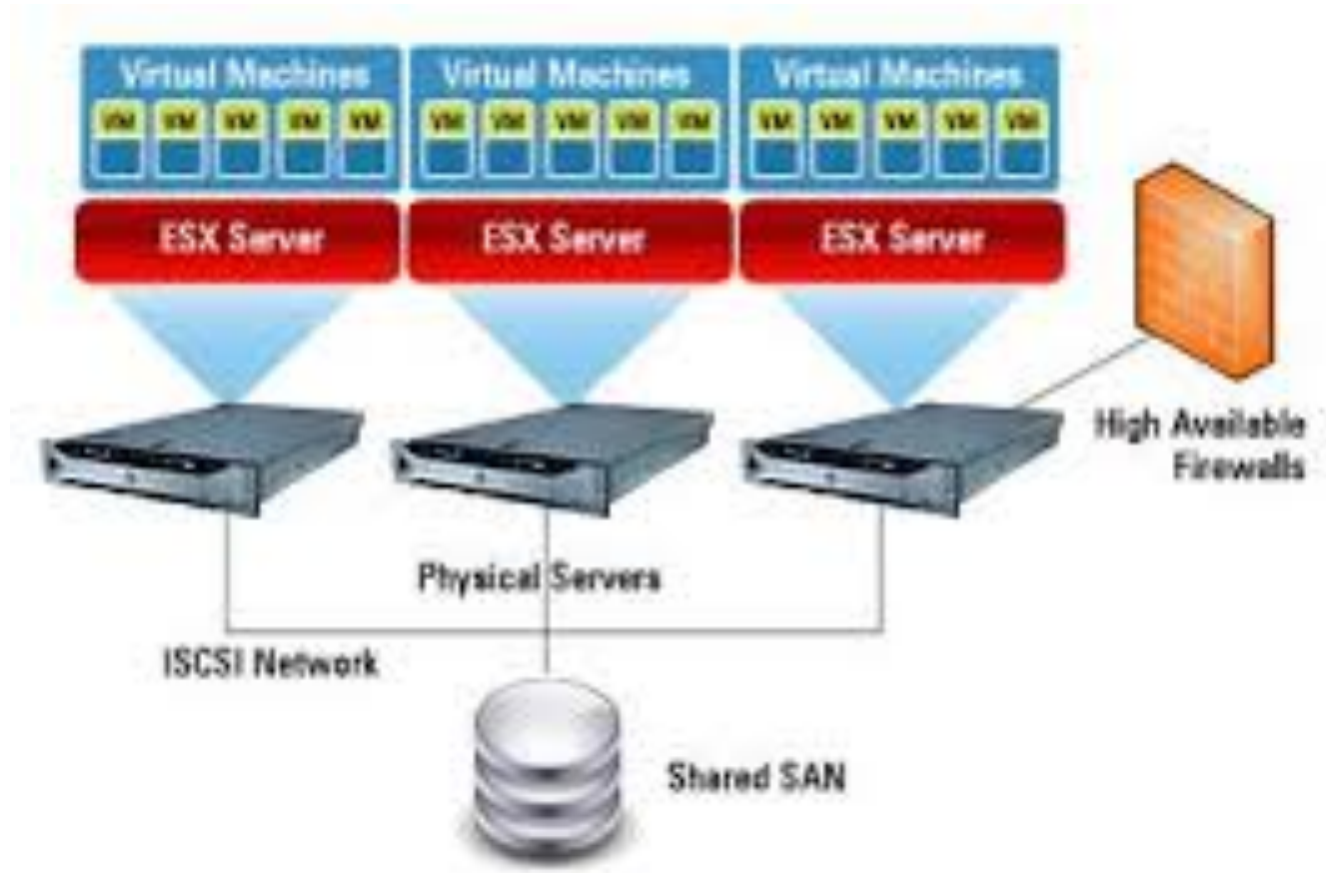
Agile project Cloud



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Agile project Cloud



Agile project Cloud



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openstack.
CLOUD SOFTWARE

NaviSite®



Agile project Mobile (Citrix)



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Agile project Enterprise Software



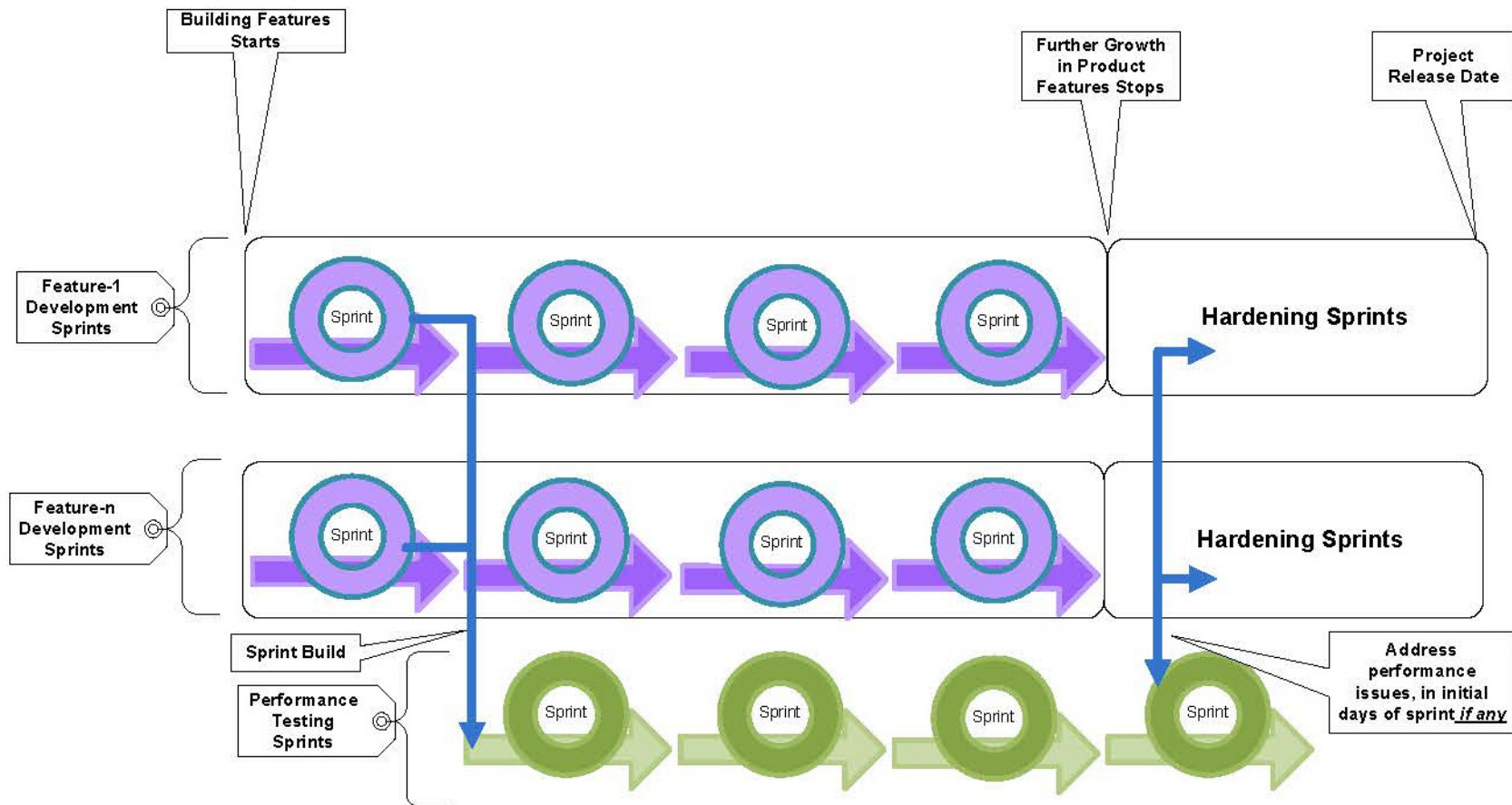
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Redefined the Definition of Done



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Prakash Mallappa Pujar

Key considerations



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- ❑ Service-level objectives (SLOs)
- ❑ Focused performance testing
 - Agile processes rely on the production availability lifecycle (PAL)
- ❑ Test data preparation
 - just-in-time (JIT) manufacturing
- ❑ Trending
- ❑ Reusable and shared testing assets
- ❑ Automated testing
- ❑ Continual analysis
- ❑ Component testing & stubs



Three phases of Agile Performance Testing



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- Unit Level
 - ▣ Executing tests to isolate and fix bottlenecks at code level.
- Component Level
 - ▣ Executing tests to isolate and fix bottlenecks in application components level.
- Application Load
 - ▣ Testing the critical application flows for user experience under normal and peak loads.





“Effective performance testing is inherently agile.”

Scott Barber



Conclusion



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- Flexibility
- Cost reduction
- Team work even cross-functional teams



Resources



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- <http://www.ministryoftesting.com/2014/02/real-agile-approach-performance-testing/>
- <https://www.scrumalliance.org/community/articles/2013/2013-may/agile-performance-testing-an-experimental-approach>
- <http://www.agileload.com/docs/whitepapers/agile-performance-testing.pdf?sfvrsn=2>
- <http://www7b.boulder.ibm.com/wsdd/library/techarticles/hvws/scalability.html>
- Patterns & practices: Performance Testing Guidance for Web Applications by Scott Barber
- ISO 9126, 29119





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Thank you !

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