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The End of Projects and what happens next

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Allan Kelly...

- Training for Agile
- > Advice on
 - > Agile, adopting Agile
 - Organizing teams

Author

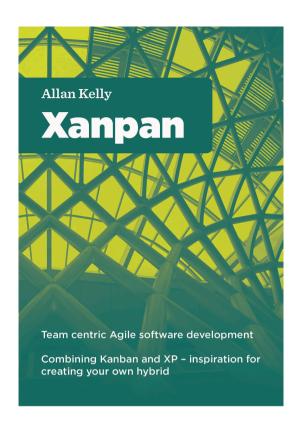
- Xanpan: Team Centric Agile Software Development
 https://leanpub.com/xanpan (2014-2015)
- Business Patterns for Software Developers (2012)
- Changing Software Development: Learning to be Agile

(2008)

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Problem #1 - Benefit

Project Success Criteria

- On Schedule
- On Budget
- On Quality (Features)

Where's the value?
£\$€



Project Model Assumptions

- Value is knowable
 And is known before start
- 2. There is no value in flexibility i.e. Options are valueless



Pre-defined outcome?

Requirements change The world changes

The observed rate of change in the US is about 2% per calendar month

Compound to ~27% per annum

Capers Jones, 2008

IT/IS & Business Manager survey

70% believe they are failing to identify and quantify the benefits adequately 38% openly admit they overstate the benefits in order to obtain funding 80% report that the review and evaluation of completed projects is also inadequate due to the focus on [achieving] cost, time and quality objectives and not on whether the intended benefits were realized.

Delivering value from IS and IT investments, John Ward, Cranfield School of Management, 2006 <u>-</u> survey of UK & Benelux managers

http://www.som.cranfield.ac.uk/som/dinamic-content/research/documents/deliveringvaluereport.pdf

The Project model leads to...



Goal displacement

- Chasing date over benefit
- Chasing time over benefit
- Chasing cost over benefit
- Chasing features over benefit

Solution

Focus on Benefit not The End

Ask not, "When will the software be done?"

Do ask: "When will the software deliver value next?"

Think: Stream of Value (which might stop one day)

Not: An end date

Change Governance

 Base Governance on actual delivered benefits

- Not milestones completed
- Not documents
- Not budgets

What have you delivered for me lately?



Picture from Picasa - Creative Commons License http://commons.wikimedia.org/wiki/File:House_of_Parliment_6_2012-07-08.jpg

Governance based on results

- Experiment friendly
 - Failure tolerant
 - Fail fast, fail cheap (salvage)
- Align with strategy
- Governance through *Iterative Portfolio Management*

Iterative Portfolio Management

- Fixed schedule for gate reviews
- Review what is ready on a date
 - Benefit <u>delivered</u> to date
 - Potential benefit if continued



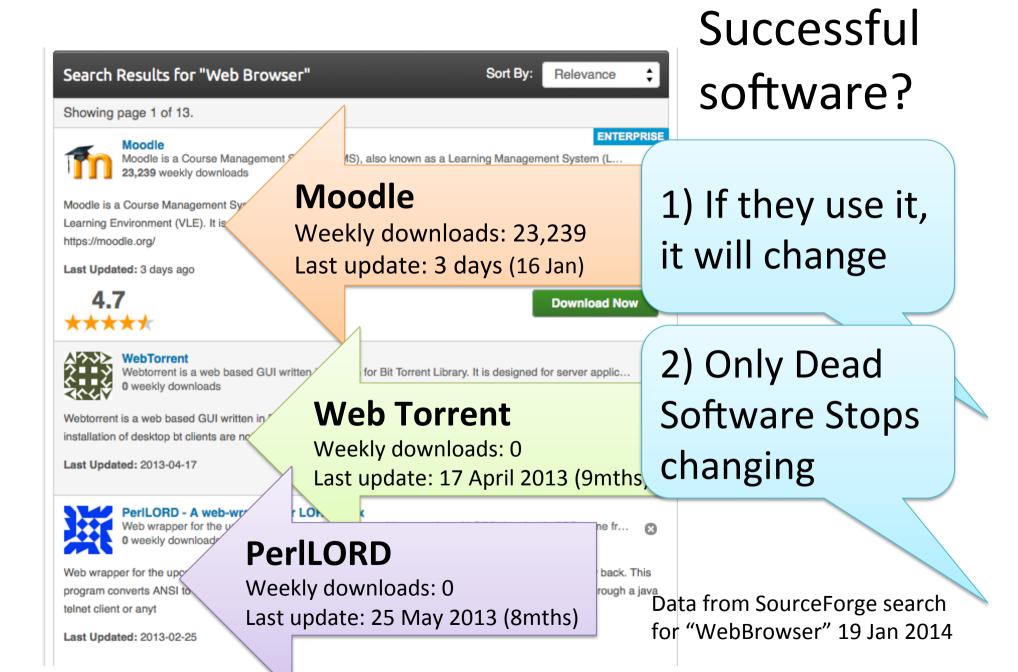
Problem #2 – The End

Software isn't temporary

Successful software doesn't stop

Successful software continues to change Only dead software has an end-date





End dates damage quality

- Short term thinking leads to...
 - Corner cutting
 - Known & unfixed bugs
 - Residual technical debt
 - Knowledge lost



End Date considered harmful

Late requirements considered inferior



A Project is...

"A temporary organization that is needed to produce a unique and predefined outcome or result at a pre-specified time using predetermined resources."



PRINCE2 definition of project

A project is....



"PMI defines a project by its two key characteristics:

- it is <u>temporary</u> and
- undertaken to create a product, service, or result that is unique."

Project Management Institute - http://pm4id.org/1/2/



A Match Made in Hell



Rational end dates?

In the US more than half of the large projects ... predetermined end date is selected, and it is forced on the project by arbitrary decree.

Capers Jones, 2008



Solution

- Work to the business deadline
 - Do what you can in the time
 - Do good work

Deadlines Good



End dates Bad



Temporary organizations

The most destructive idea known to software development

Temporary Organization?

- Storming
- Norming
- Forming
- Performing
- Destroying

Takes time & money!



Why destroy performing teams? Why spend that money? Why loose knowledge?

Temporary organizations

The most destructive idea known to software development

Disbanding teams destroys

- Knowledge
- Capability
- Performance

Corporate Psychopathy

Process by which corporations disband performing teams and release staff



Solution

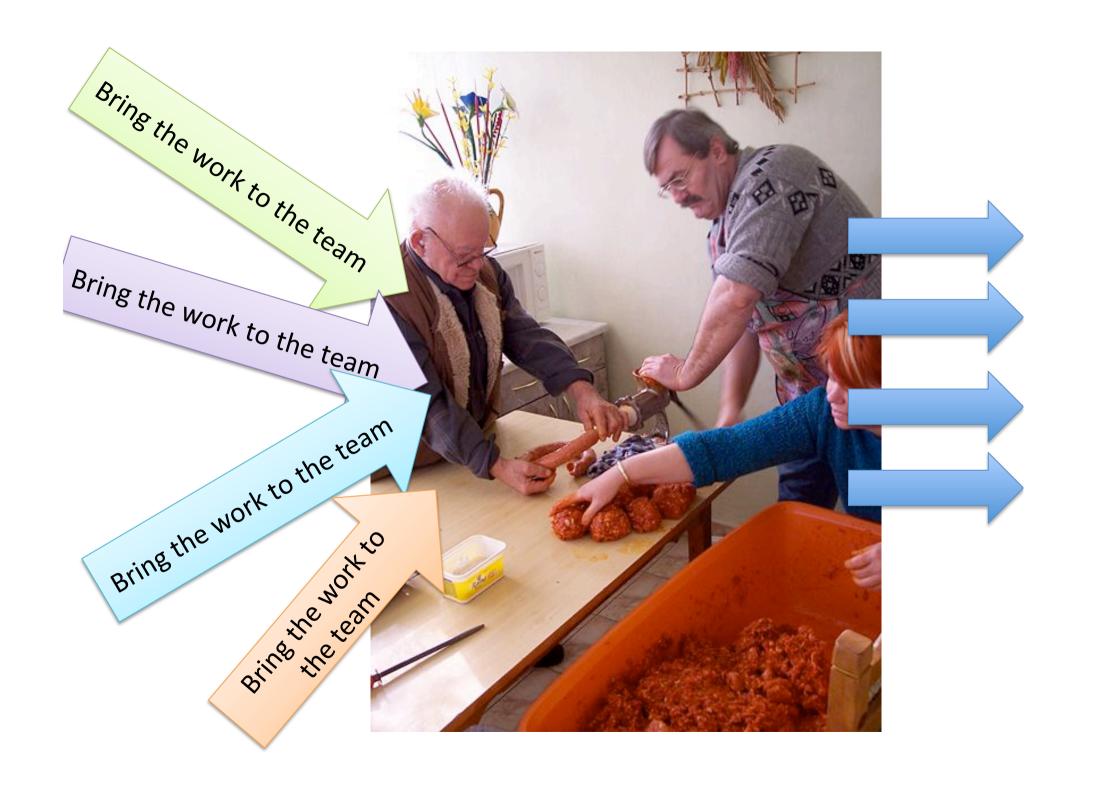
Base work around stable

– Teams

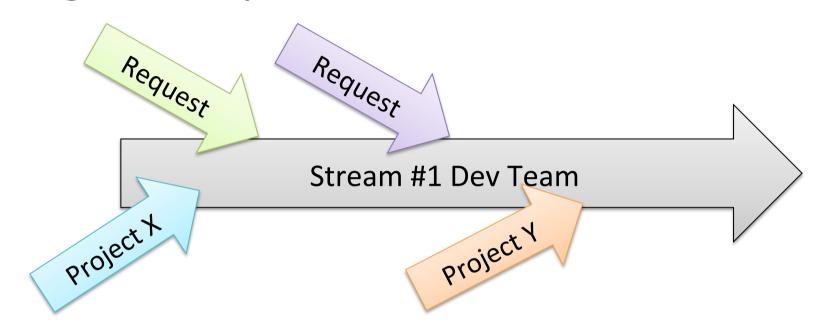
Aim for continuity

<u>Continuous</u> flow<u>Continuous</u> improvement<u>Continuous</u> delivery<u>Continuous</u> benefit

Continuous not Temporary



Organize by business stream & team



- Aim for stable teams & continuity
- Close to business
- Manage queues within capacity

What to do about it...

- Keep teams together
- Flow work to the teams
- Work in the small
- Work continually
- Demonstrate value



Problem #4 – Projects are Big

- Project model is optimized for big
- Used on small pieces of work it inefficient
- Projects push big decisions up
 - to big men
 - with big cheque books
 - top-down authority

Software development...

- Does NOT have economies of Scale
- Development has DISECONOMIES of scale

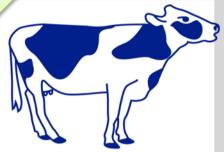






Milk is cheapest in BIG cartons





MILK

VITAMIN D ADDED

GRADE A HOMOGENIZED PASTEURIZED

NET 32 FL OZ (1QT) 946 mL





And small cartons of software reduce risk

Software is cheapest in lots of small cartons

Big increases risk

Solution

Software development...

- Does NOT have economies of Scale
- Development has DISECONOMIES of scale

Therefore

- Stop thinking BIG
- Start thinking SMALL



Project A: Risk = 30% Value at risk = £1m Therefore risk weighted value = £300,000

Consider a large project

Prj B: Risk = 15%Value @ risk = £½m Therefore ... = £75,000

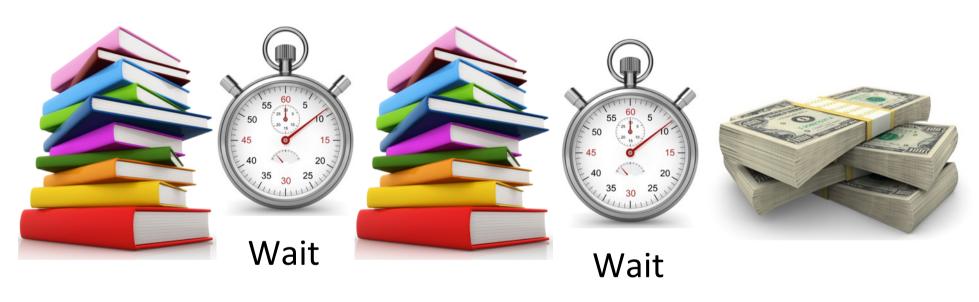
Prj C: Risk = 15% Value @risk = £½m Therefore ... = £75,000

J: Risk = 6%

@risk = £200k

Therefore = £12k

Big Batch Size

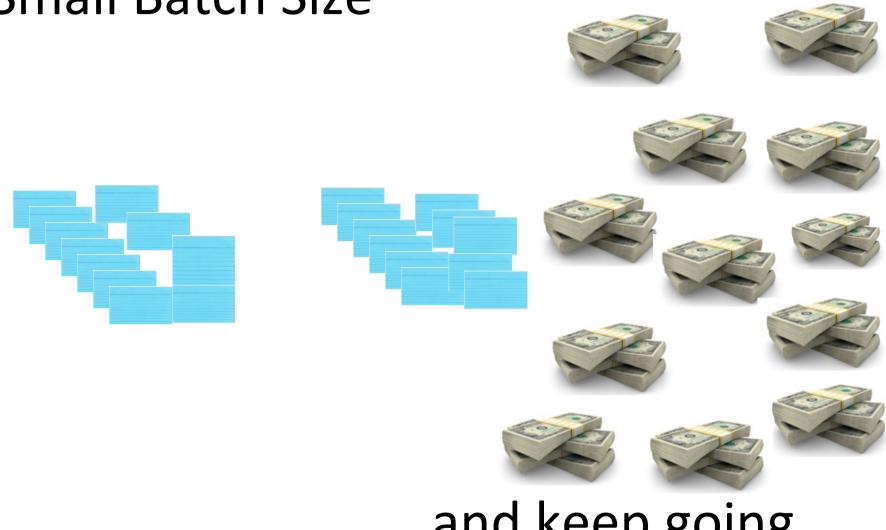


Build this!

Deliver this!

Make lots of this!

Small Batch Size



... and keep going

The End of Projects



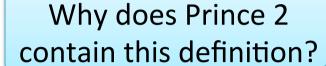
- Projects are accounting codes
- Finished Software is <u>Dead Software</u>
 - Living software changes
 - Dead software doesn't
 - Living software doesn't end
- Project thinking kills software

So what is "A project"?

Wait a minute....

Not fair! You misrepresent us!

Project Manager





- Break up teams
- Stick doggedly to requirements

We do

- Allow change
- Consider value
- Work continually





Problem #3: Language

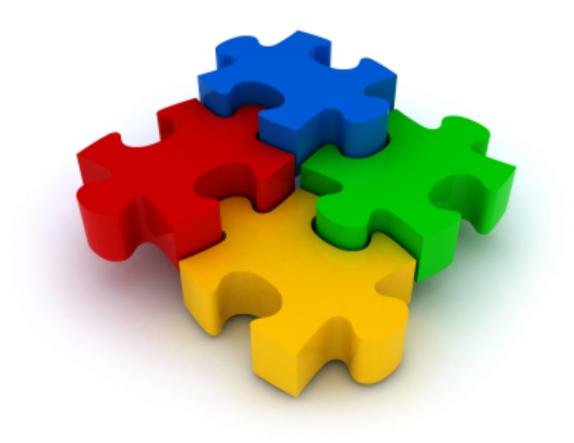
"False Projects"

When the language of projects is used to discuss work which is not a project



Beyond Projects

A new model....



Waterfall 2.0 Continuous Flow



Jonathon's Run Fall, Pennsylvania by Hubert Stoffels (http://flickr.com/photos/22195940@N00)
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Continuous flow

- Work in the small
- Get good at doing small things
 - Deliver small increments of value
 - And evaluate results
- Go fast
- Value seeking
- Repeat, don't stop



Organize for...

Work management optimized for small

- Lots of small decisions
- Devolved authority

Base work around stable

Teams

Aim for continuity

Could this ever work?

Seems to work well on Sand Hill Road ...

- Governance by results?
- Fail fast, fail cheap?













SEQUOIA & CAPITAL







Thanks!

Beyond Projects

- It ain't ever over
- BAU is not a dirty work

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