

Sustainable competence

(the people vs process and technology)

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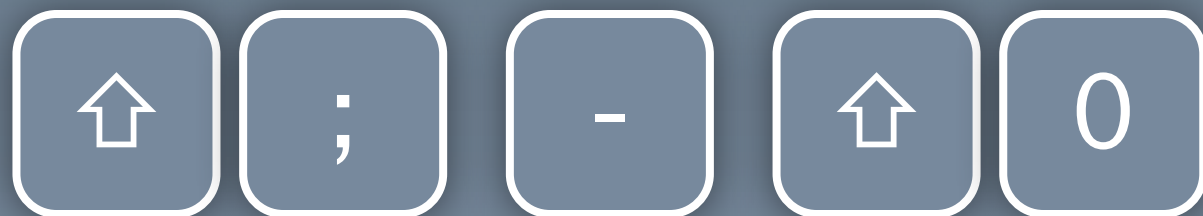
@simonbrown on Twitter



I help software teams understand
software architecture,
technical leadership and
the balance with agility



I code too



Software architecture needs to be more accessible



Training

In-house and public courses



Book

leanpub.com



Speaking

Conferences and user groups



Not all software teams
are created equal





Developer



Developer



Developer



Developer



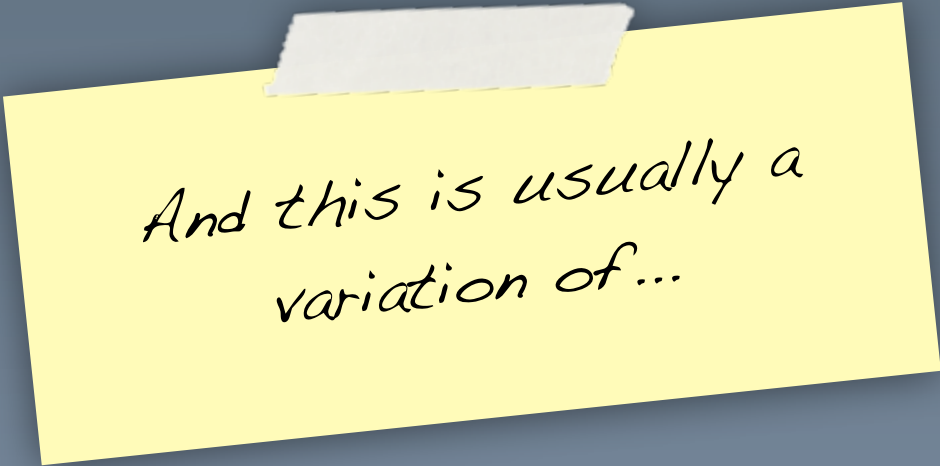
Developer



*Small teams of generalising specialists,
everybody does everything*

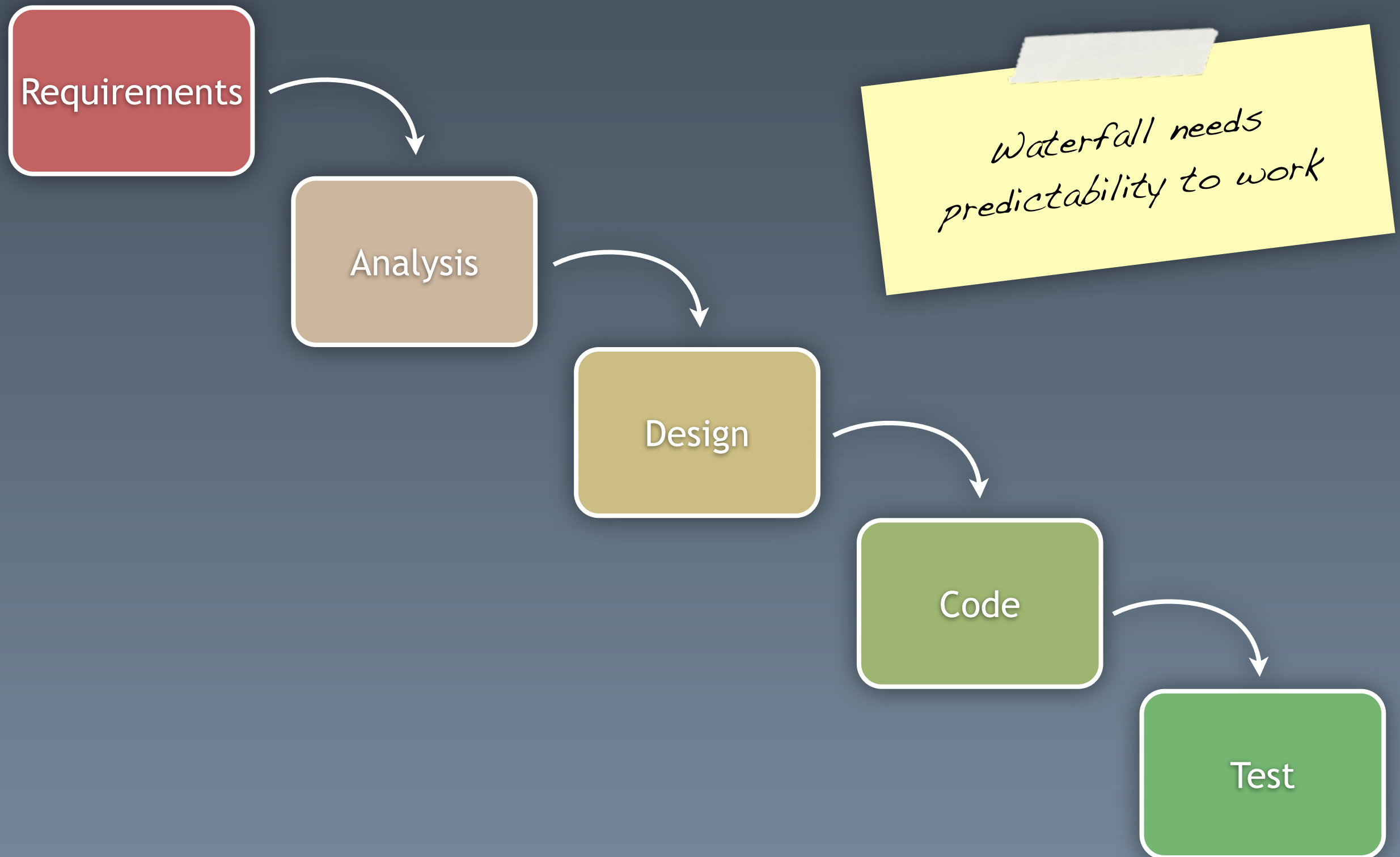
Process

Many IT teams simply do
**what they've
always done**

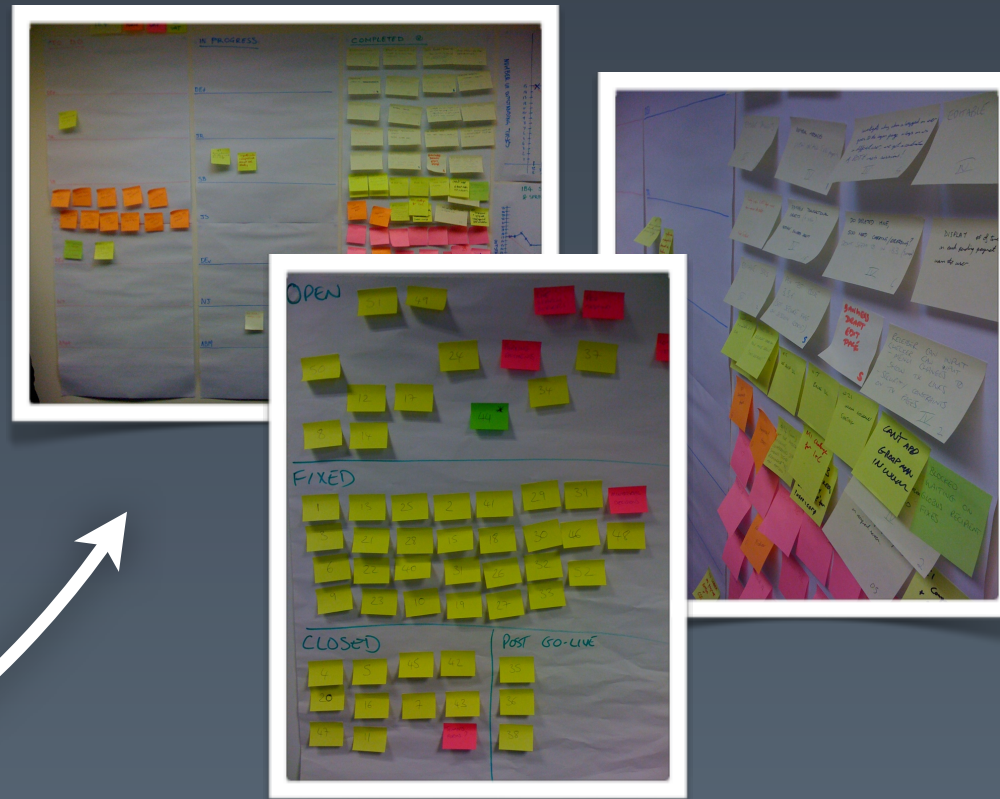


*And this is usually a
variation of...*

The “Waterfall” Model



Work is broken into
timeboxes
and managed
visually



Minimum viable product
followed by regular high quality releases



Team

IT system

*Let's use
DSDM Atern*

Have you read the
DSDM Atern book?



Me

Why not?!

Agile Project Management Handbook

DSQM[®]
CONSORTIUM

APMG-International[™]
Agile Project Management

to be considered and therefore built into the design of the solution (e.g. security) or specific attributes that the solution will demonstrate (e.g. fast performance). Some will be global and apply across the whole set of requirements some will be specific to an individual requirement. For instance high levels of security may be needed for the entire solution or it could be that only part of the solution requires such rigour e.g. one small business process handles information that is particularly sensitive so it requires extra controls.

Just like functional requirements non-functional requirements should be prioritised using the MoSCoW technique and visible to all stakeholders.

15.6 Guidelines on establishing requirements

Be wary of moving too quickly from the what (the requirement) to the physical how (the solution). It is common for both business and technical sides of the project to jump into solutions much too soon.

Requirements should clarify:

- **Functionality.** Describing clearly and unambiguously what the end-product (solution) is supposed to do, in business terms.
- **External interfaces.** Defining how the solution needs to interact with people, processes, technology and other business areas and projects.
- **Performance.** Giving expectations of the volumes, resilience, reliability, response times needed.
- **Attributes.** Solution aspects such as portability, accuracy, maintainability, disaster recovery and security should be considered.
- **Design constraints** imposed on an implementation. Certain standards may be required to be met both internal and external to the organisation for which the solution is being developed. These may impose implementation constraints or they may be associated with policies, resource limits or operating environments.

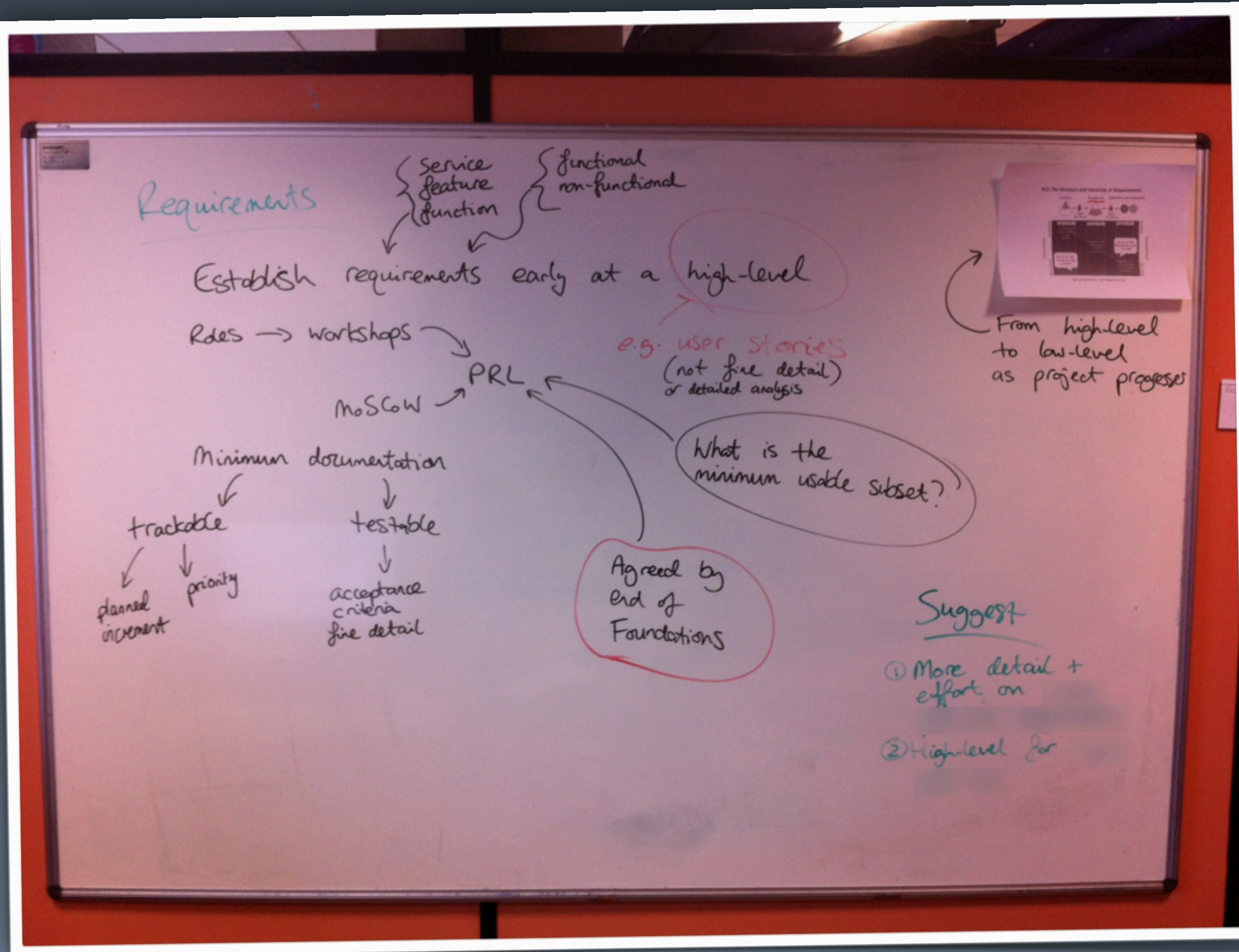
15.7 Understanding requirements through the lifecycle

In Agile functional requirements should be specified at a high level during the Feasibility and Foundations phases of the lifecycle and decomposed into lower-level requirements that are more specific in later phases. This matches with the exploratory nature of the Agile lifecycle, where understanding of the solution evolves and deepens as the project progresses. Initially, the customer will have an idea of what they need. As they gain a better understanding of what it is they need, they gain a better understanding of how they will achieve it.

The non-functional requirements (performance attributes and constraints) may also emerge throughout the lifecycle. Some of the more critical ones may be evident at the outset when the objective is established. Others should be actively sought alongside the functional requirements when they are captured during facilitated workshops to establish the PR. More detailed ones may emerge during Exploration and Engineering.

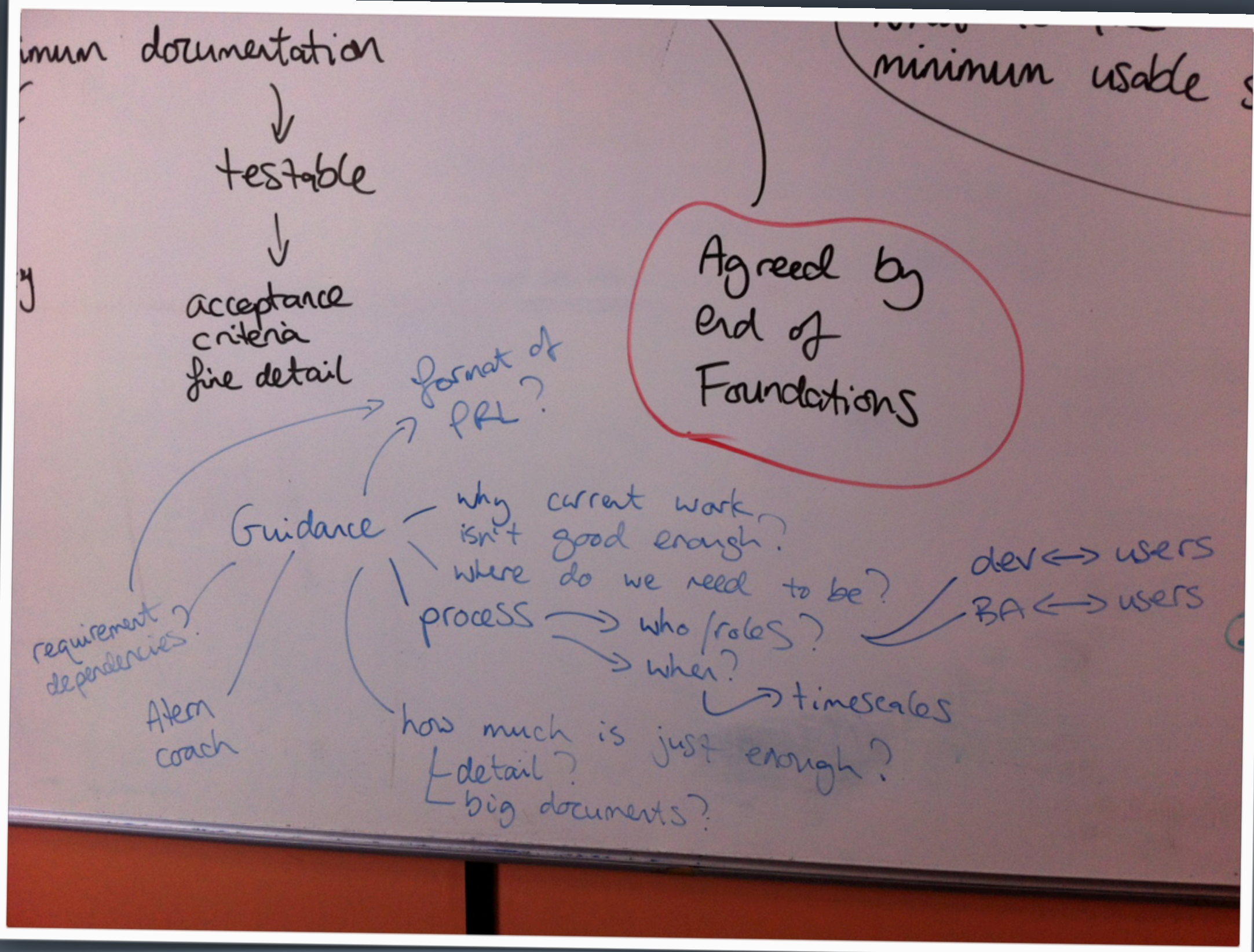
A word of warning: non-functional requirements which are missed or discovered too late can be a major source of failure for projects. If discovered too late, it may be difficult or impossible to accommodate them. Non-functional requirements should be considered and documented in the Solution Foundations during the Foundations phase.





A workshop to talk about requirements in DSDM Atern

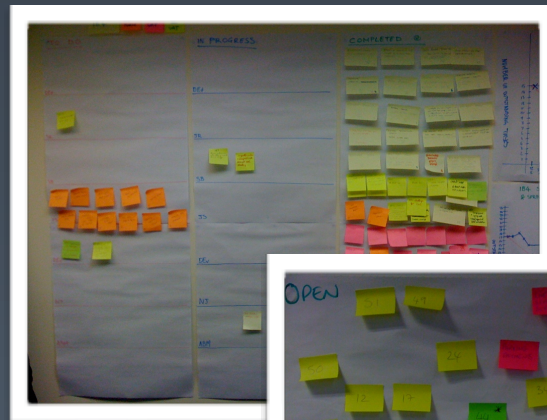
How do we do this?



The PRL was
dropped

DSDM Atern was
dropped

is broken into
boxes
visual



releasable product
follows high quality releases

team

X is **broken.**

I'll send you an e-mail.



A tester

*What happened to
defect tracking and
configuration management?*

Here's a new release; it contains
new stuff plus the
defects we fixed



Supplier

*When did
configuration management
go out of fashion?*


Process
is often
dropped
when things
get
frantic



Project and programme management

In my experience, most
IT project managers are
non-technical

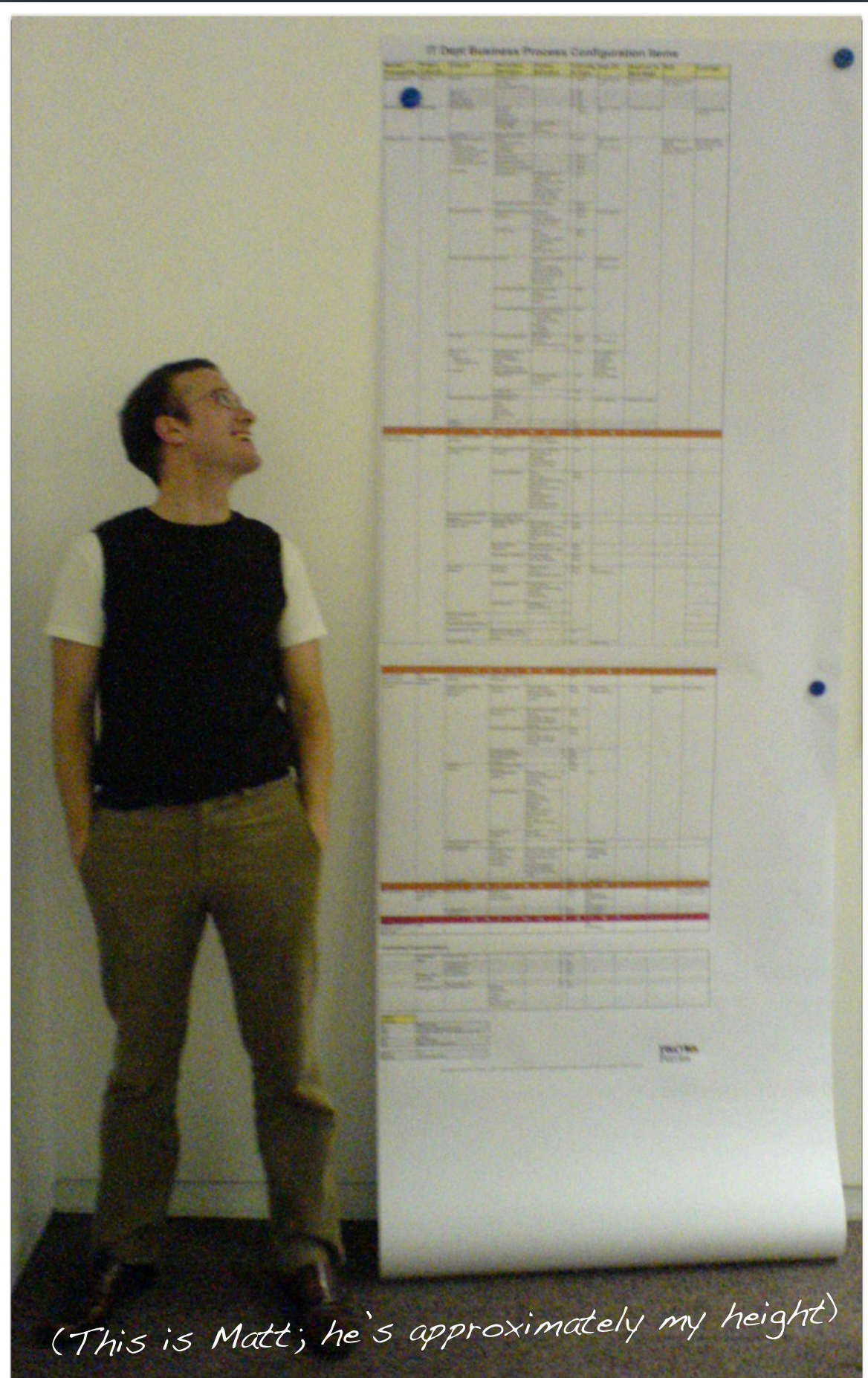




Are we
there yet?



*This isn't project
management :-/*



(This is Matt; he's approximately my height)

Simply *having* a project plan

doesn't mean that
you're doing
project management
either

Status reports are useful but they often don't reflect reality

Week 1



Week 2



Week 3



Week 27



...

Week 28



#epicfail

We need
another
£200,000



Project Manager

*How can you possibly
know this when you don't
understand the scope?!*

We use

PRINCE2

... but we scale it down

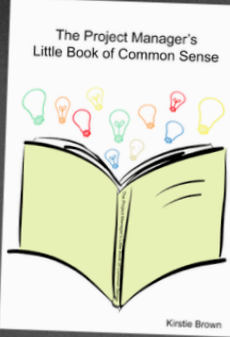


You have <20 risks for a
£1,000,000+
project?

Common sense?

Leanpub

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The Project Manager's
Little Book of Common Sense

by Kirstie Brown

**The Project Manager's
Little Book of Common
Sense**

by Kirstie Brown

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Suggested price: \$10.00

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Last updated: 2013-04-04

The author considers this book to be about 10% complete!

Book language: English

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About the Book


This book is mainly aimed at Information Technology project managers, however most of the principles in the book will also apply to any project. It is an ideal read for either new or experienced project managers as the aim of the book is to be small, compact, easy to pick up and flick through or to read cover to cover.

The book covers the main principles on project management with scenarios, tips and examples drawn from real life experiences that are used to explain how to overcome some of the challenges IT project managers face in an ever changing technical environment.

The book is currently being published iteratively and contains the first two chapters.

About the Author

Kirstie Brown [@kirstie_brown](#)



Kirstie lives in Jersey, Channel Islands with her husband and family. She works in one of Jersey's largest organisation's and is responsible for running the Information Services Project Management Office. Her interests are in project management, agile and change. She used to be a software developer, so has an understanding of the technical issues faced in project delivery.

Table of Contents

What is a Project Manager

Is accreditation important?

How can you be a good project manager?

What can help but isn't essential?

Is it a project?

What's a project?

What's a programme?

What's a portfolio of projects?

What's "business as usual" (BAU)?

Why start a project?

Project assumptions

Common mistakes

How to capture and manage assumptions


Project constraints

How to manage constraints

Other constraints

Comments

0 comments



Leave a message...

★ 0

*We have
good people*

(we trust them; they will do the right thing)

We're all on track to
deliver 30th September

*We're running late,
but I'm sure the
other team are
behind schedule too*



Us too!

*We're late, but I think
they are too; let them
break the news to the
sponsor to buy us
some more time*



Project Poker

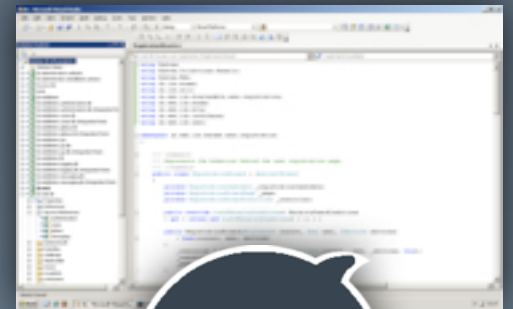
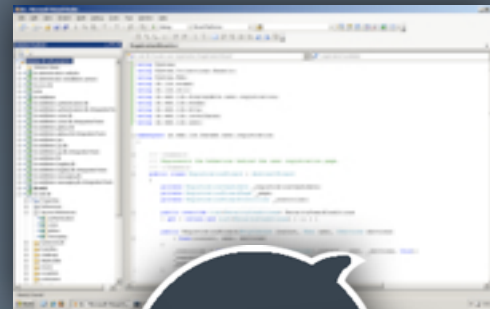
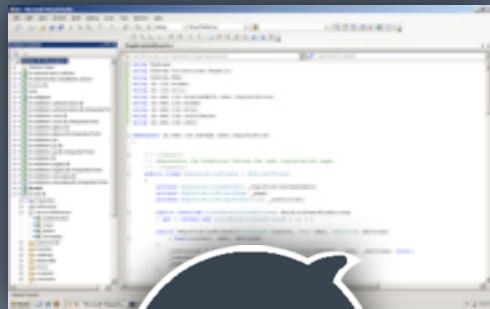
I want you to bust your

ass!



Project Manager

I want you to
bust your ass!



*Strong technical team;
the project manager
brought us together!*

Technical leadership



Gerald Weinberg

@JerryWeinberg

@gdinwiddie Delivering means nothing if we don't take quality into account. Any fool can deliver crap. #Agile #development

← Reply ↻ Retweet ★ Favorite

“Any fool can deliver crap”

What's the incentive for quality?

*(especially if there's a long testing phase
or large maintenance contract has been agreed)*

*Internal quality
(clean code, good structure,
maintainable, flexible, etc)*

*External quality
(it "works", look & feel, robust,
delivers value, etc)*

That's for

our

eyes only

Layers

are

good,

let's

have

lots

of

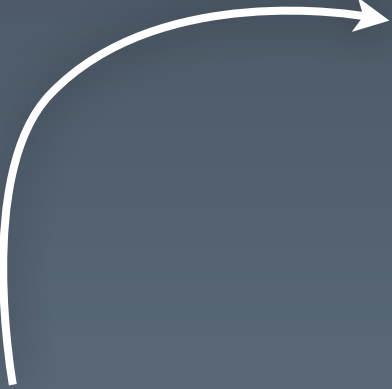
them!

*How many layers should
we have? It depends
on the developer... :-/*

Collective code
ownership is great
(except when some of the code is “too complex”)

Technical Requirements Document

- (1) The system must be fast.
- (2) The system must be highly secure.
- (3) We need the system to be available 24x7.



Many IT projects fail
because the technical
requirements were not
fully understood
... by anybody!

Remainder of document is the grey text
from the template this document was
based upon, but nobody understood
what it meant so it never got deleted...

The irresponsible architect

Cross-site scripting attacks possible; weak passwords allowed; HTTP sessions didn't timeout; ...

No non-functional testing (e.g. penetration testing or load testing); ...

Basic functionality errors; little or no quality assurance; rework required late in the project because of assumptions; ...

No documentation; ...

Oh, did I mention this was supposed to be a "strategic platform"?

Technology

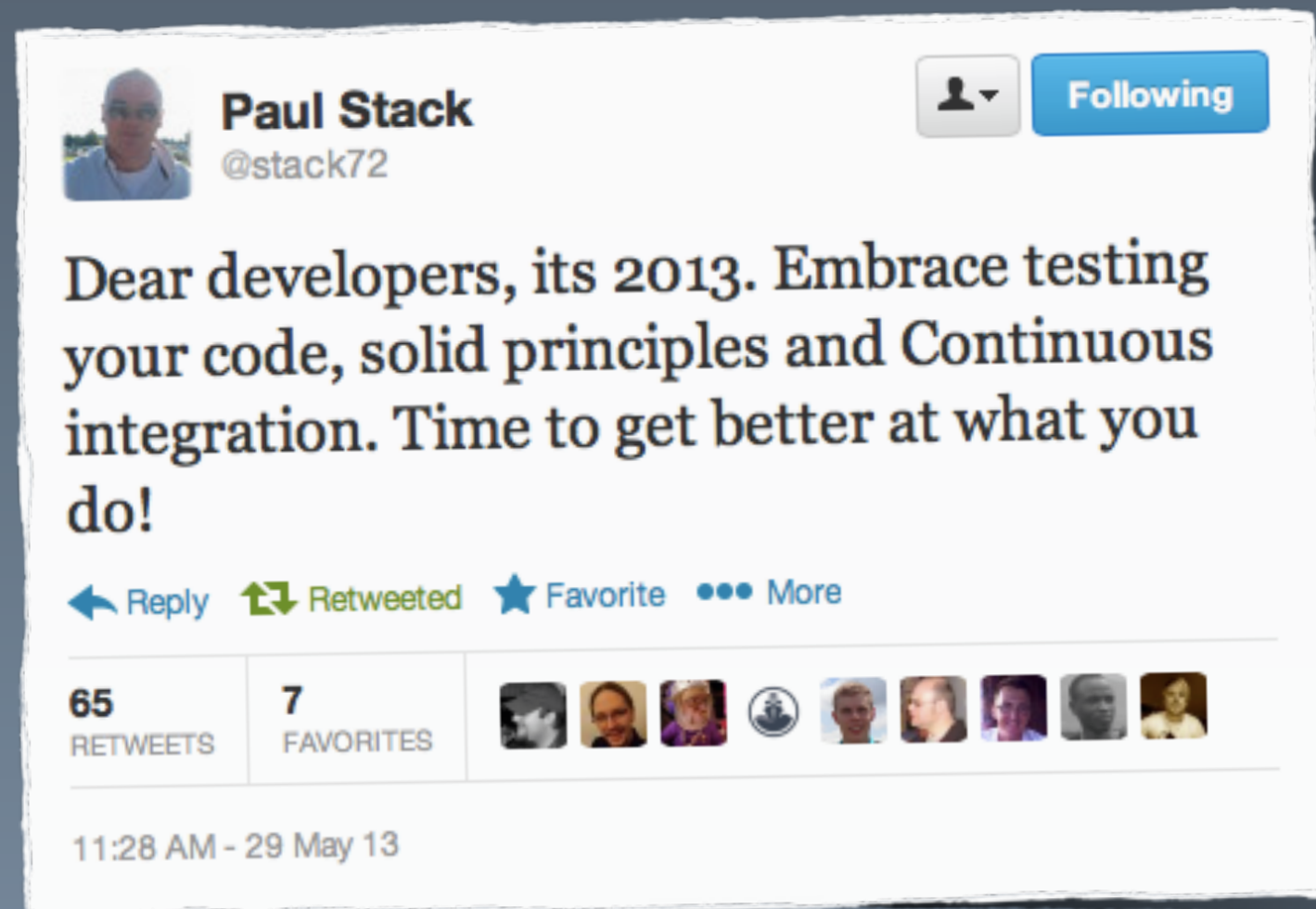
— — — — — — — — — —

isn't the answer
you're looking for

We do automated unit
testing & continuous
integration



Modern software development practices are
not optional
for software “professionals” in 2013



Have you read
any books by

— — — — — — — — — —

?

SharePoint isn't
“software
development”



Director of a consulting company (that specialised in SharePoint)

We have the tools,
and we have the
talent.

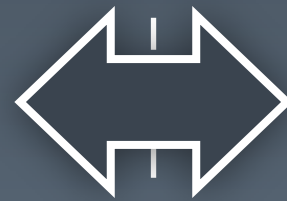


Winston Zeddemore, Ghostbusters (1984)

Really? :-/

*This clearly
hasn't
been tested :-/*

Outsourcing and offshoring



Outsourcing and offshoring
complicate the situation

Many organisations outsource because
**IT isn't their core
business**

*How do you effectively
manage suppliers if
this is the case?*

We're an

ABC Certified Partner

(we got invited to their conference and we have a badge to prove it)



Supplier

Vendor certifications & qualifications
aren't the same as having

**real-world
experience**

*Be wary about using them
as a differentiator...*

Statement of Work

Dear valued customer,

We have pleasure in providing you with the following quote related to our recent discussions.

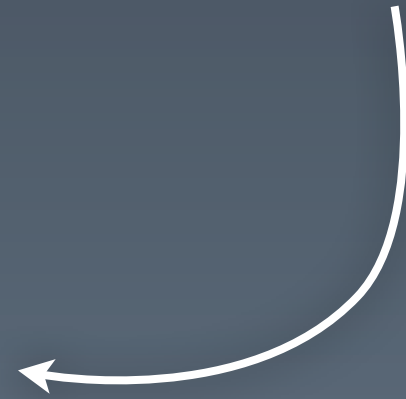
- Total cost: £149,950

We hope it meets your needs.

Lots of love,

Your trusted supplier X

Assumptions are the
mother of all ...



Statement of Work

Dear valued customer,

We have pleasure in providing you with the following quote.

- Replace system X with technology Y
- Test
- Deploy
- Total cost: £149,950

We hope it meets your needs.

Lots of love,

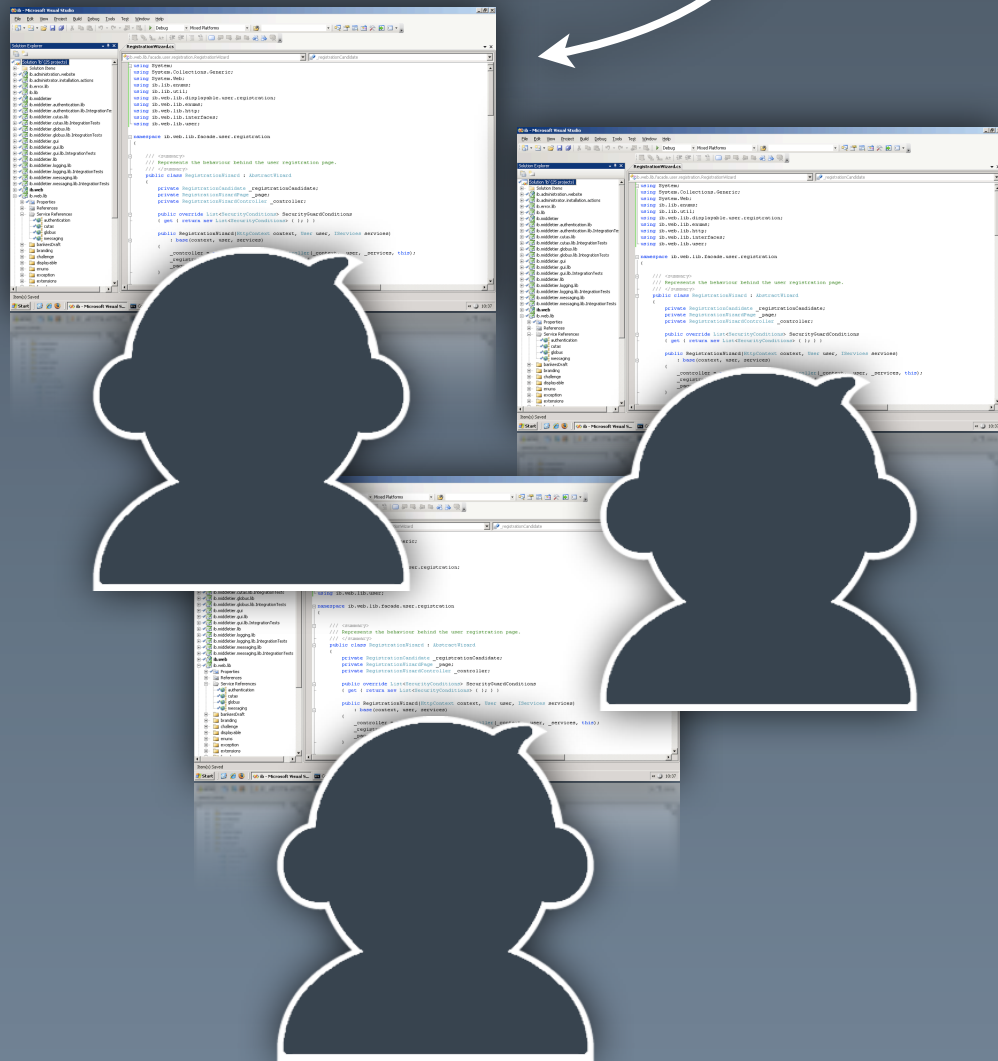
Your trusted supplier X

Err ... what does system X actually do?!



“Them” and “Us”
policies are often
pointless

Development team
builds the software



“Them”

Big live
environment

Somebody else
deploys/installs
the software



“Us”

So what?

That's **just the way**
that the organisation works



Co-worker: We need to deliver this, despite being two weeks and \$2,000 over budget?

Boss: Well...

...we are where we are



Commonly used in the business world, meaning "We are in the shit, but suck it up"...

It's all about the
people, stupid

Why Don't We Learn!?

<http://www.infoq.com/presentations/Why-Dont-We-Learn>



How do you get such teams to

learn

and

adopt

“modern software development practices”





Energized Work

@energizedwork



Follow

When organisational bias favours
productivity, often thinking falls by the
wayside

← Reply ↻ Retweet ★ Favorite ... More

2:34 p.m. - Feb 24, 2013

Productivity ... or other motivations

They're a
challenging
team



Director of a consulting company

*They work in an ad hoc
manner, no attention to
detail, etc...*

shit



Jèrriais

The native language of Jersey
(a form of the Norman language)

The problems are
caused by the
culture



The conclusion from an organisational review (after seven months!)

Any approach can work with
good people

Every software
development team
needs a
master builder



1 or many



The software architecture **role**



Dedicated software architect

Single point of responsibility for the technical aspects of the software project

From chaos to self-organising



Everybody is a software architect

Joint responsibility for the technical aspects of the software project

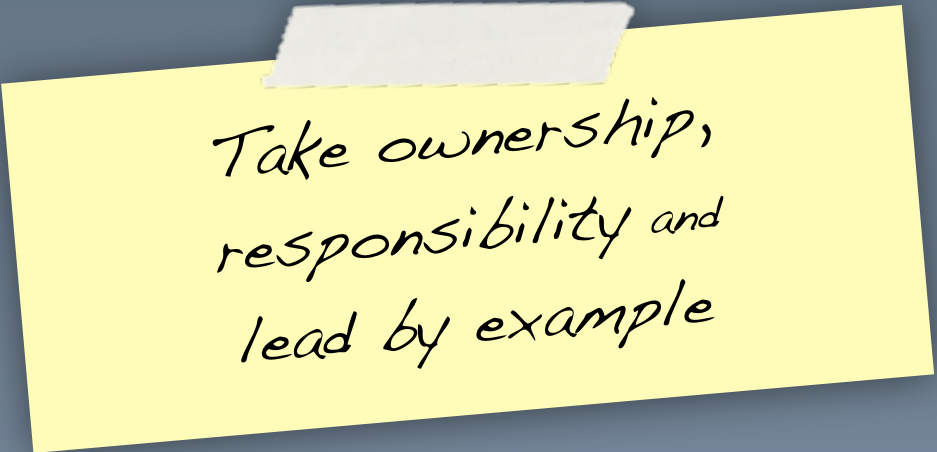
Elastic Leadership (Roy Osherove)
Survival (command and control),
learning (coaching),
self-organising (facilitation)

Software architects should be coaches and mentors

Explain the rationale and intent of decisions...

*Strong technical leadership
but open to ideas...*

Be proactive
and take the lead



*Take ownership,
responsibility and
lead by example*

Software architect and project manager as peers



Project
Manager



Team
Member



Team
Member



Team
Member



Software
Architect





Account
Manager

How are you all?
Anything I can
do to help?
Fancy some lunch?

A little management
often doesn't hurt :-)

Transparency, honesty and openness

*Take an iterative and
incremental approach
to all deliverables*

*Be honest
about progress!*



**KEEP
CALM
AND
TAKE A
STEP BACK**



**KEEP
CALM
AND
CARRY
ON**

Hiring

software people



What was the last
technical book
that you read?



Interviewer

How do you keep
up to date?



Interviewer

1 hour?



Generalising

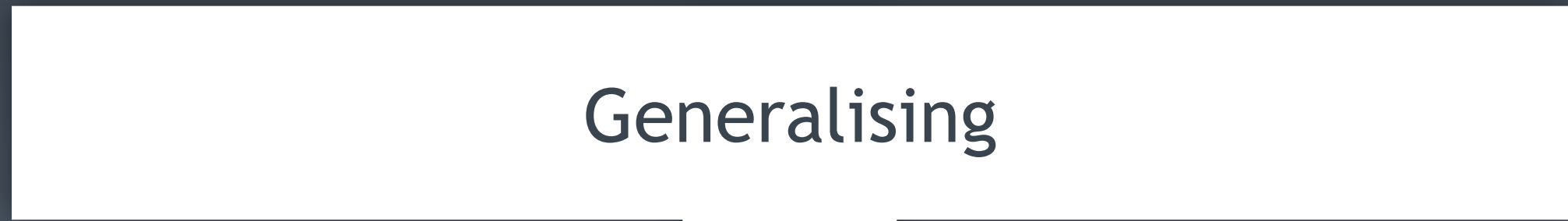
Specialist

Depth

Deep hands-on technology
skills and knowledge

Breadth


Broad knowledge of
patterns, designs,
approaches, technologies,
non-functional requirements
...





GROW people

(technical and soft skills)

A diagram illustrating 360-degree feedback. A large dark blue circle with a white border is centered on the page. Inside the circle, the text "360°" is written in a large, white, sans-serif font, and the word "feedback" is written below it in a smaller, white, sans-serif font. Surrounding the central circle are six white line-art icons of people's heads and shoulders, arranged in a circular pattern. The background is a solid dark blue color.

360° feedback

Change

the model from “them and us”
to just “us”

Skills Matter : In The Brain of Linda Rising: Who do You Trust? Beware of Your Brain

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HOME SCALA & F# JAVA .NET WEB GROOVY & GRAILS ANDROID & IOS NOSQL ARCHITECTURE AGILE & SCRUM AGILE DEVELOPER

In The Brain of Linda Rising: Who do You Trust? Beware of Your Brain

Who do You Trust? Beware of Your Brain

Cognitive scientists tell us that we are more productive and happier when our behaviour matches our brain's hard-wiring; when, what we do and why we do it matches the way we have evolved to survive over tens of thousands of years.

One problematic behaviour humans have is that we are hard-wired to instantly decide who we trust. And we generally aren't aware of these decisions—it just happens.

Linda Rising explains that this hard-wired "trust evaluation" can get in the way of working well with others.

Pairing, the daily stand-up, and close communication with the customer and others outside the team go a long way to overcome our instant evaluation of others. As Linda helps you gain a better understanding of this mechanism in your behaviour and what agile processes can do to help, you are more likely to build better interpersonal relationships and create successful products.

WANT TO LEARN MORE? THEN CHECK OUT OUR EXPERT WORKSHOPS!

Linda Rising's Fearless Change - Patterns for Introducing New Ideas

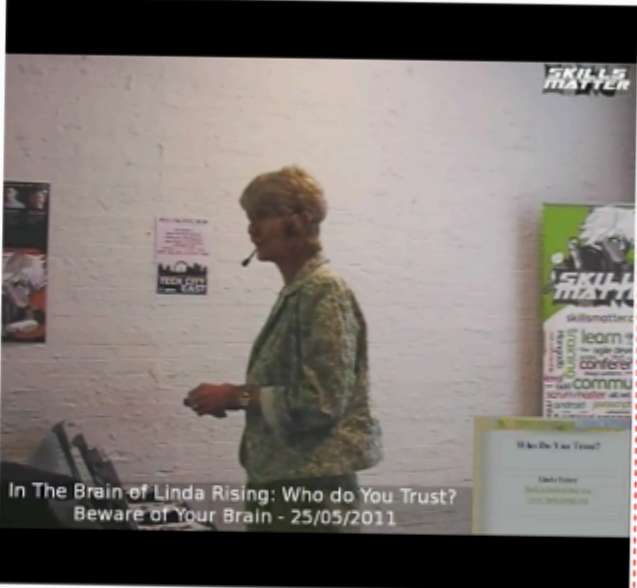
Linda Rising's Fearless Change - Patterns for Introducing New Ideas course offers proven change management strategies to help you become a more successful agent of change in your organization.

In this 1 day Fearless Change - Patterns for Introducing New Ideas course, Linda shows how the lessons from her book, Fearless Change: Patterns for Introducing New Ideas, can help you succeed. Find out more [here](#).

Kevlin Henney's Agile Development for Developers


Kevlin Henney's three day Agile Development for Developers course looks at the Agile principles, practices and processes that offer a path to sustainable development for individuals, teams and organisations. For many Developers who want to focus on their craft, it is sometimes difficult to get a view of Agile development that is neither focused on a project management perspective nor just on the practice of Test-Driven Development (TDD).. Find out more [here](#)

PODCAST WHO DO YOU TRUST? BEWARE OF YOUR BRAIN



In The Brain of Linda Rising: Who do You Trust? Beware of Your Brain - 25/05/2011

WHO DO YOU TRUST? BEWARE OF YOUR BRAIN PHOTOS



In The Brain of Linda Rising Who do You Trust? Beware of Your Brain

<http://skillsmatter.com/podcast/agile-scrum/who-do-you-trust-beware-of-your-brain>

Shared goals; win-win

*No more "them" and "us"
... there is just "us"*



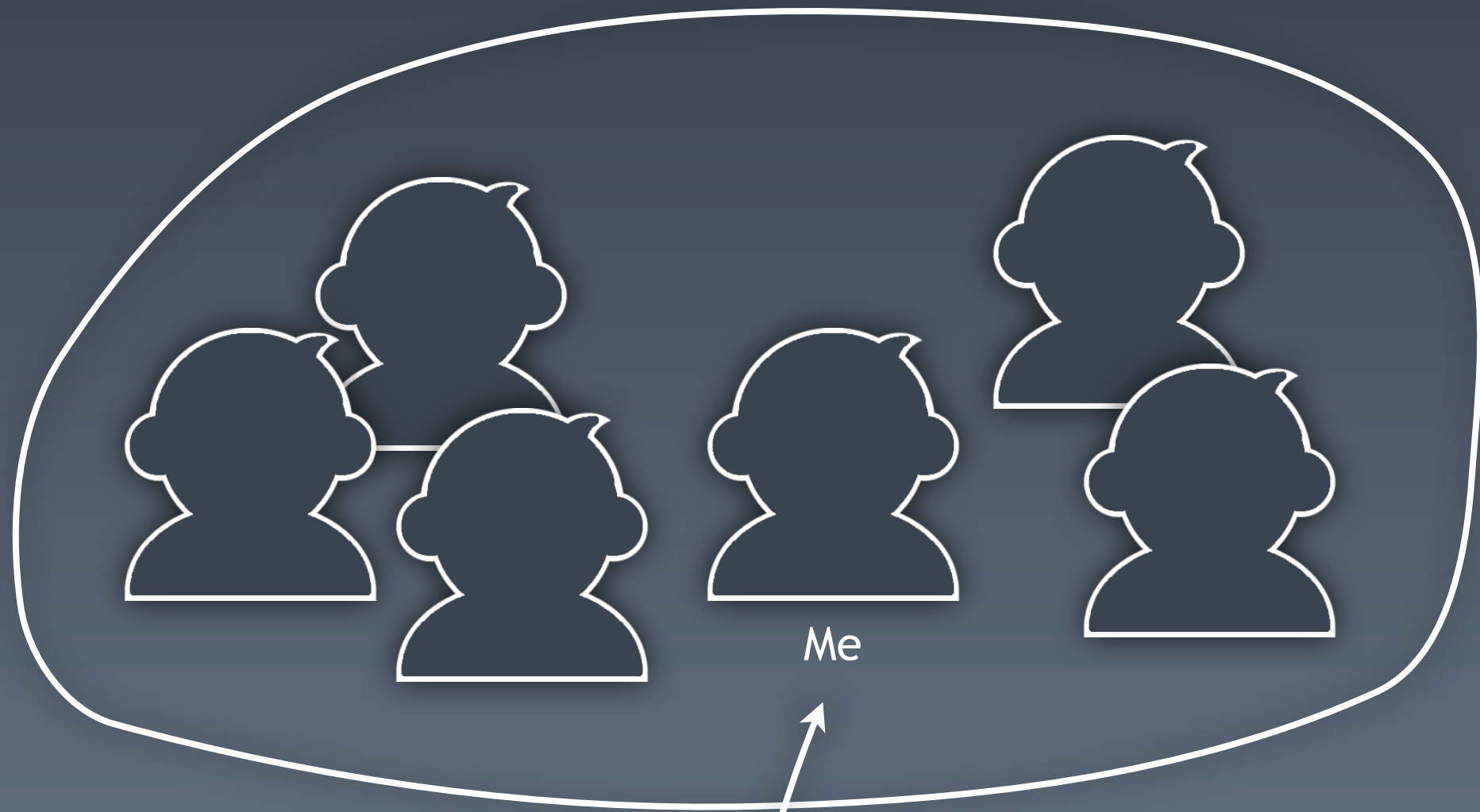
*The traditional approach:
"we want X for Y by Z"*

“Project as a Service”

VS

“Team as a Service”

*The agile approach:
"we want a team to deliver
business value, and fast"*



Me

*A mixed customer/
supplier team
means constant cross-training and the
customer retains the ability to support/
maintain/enhance the solution*

Continuous improvement is
only achievable if you have

sustainable
competence

: –)

We have a duty to
educate



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@simonbrown on Twitter