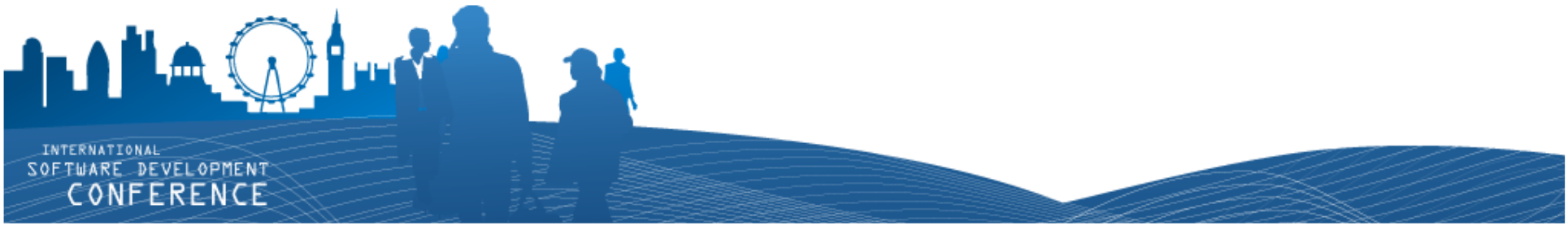
QCon

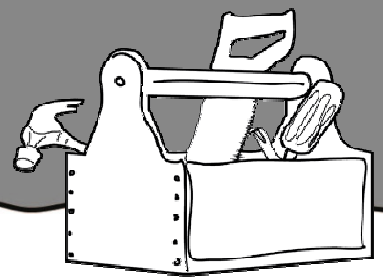
Please evaluate my talk via the mobile app!



Instrumenting Your Business For Success With DevOps

Robert Benefield
Evolve Beyond, Ltd
rbenefield@evolvebeyond.com

About Me



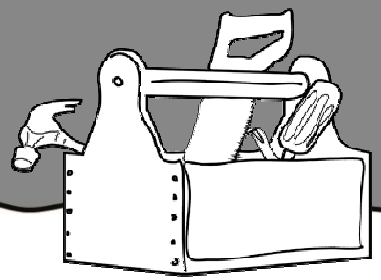
CTO, Evolve Beyond @leandevops

Over 20 years of experience in Development, Operations and Executive levels from start-ups to large multinationals

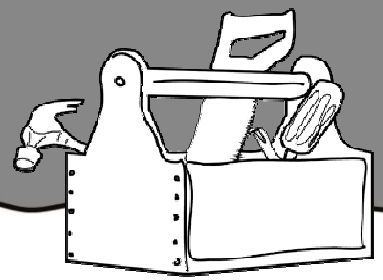
Software, Military, Government, Banking, Utilities, Telecom, Internet, Energy, Healthcare, Embedded Systems

I like solving difficult problems

Sound Familiar?



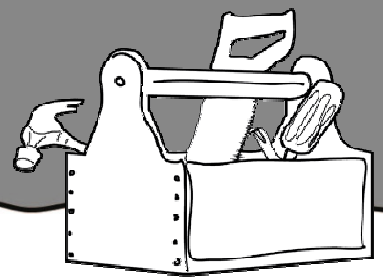
What We Need to Achieve

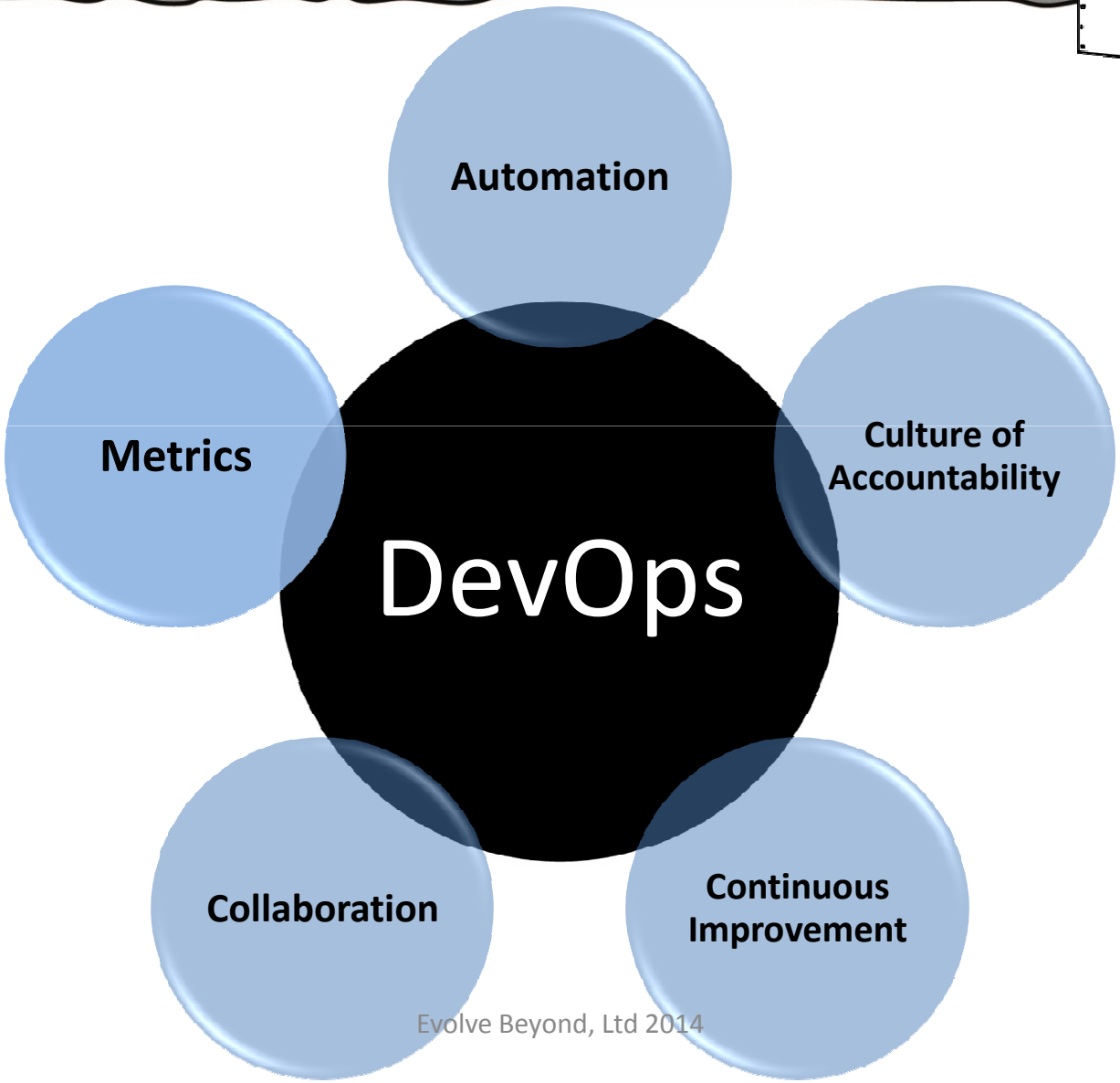


Shared **Situational Awareness**

Continuous Improvement

DevOps Ecosystem





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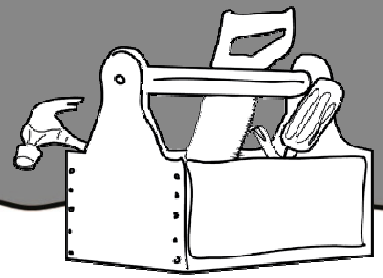
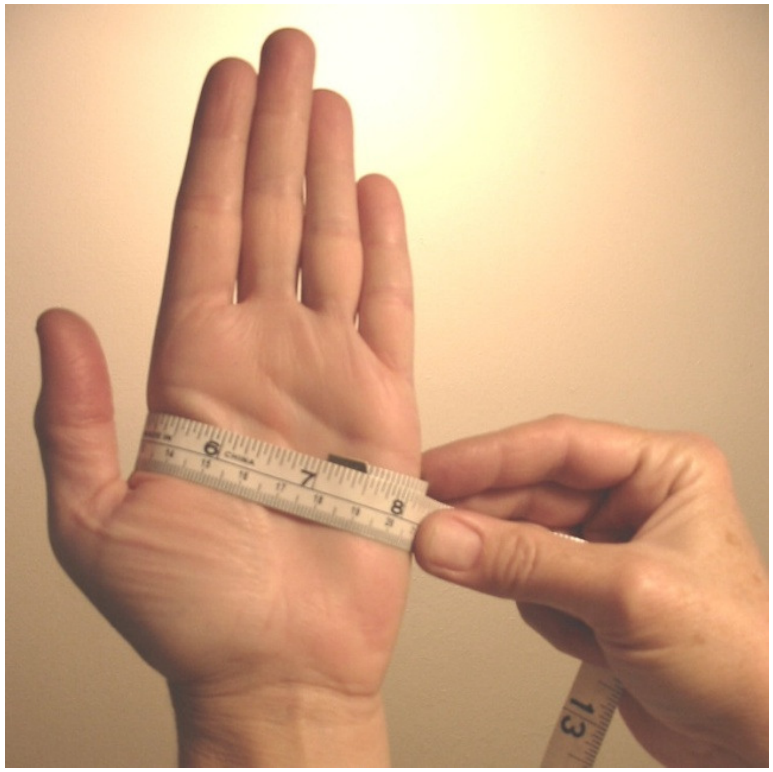
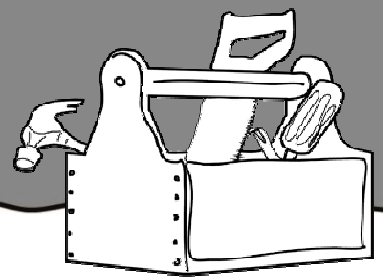
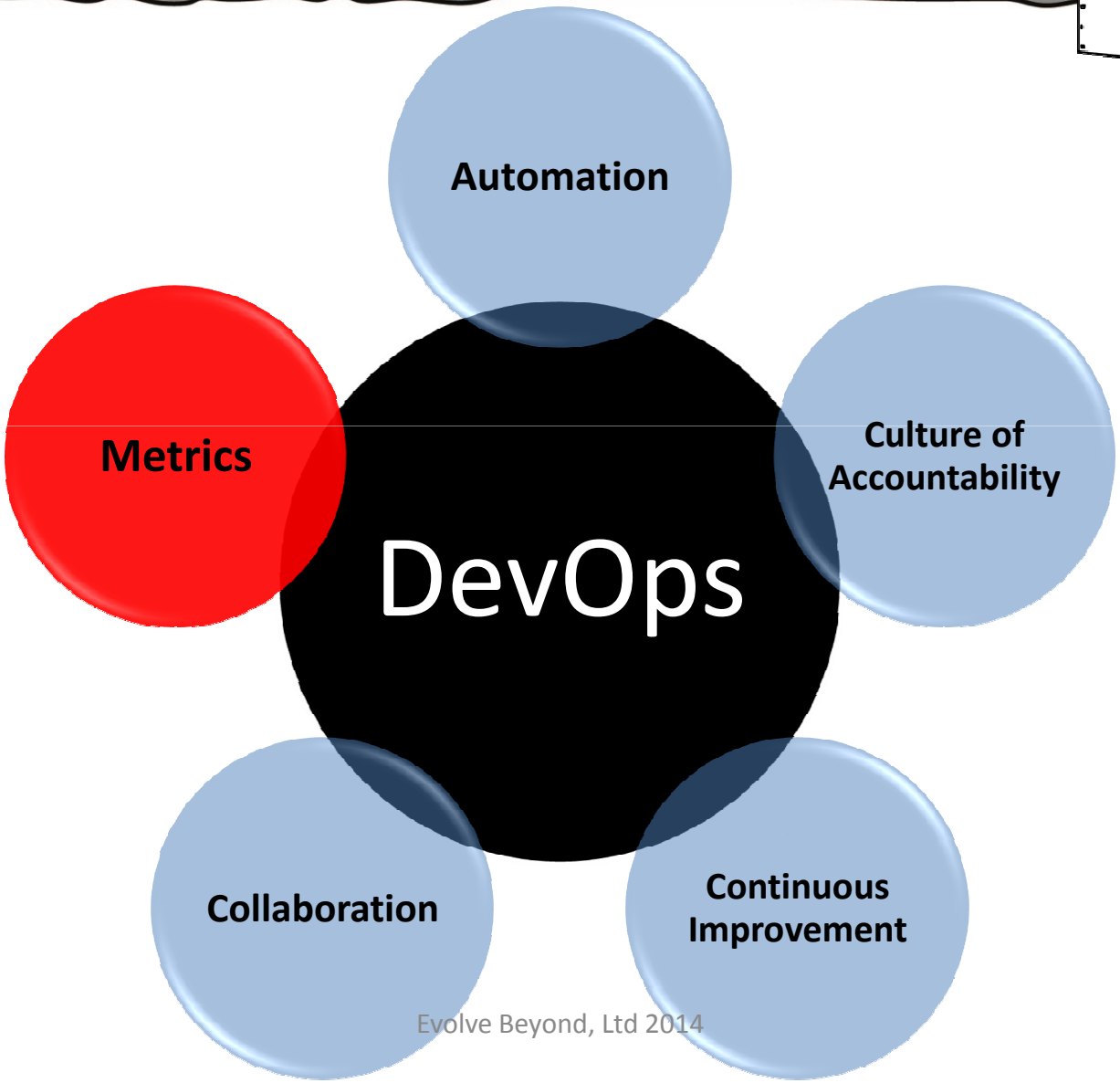
Have the Metrics Changed?



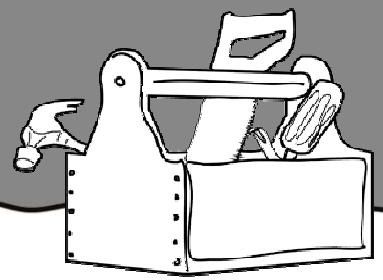


DevOps Ecosystem





Typical DevOps Measures

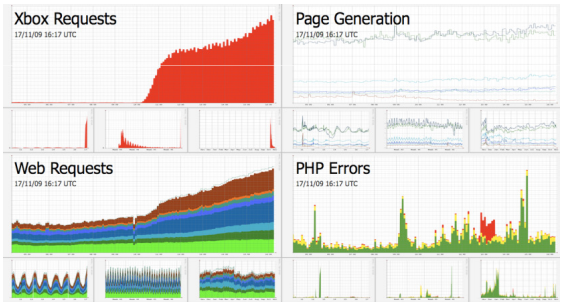


Availability

- Mean Time Between Failure (MTBF)
- Mean Time To Recover (MTTR)

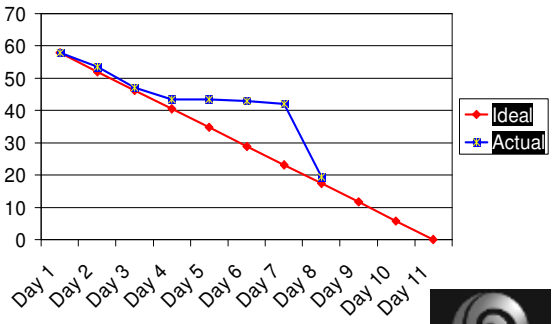
Health

- Warnings/Failures/Restarts



Throughput

- Capacity (CPU, Memory, I/O, etc)
- Deploy speed & frequency
- Team Velocity



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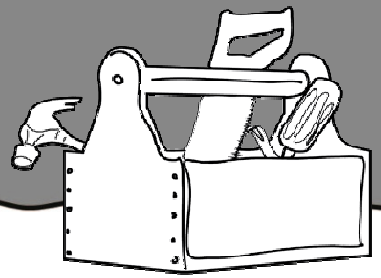
Are We Missing a Trick?



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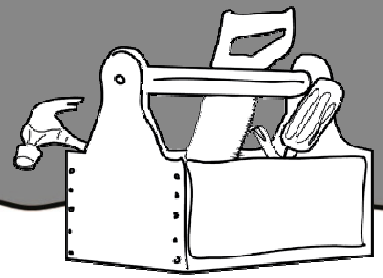
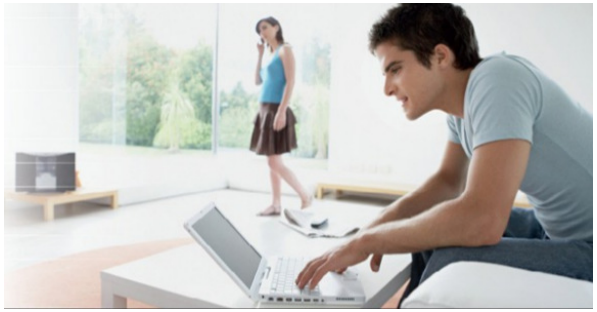
Business Environment



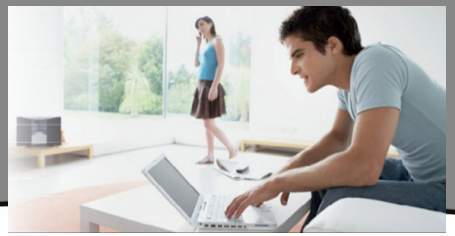
Customer



Business

IT

Customer's View



The Service <u>is</u> the Product!

Available

- Does it work when I need it?

Usable

- Does it do what I need it to do?
- Is it easy to use and performant?

Provide Value

- Is it value for money?
- Is it better than I could do myself?

Secure

- Is my data safe?

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Perceived Business View

“Agile just means we deliver faster, right?”

“Cloud/SaaS is just a distribution channel”

“DevOps is Cloud + Automation to go even faster!”

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Business Metrics Focus

Increase revenue & market share

Reduce costs & delivery friction

Protect – ***manage risk*** to revenue & market

Which all boils down to:

Understanding the Customer & Market

Understanding resident capabilities & risks

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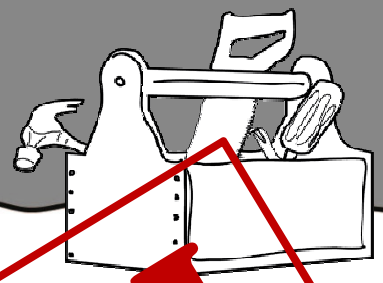
Typical DevOps Measures



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Throughput

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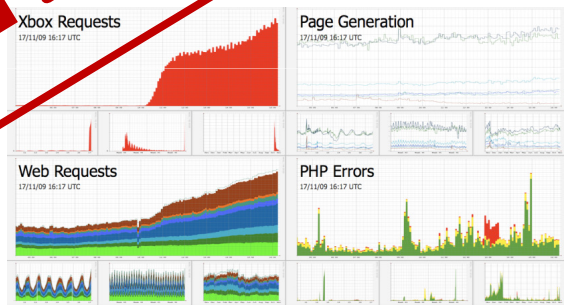

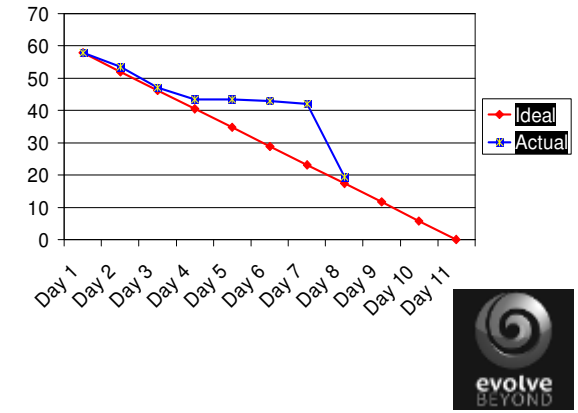

TOO TECHNICAL

BUILDING THE BRIDGE

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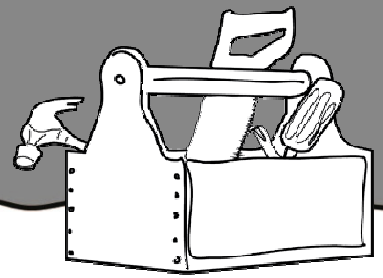
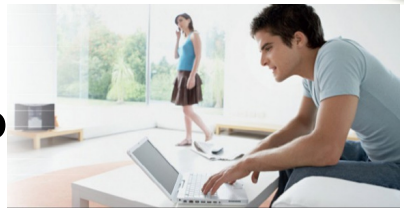
Building Situational Awareness



What causes **friction**?

What are our **risks**?

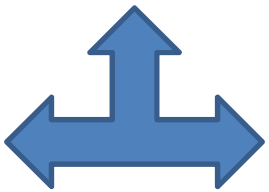
What are our **capabilities**?



Do we really **understand our customers**?

Remember: We run the service!

How are **decisions** made?



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Friction

How quickly can we **deliver**?

How quickly can we **scale**?

How quickly can we **respond**?

How quickly can we **resolve**?

How often is there **rework**?

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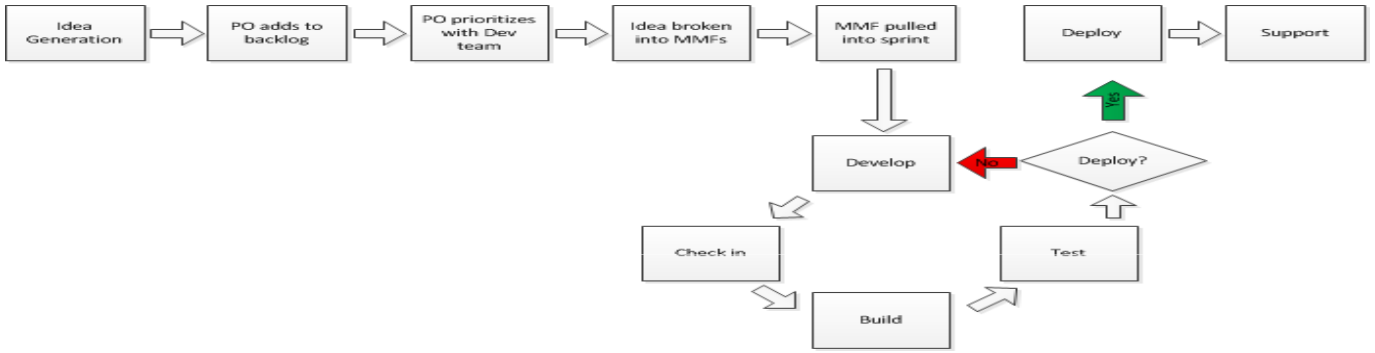
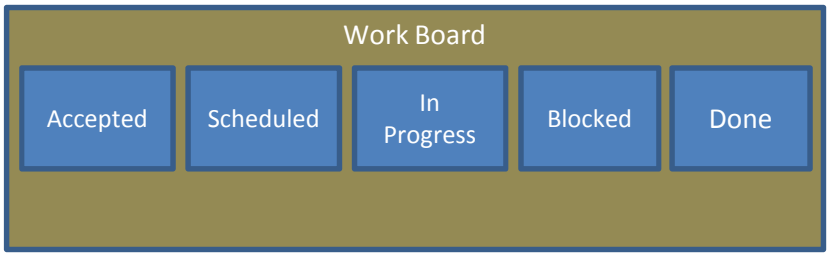
Delivery Friction

Value Streams



Workflow Visualisation



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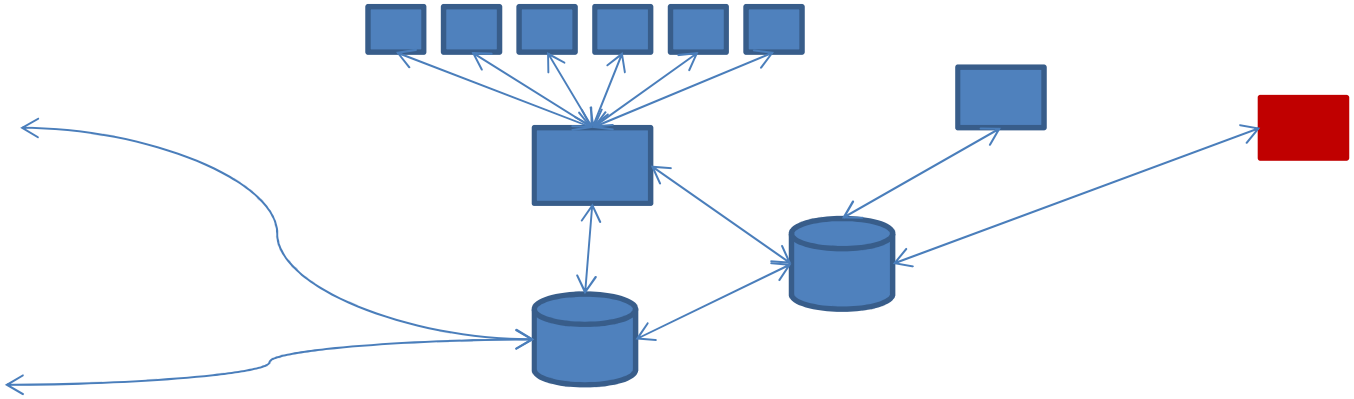
Scale Friction

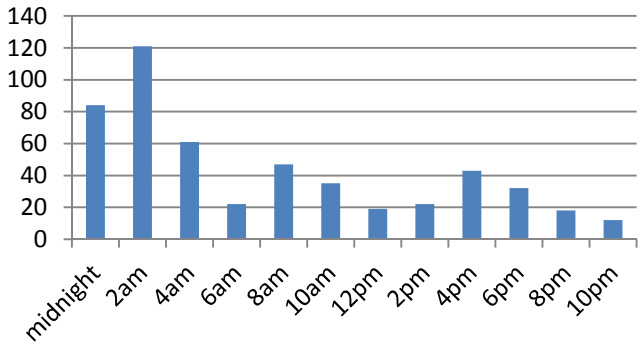
Visualising architectural challenges

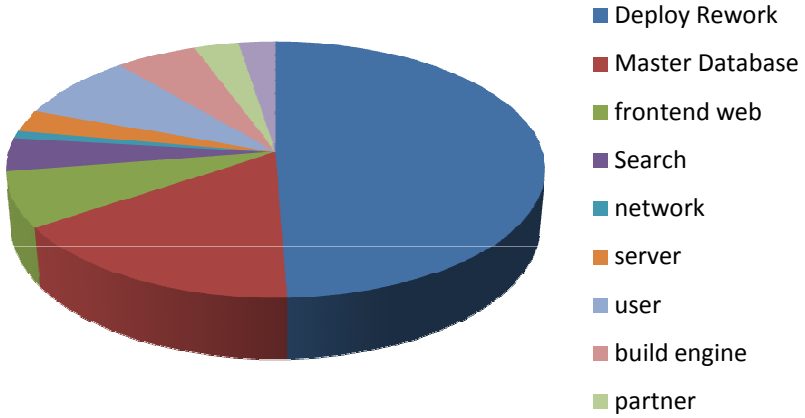


Acquisition Dependencies

Event Friction

Tracking & Trending the “Why & When”





Effort due to change rework

Risks

Where is the **technical debt**?

Where are the **“known unknowns”**?

Where are the **SPoFs**?

Where are the **dependencies**?

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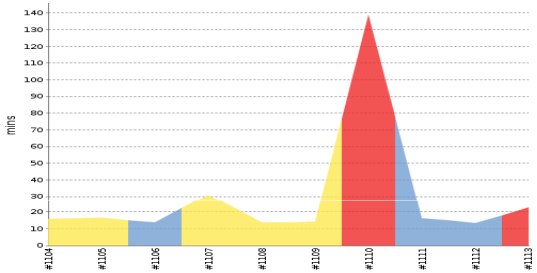
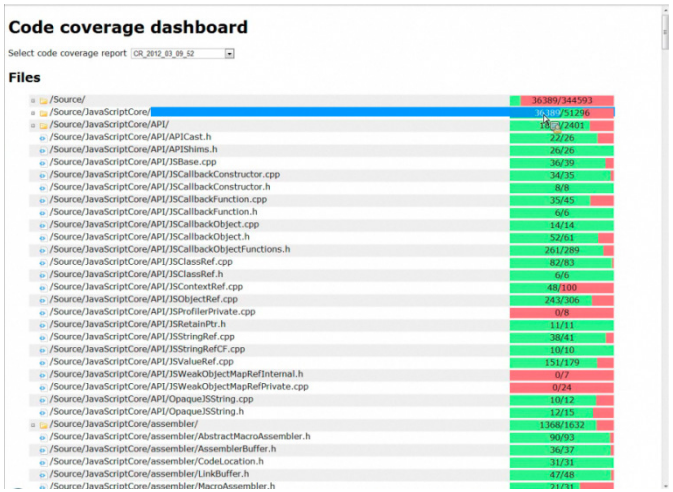
Visualise Code Risks

Component Build Failure Rates

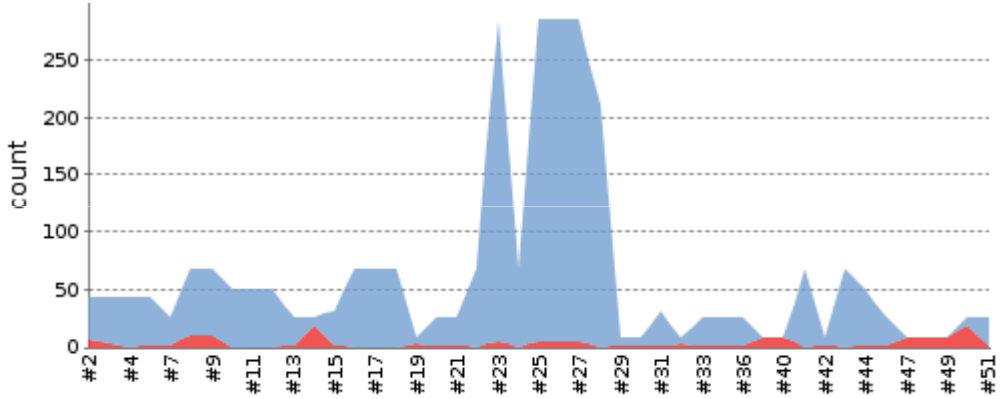


Code & test coverage



“Known Unknown” Risks

Test scenario risks



Marketing/Sales campaign risks

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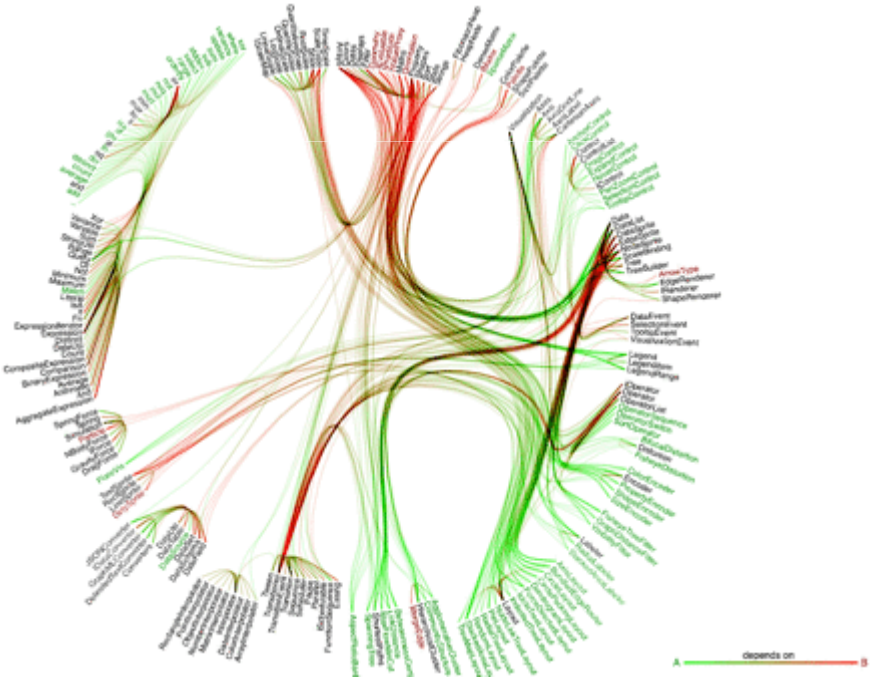
SPoFs & Dependencies

Visibility & Elimination

Top Committers – By LOC

ant	105806
anton	27102
tomas	25017
ekke	24464
sim	23320
andresen	21540
ku	20887
runno	20623
karu	17885
tommi	17154



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Capabilities

What are they?

Are they being used?

Are they constrained?

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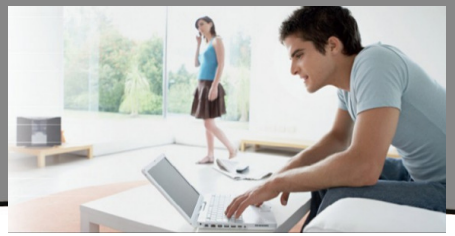
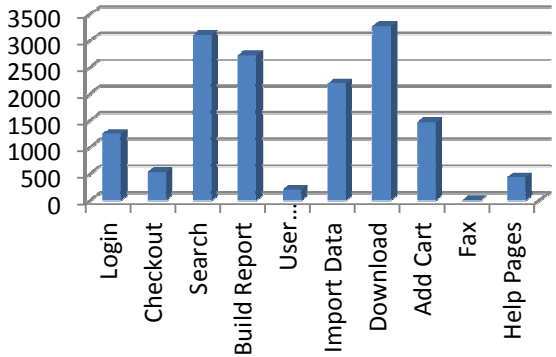
Understanding the Customer



Who they are

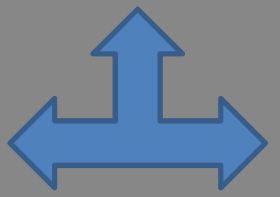
What they use (when/how/why)

What is important to them



How do we know how well are we doing?

Decisions & the Business



Understanding decision process

Improving information flows

Building shared context

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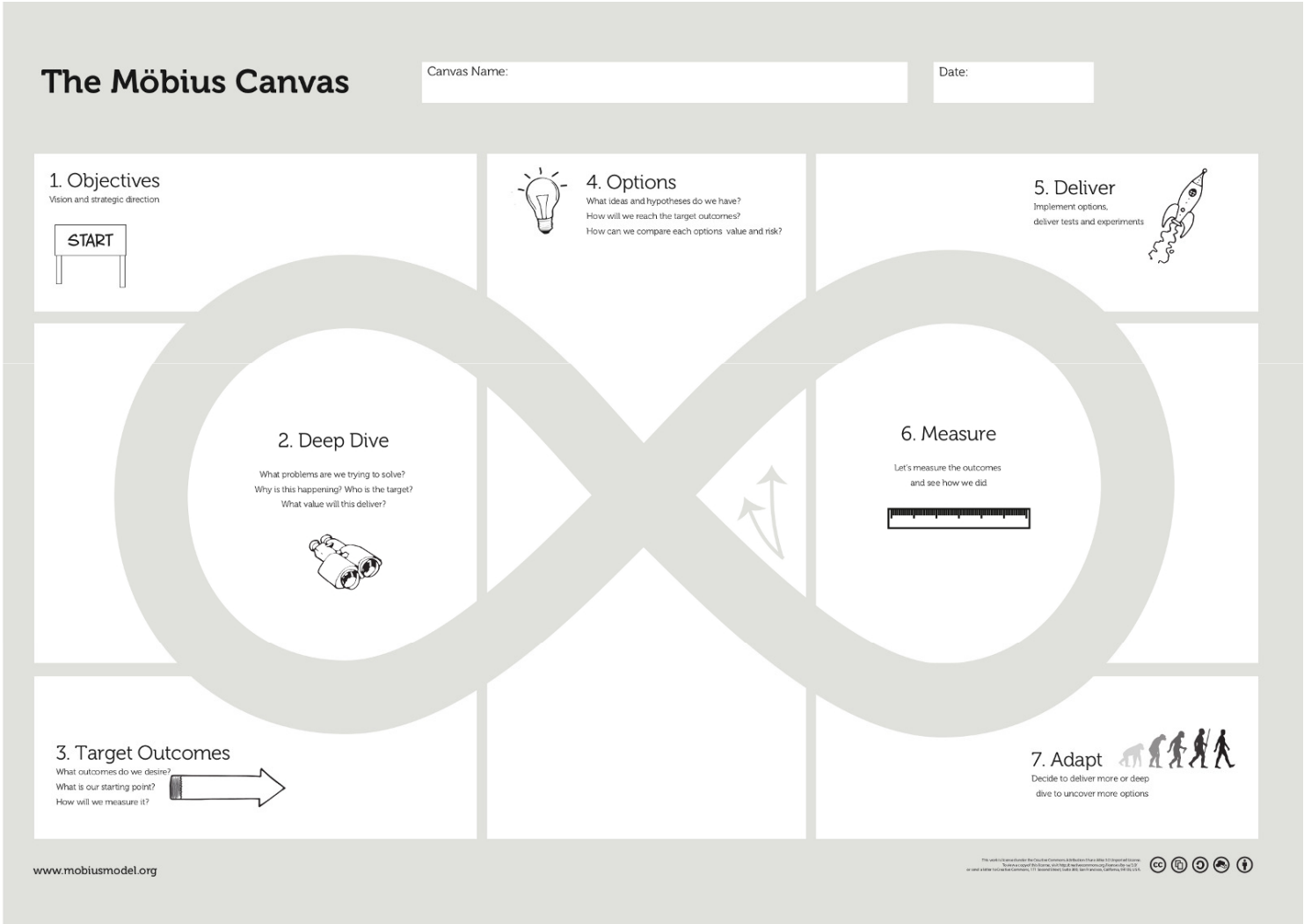
Building a Continuous Improvement Loop



Signs of Success

Fewer Surprises

Less Waste

Improved Priority Alignment

Metrics are useful to everyone

Collaborative continuous improvement

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QUESTIONS?

@leandevops
rbenefield@evolvebeyond.com
http://cloudagility.blogspot.com

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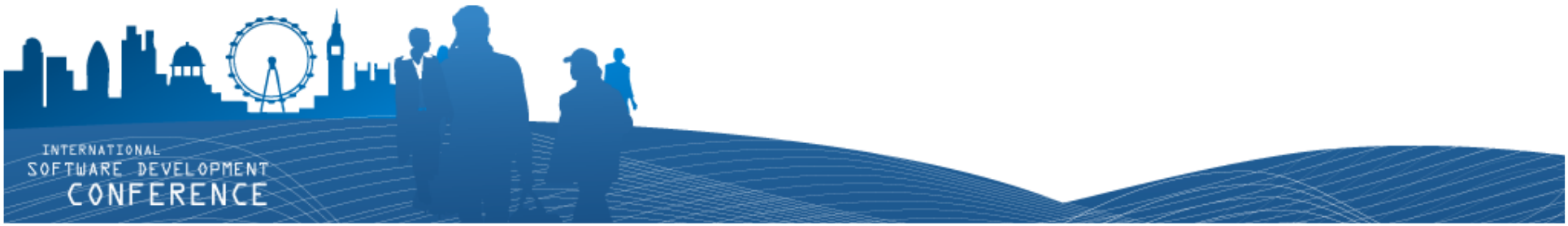
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