

SOME THOUGHTS ON PORTFOLIO MGMT

(Implicit load/capacity balancing in popular release mgmt models)

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www.42stc.com

Most frequent challenges – or, what's bidding you?



Aside from
Confusion,
Chaos &
Overload

Common challenges

#Prison3DotZero



STRUCTURE – working against you



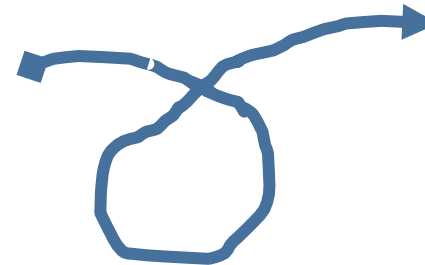
most IDEAS are bad

*Looking where the
light is*



FOCUS – not what you can; what you should

*Most have much
more capacity
than anyone can
imagine*



the GAME is changing – new
technology; new entrants; new
everything

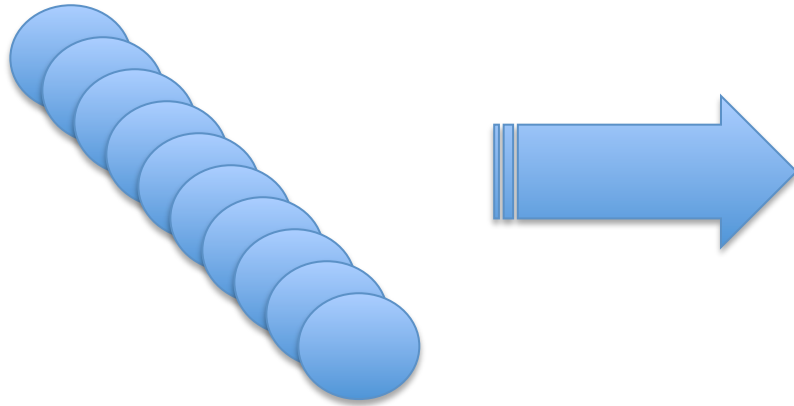
What sometimes go wrong in managing the portfolio

- *Bundling drivers*
 - *Risks, purposes and complexities*
- *Missing the signs that everything is not well*
 - *Lack of transparency and comparability – no response to obvious signs*
- *Overload*
 - *Too big and too many projects*
- *Too low level of detail in planning and estimation*
 - *Planning and estimation is like alcohol; the more you look into the bottle, the more you realize that the answer isn't there*
- *More?*

Managing portfolio – some theses

- *Ability to steer comes from visibility and comparability*
- *Predictability comes from executing to capacity at a balanced risk level*
- *Success in execution comes from fast and frequent feedback – from seeking the certainty and the validation*
- *Success in business comes from ... (cost of delay)*

Racetrack for comparability



Similar things racing on the same track are directly comparable

Micro fund round by round for transparency and continuous grooming

Optimal size: 7-11 lanes

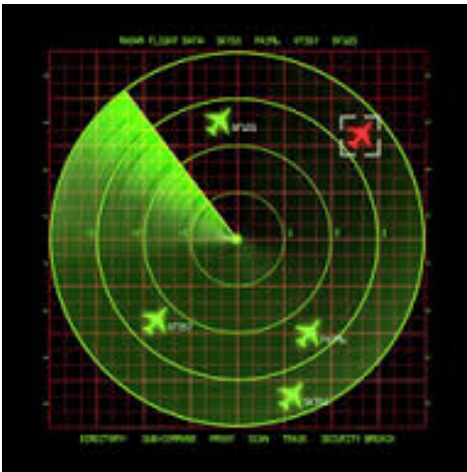
Optimal track length: typical 2-3 weeks or 2-3 months
depending on level; never more than 6 months

*'never execute
one project in
isolation'*

What is an airplane?



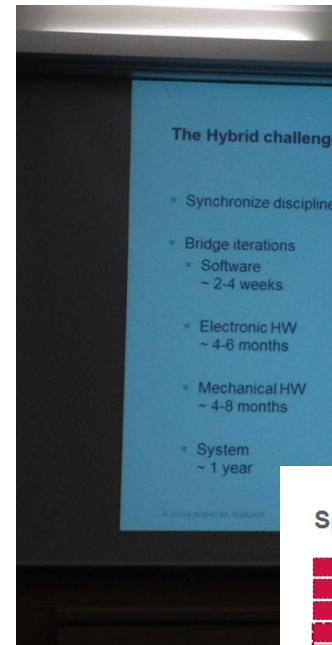
That depends ...



What is a project/program?

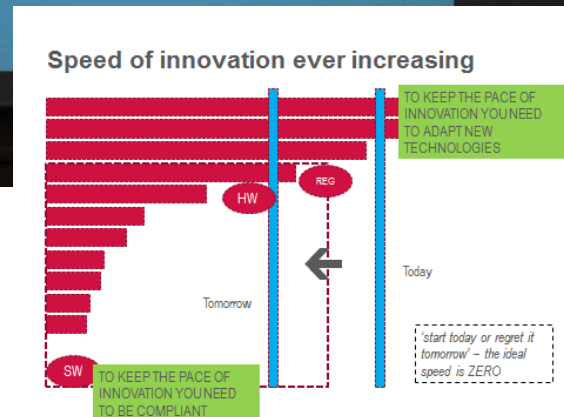
Grid-up projects/programs to compare

- Technology, product, improvement/change, ...?
- Size?
- Complexity?
- Risk?
- Value?
- Drivers – generic/specific?
- ‘laws of nature’
 - Natural lead times
 - ‘climate changes’
- Look for trends/patterns
 - Lead time on UI
 - Combinations – new team/new technology ...



(just an illustration)

	Green behavior <small>Do NEW behavior one that is unfamiliar</small>	Blue behavior <small>Do FAMILIAR behavior</small>	Purple behavior <small>INCREASE behavior intensity or duration</small>	Gray behaviors <small>DECREASE behavior intensity or duration</small>	Black behavior <small>STOP doing a behavior</small>
Dot behavior <small>is done ONE-TIME</small>	GreenDot <small>Do NEW behavior one time</small> Install solar panels on the roof	BlueDot <small>Do FAMILIAR behavior one time</small> Talk to neighbors about eco-friendly soap	PurpleDot <small>INCREASE behavior one time</small> Plant more trees and native plants	GrayDot <small>DECREASE behavior one time</small> Buy fewer cases of bottled water today	BlackDot <small>STOP doing a behavior one time</small> Turn off space heater for tonight
Span behavior <small>has a DURATION, such as 40 days</small>	GreenSpan <small>Do NEW behavior for a period of time</small> Try composting to work for three weeks	BlueSpan <small>Do FAMILIAR behavior for a period of time</small> Bike to work for two months	PurpleSpan <small>INCREASE behavior for a period of time</small> Recycle more of household waste for one month	GraySpan <small>DECREASE behavior for a period of time</small> Take shorter showers this week	BlackSpan <small>STOP a behavior for a period of time</small> Don't water lawn during summer
Path behavior <small>is done FROM NOW ON, a lasting change</small>	GreenPath <small>Do NEW behavior from now on</small> Start growing own vegetables	BluePath <small>Do FAMILIAR behavior from now on</small> Turn off lights when leaving room	PurplePath <small>INCREASE behavior from now on</small> Buy more local products	GrayPath <small>DECREASE behavior from now on</small> Eat less meat from now on	BlackPath <small>STOP a behavior from now on</small> Never alter again



Your example/exercise

- How would you grid-up your projects?
- How can you balance the value/risk/load/size/scope on each project?
- How can you make projects comparable?
- How can you make 'risk-exposure' and 'Time-To-React' visible?

Examples (balance risk; constrain load - implicit)

Programs

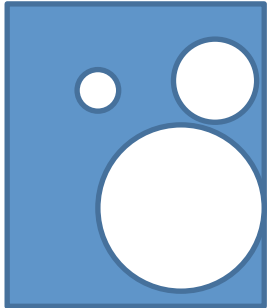
SIGNIFICANT

KNOWN
CHALLENGE

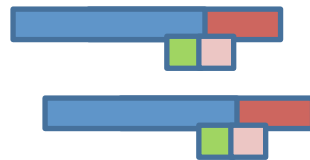
NO
CHALLENGE

Even out technology
risk

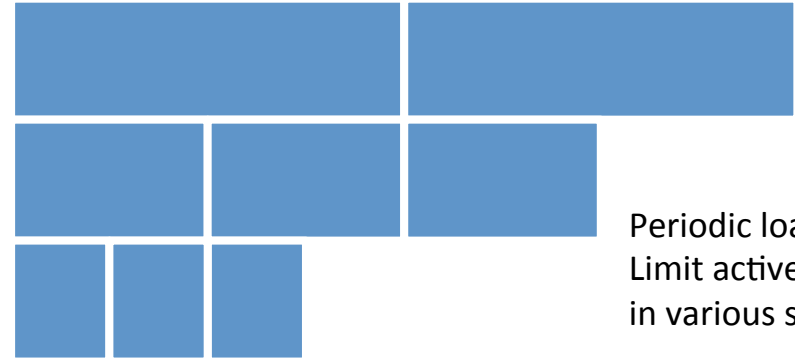
Releases



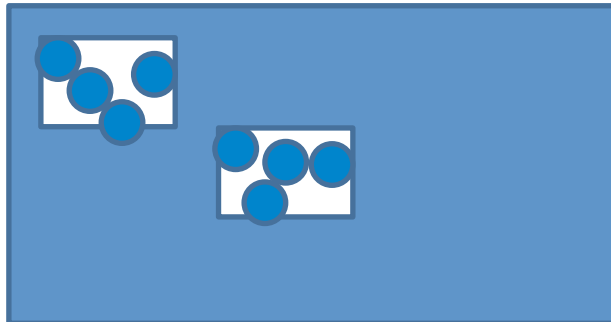
Boulders/rocks/pebbles



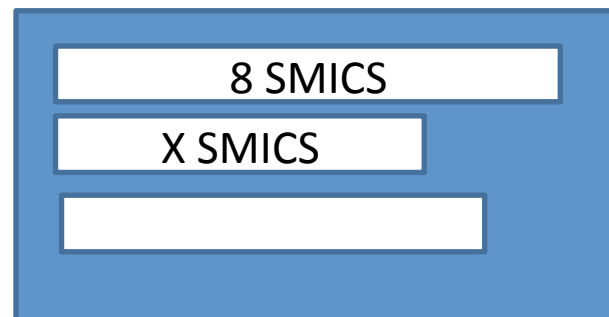
Project patterns/
Types of load



Periodic load
Limit active projects
in various sizes



Using 2 magnets pr person for active tasks



SMICS – Significant Monthly Individual Contributions
A SMIC is a load of an individual of 1-3 weeks within a month
Total SMICS equals e.g. $3 \times \text{#person}$ → 1½ months full load

THANK YOU

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- Principal Consultant, DELTA, 2012-2015
- 14 years in Nokia R&D – quality, testing, processes
- MSc & Phd in Computer Science from TUD
- See more from:
www.linkedin.com/in/mortenelvang
- Personal belief: Create *freedom to perform*
- Blog: www.42ndstreetcompany.com
- Interests: Agile, Lean, Innovation



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My thoughts about running large R&D operations

Strong culture
and principles
for operating

*‘Freedom
to perform’*

Continuous focus
on picking right
change drivers to
improve

*‘The fastest
learner
will win’*

#GameChangingBeliefs

...are beliefs with a game changing impact on your success with high-tech product development!



Imagine if you could chose to believe in something ... and then it would change your luck ... forever!

www.42ndstreetcompany.com/game-changing-beliefs "Change your luck ... forever"

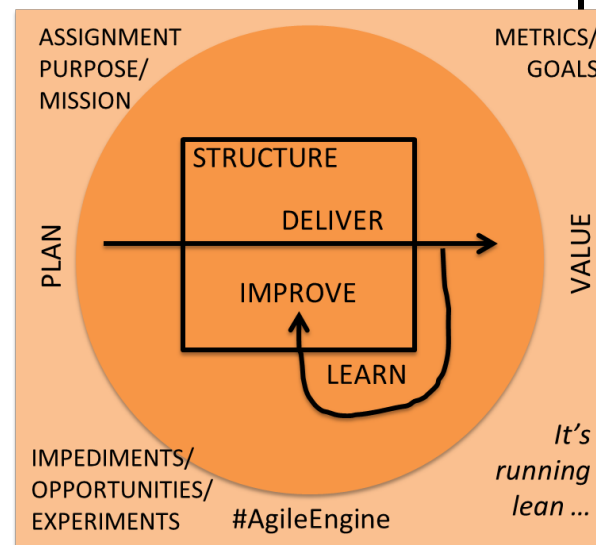
Eleven+1 Game Changing Beliefs

(Based on version 1.1984)

- The OPPORTUNITY SPACE is huge – never stop searching
- Know and be who you are ... be RELENTLESS in what you are aiming for
- PEOPLE make the difference
- Enable everyone to EXPERIMENT, LEARN and ACT INTELLIGENTLY
- Understand what VALUE is and where it comes from
- Optimize the FLOW OF VALUE
- The worst COST is what you can't do, because of what you did
- Accept that MOST IDEAS ARE BAD
- Accept that MOST PROJECTS ARE CHAOTIC
- SMALL, FAST, SIMPLE beat large, slow, complex any day
- ENGAGE with the world – SHARE what you know – STEAL with pride
- In practice ACCOUNTABILITY is indivisible

See more: www.42ndstreetcompany.com/game-changing-beliefs

"Change your luck ... forever!"

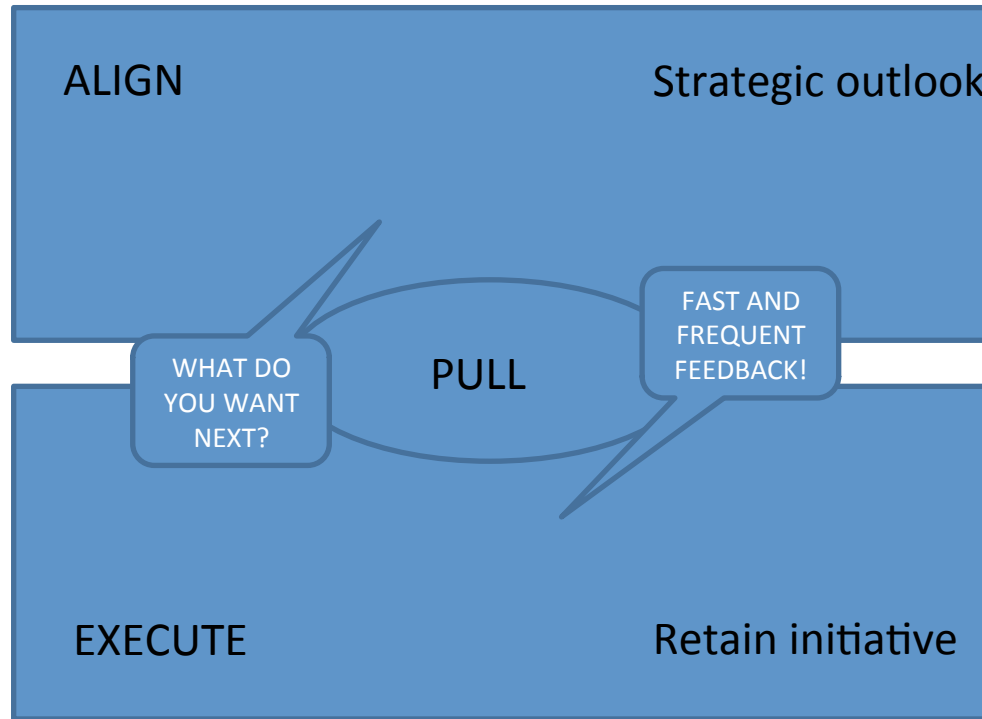


See www.42stc.com

#NeverEndingGame:

- ADAPT
- IMPROVISE
- DELIVER

Align & Execute – create a closed-loop pull system

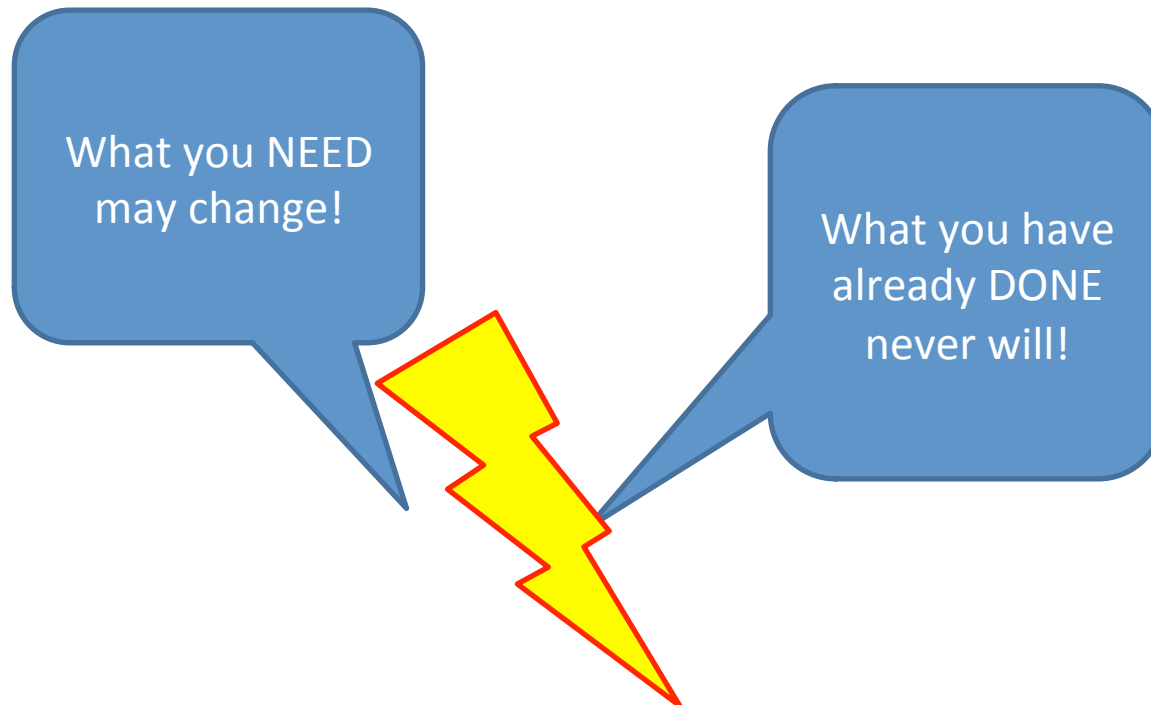


‘DEFER COMMITMENT’

‘OPERATE AT 80% CAPACITY’

‘BALANCE RISK’

The biggest risk



TO AVOID: DEFER COMMITMENT; OPERATE AT CAPACITY; SEEK VALIDATION
BEWARE: OPPORTUNITY COST; COST OF DELAY

Visualize: Risk exposure + Time-To-React [... when needs are changing]

3 principal levels of operating

ROADMAP/STRATEGY/PORTFOLIO

NEED/OPPORTUNITY

VALUE

DEMAND
'what we need
and want'

ALIGN

PROGRAM/PROJECT

BREAKDOWN

INTEGRATE

BALANCE/DELIVER
'when and how
we can do it'

PULL

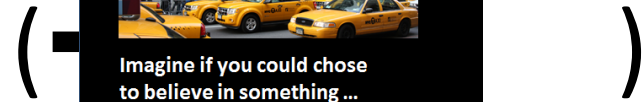
TEAM

MAKE

CAPABILITY
'what we can/
are capable of'

The strategic and tactical levels ENABLES managing flow operationally!!!!

The secrets?



- Steering comes from Visibility and Comparability
- Execute below capacity (minimize allocated SMICs)
- Split complexity and risks – balance; don't bundle
- Plan to the end \leftrightarrow Plan to next stable point --- it IS a dilemma!
- Break down details $\leftarrow \rightarrow$ Retain the tactical overview/Systemic view --- it IS a dilemma!
- Enforce a pull – ‘what do you want next’ mode
- Make experiments to learn ... fastest learner wins in the end

- ACT: Off-load late projects – be brutal
- Crystal clear project drivers – never split purposes

- BEWARE: Opportunity cost; cost of delay (\rightarrow optimize value)

- *‘knowledge work obeys the laws of traffic’*
- *‘manage at the speed you can afford to loose’*

Creating a winning organization

#GameChangingBeliefs



**Imagine if you could chose
to believe in something ...
and then it would change
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"Change your luck ... forever!"

**... are beliefs with
a game changing
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- Keep ACCOUNTABILITY crystal clear

(Based on version 1.194)

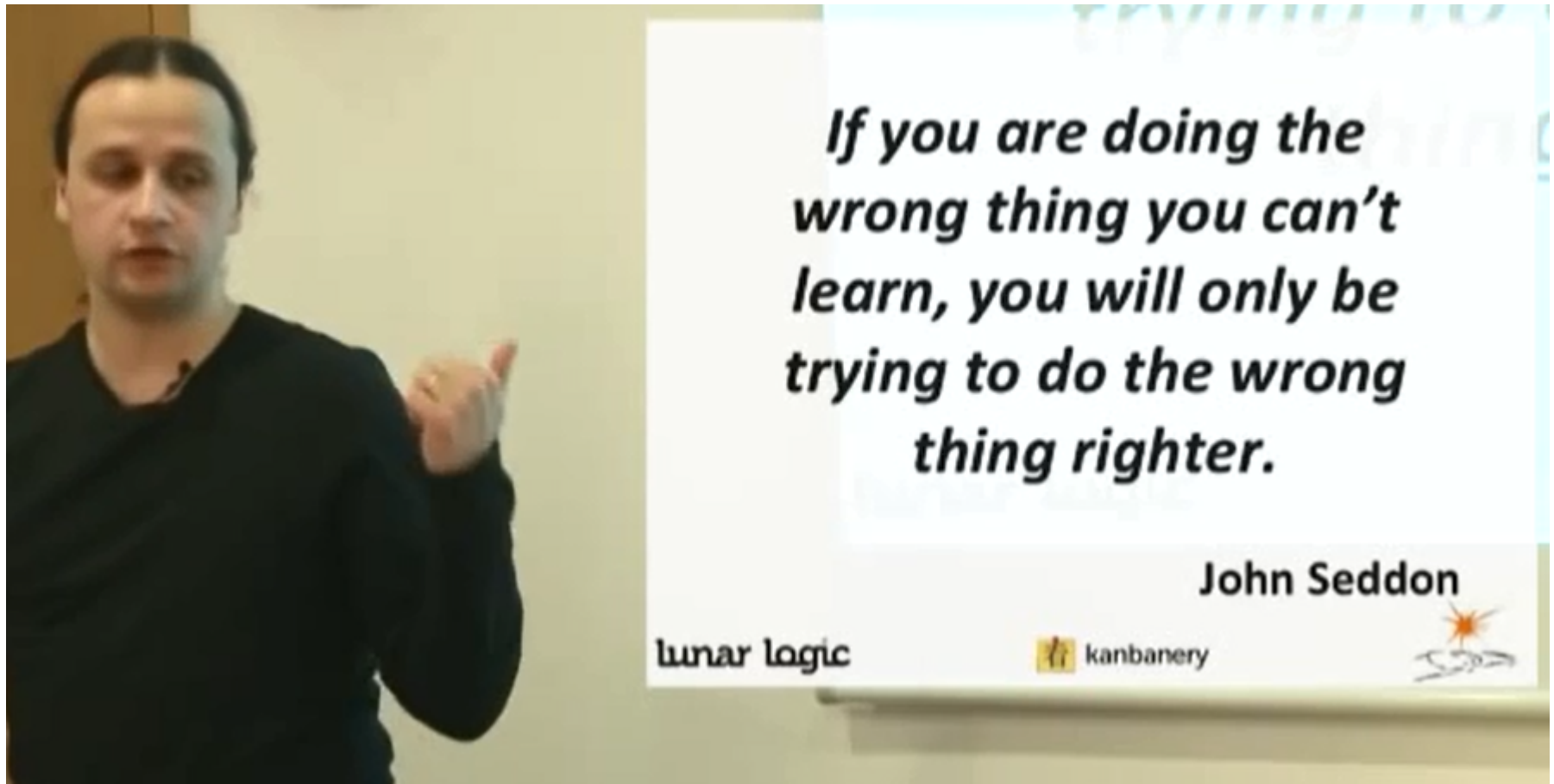
It's not as hard as you think



<https://www.pinterest.com/samanthacheok/prima-ballerina/>

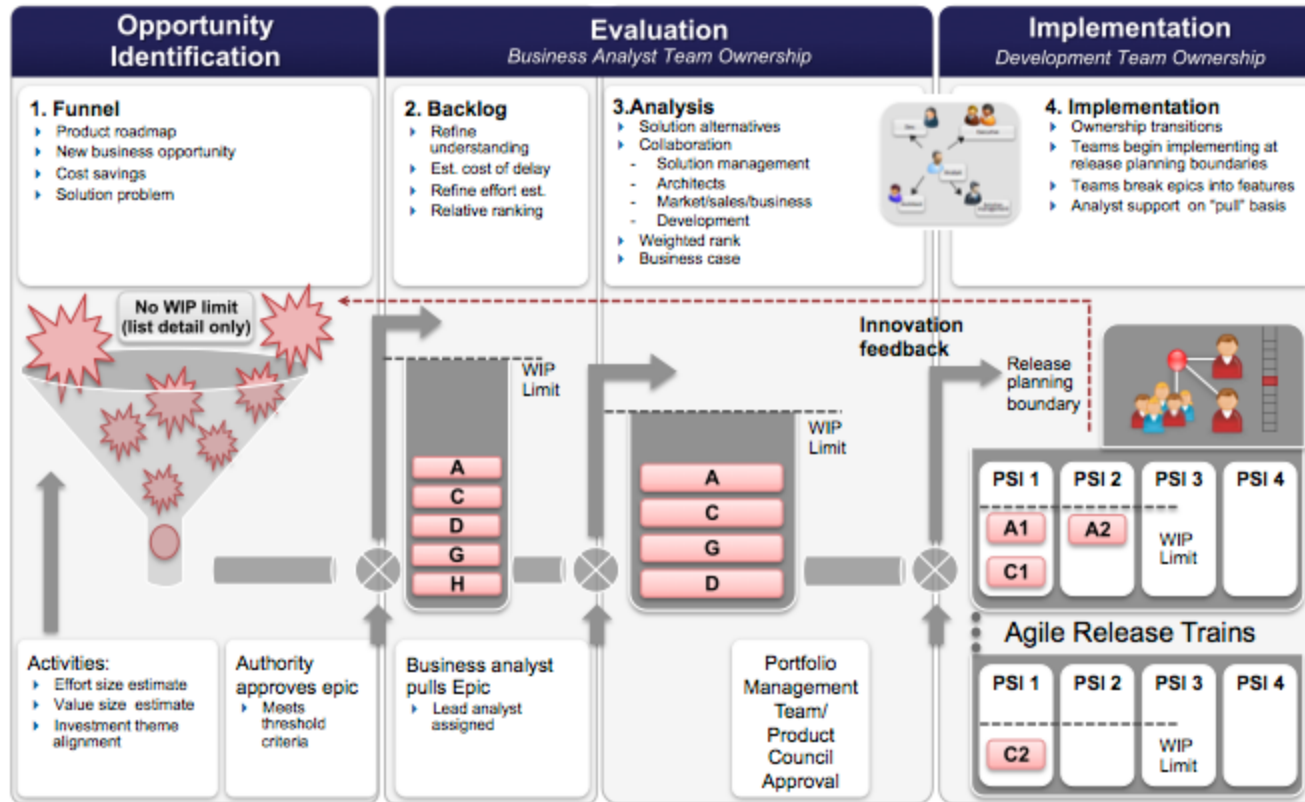
... once you learn it 😊

Pawel Bodzinski – Portfolio Kanban (can be done by a single person – only changes once a week)



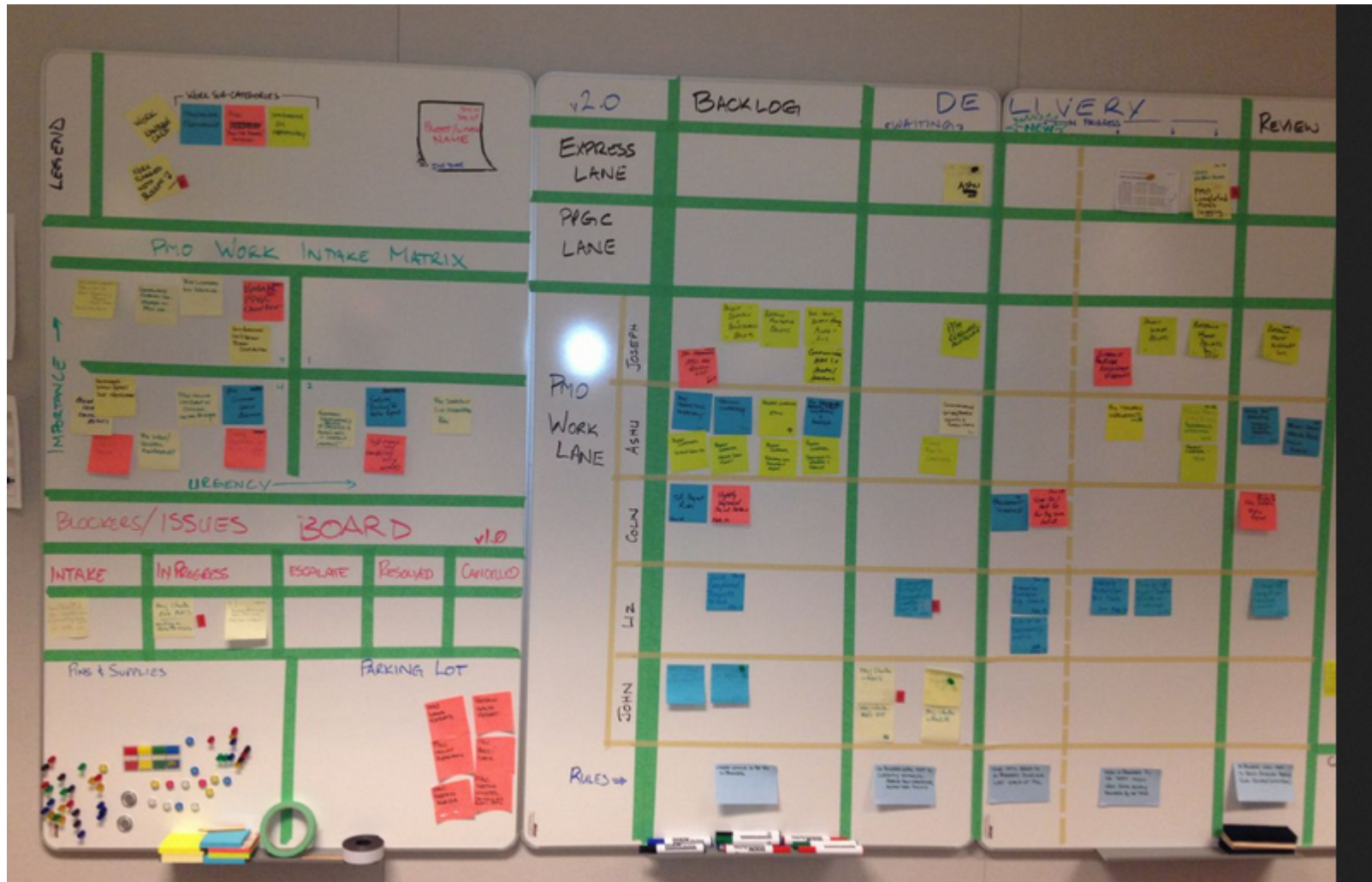
https://www.youtube.com/watch?v=ykE3_M29_Fc

Portfolio Kanban (example)



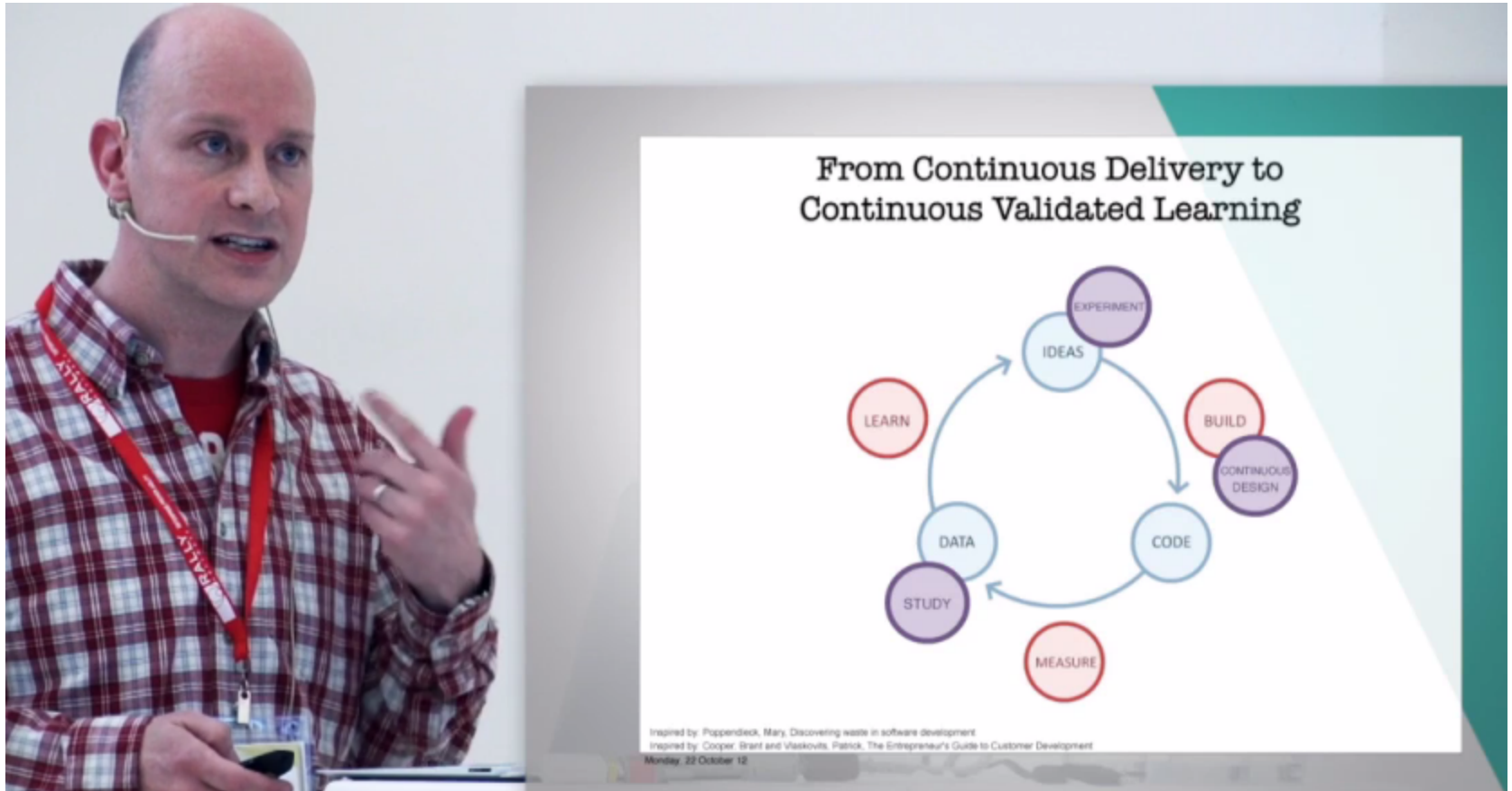
<http://www.agilenotanarchy.com/2013/02/scaled-agile-framework-applied-25.html>

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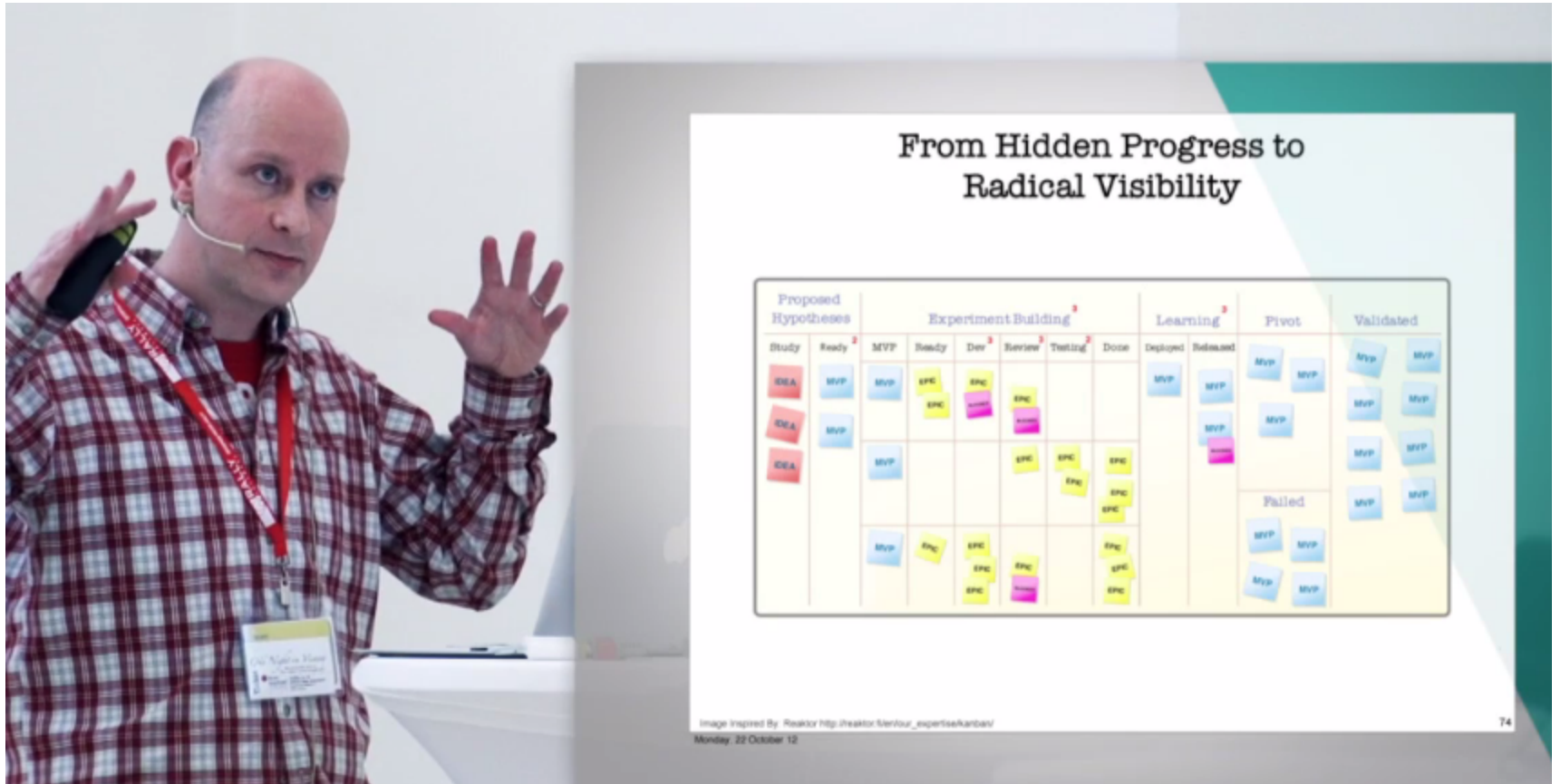
<http://fromstoneagetoagile.com/2013/08/kanban-in-the-pmo/>
 #sthash.J8EhB5BV.WuwQZoiT.dpbs

David Joyce



<http://vimeo.com/52546904>

David Joyce



<http://vimeo.com/52546904>

Examples used

- California – red lamps on highways
- WAP S40 + S30 case ($A \rightarrow B$) ... ($A \rightarrow C \rightarrow B$)
- Conversation: taxi price ... gas price morning/evening; the need for a common language
- Key message: visibility; comparability; pull; fast loops/learning
- Lean start-up: Build-measure-learn
- One project vs many projects
- ‘GRID IT UP’ ... for the many projects ... making comparable in category

Examples

- Xmas wishes – give long list and get disappointed; give just one wish at a time

Two topics – and what sometimes go wrong

- * *Software governance?*

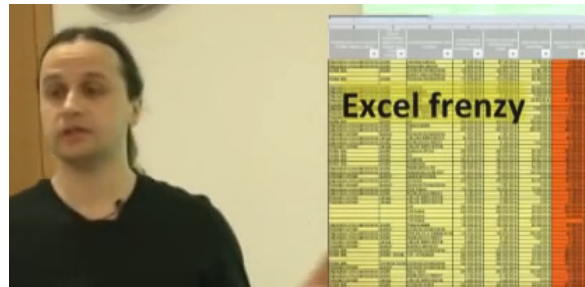
- *Trusting your existing governance model to work for SW*

SW doesn't always connect with the real world; the real world must connect with SW

- * *Managing portfolio?*

- *Bundling drivers - risks, purposes and complexities*
- *Overload – too big and too many projects*
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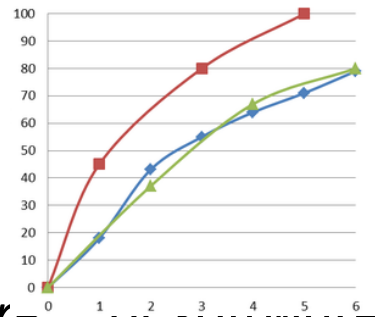
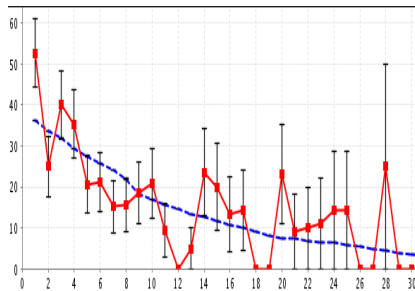
Planning and estimation is like alcohol; the more you look into the bottle, the more you realize that the answer isn't there



*Pawel Brodzinski
Portfolio Kanban
LLKD13 (on YouTube)*

Software governance

- * *Secret: During 'the closing game' SW is relatively predictable. (all features implemented, clear trends in test/error curves)*
- * *You can 'grant one milestone' when you have visibility to 'when you will finish' → 0 open errors; 100% run/pass rate*



(figures illustrative)

You get
milestone X
when you
have visibility
to X+1

- * *'only trust complete software ... or software close to being complete'
→ sequence of many smaller, complete releases (milestones, technical deliveries, customer validation [MMF; MVP; PSI])*