

AgileUpgrade

Forget about estimation!

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creuna®



WHO AM I?



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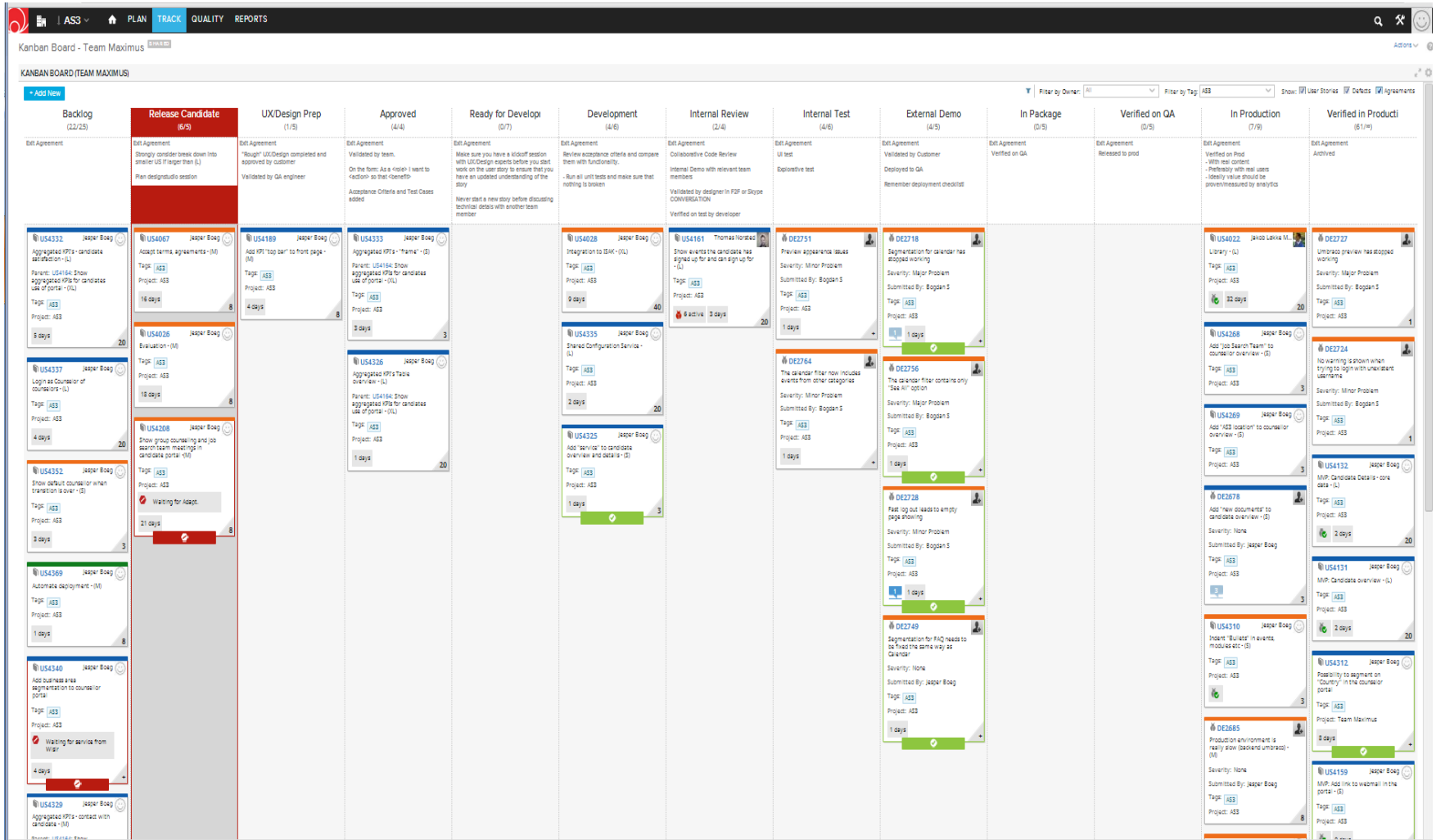
AgileUpgrade

- ▶ Review, coaching and training
 - ▶ Scrum
 - ▶ Kanban
 - ▶ Agile
 - ▶ Lean
- ▶ See more at www.AgileUpgrade.com

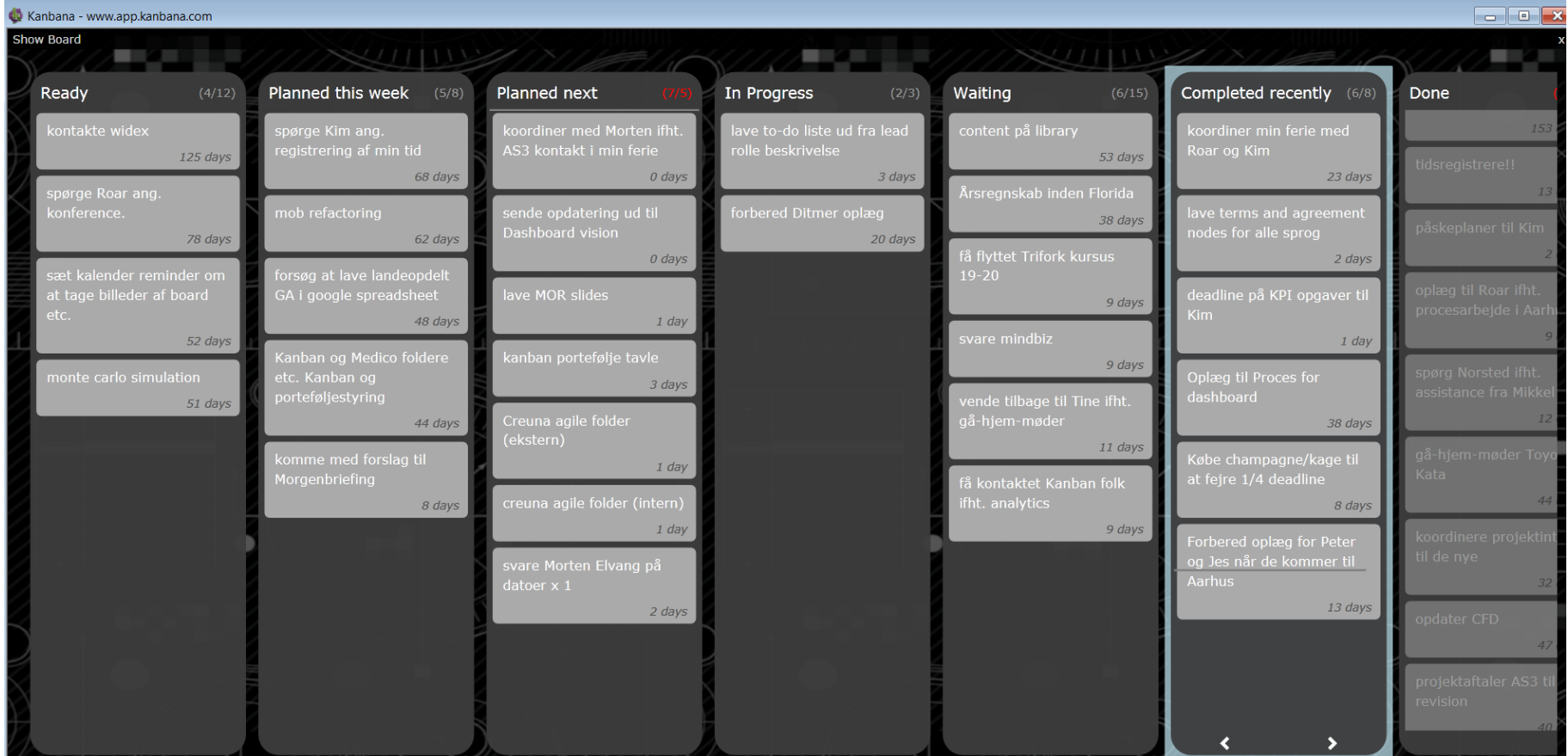


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Team



Personal



Maybe taking it too far?



In general

- ▶ Please let me know if:
 - ▶ You have questions (The primary goal is not to go through every single slide)
 - ▶ If I am not making any sense
- ▶ You will get the slides

Agenda

- 1 What not to do
- 2 How estimates really work
- 3 The simple alternative
- 4 Tracking and reporting

Known knowledge



Why estimate?





WHAT NOT TO DO

2 User Stories, 3 hours, 5 people



Why do we make the same mistakes again and again and again and again.....



The blame game



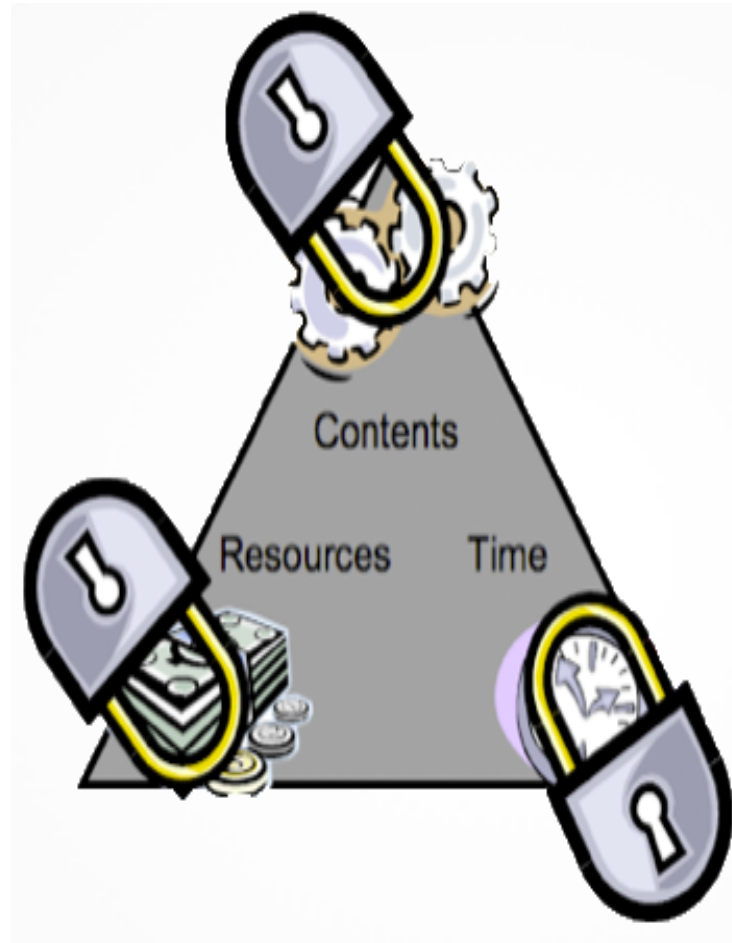
Expecting manufacturing precision



Why don't we just ask the tech-lead?



I have made it easy for you



Using time



Expecting the team to know



THE AUTHOR OF THE WINDOWS FILE COPY DIALOG VISITS SOME FRIENDS.

Could I borrow two days of your time for estimation?



Detail != predictability



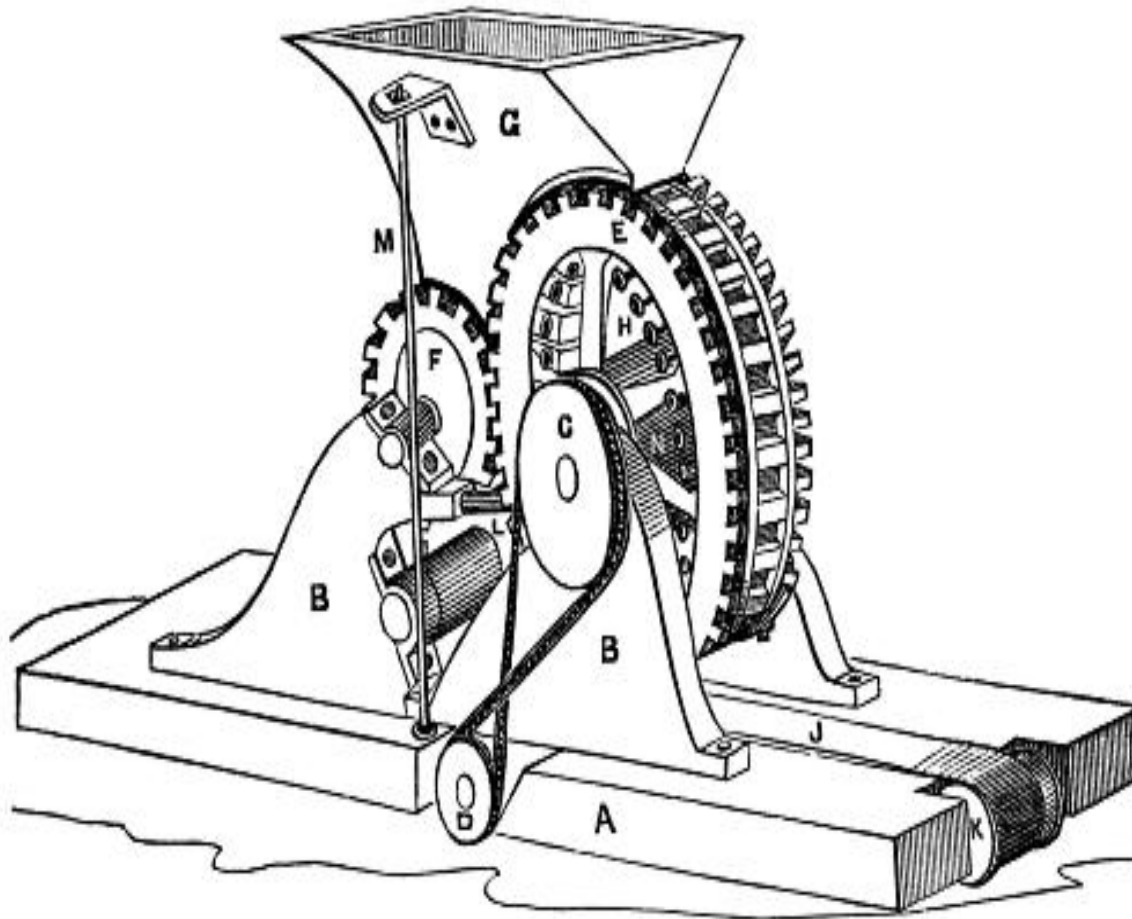
Tasks are NOT for planning and reporting

$$p = \left(\frac{rr''\delta}{M} \right)^2 \sqrt[3]{\left(\cos 2\varphi^2 \left(\frac{\cos \frac{1}{2}\delta}{\cos \varphi \left(1 - \frac{2 \sin \frac{1}{4}\delta^2}{p \cos \varphi} \sqrt{rr' \cos \varphi} \right)} \right)^8 \right)}$$

This time there will be no...



Story point machine



Death spiral



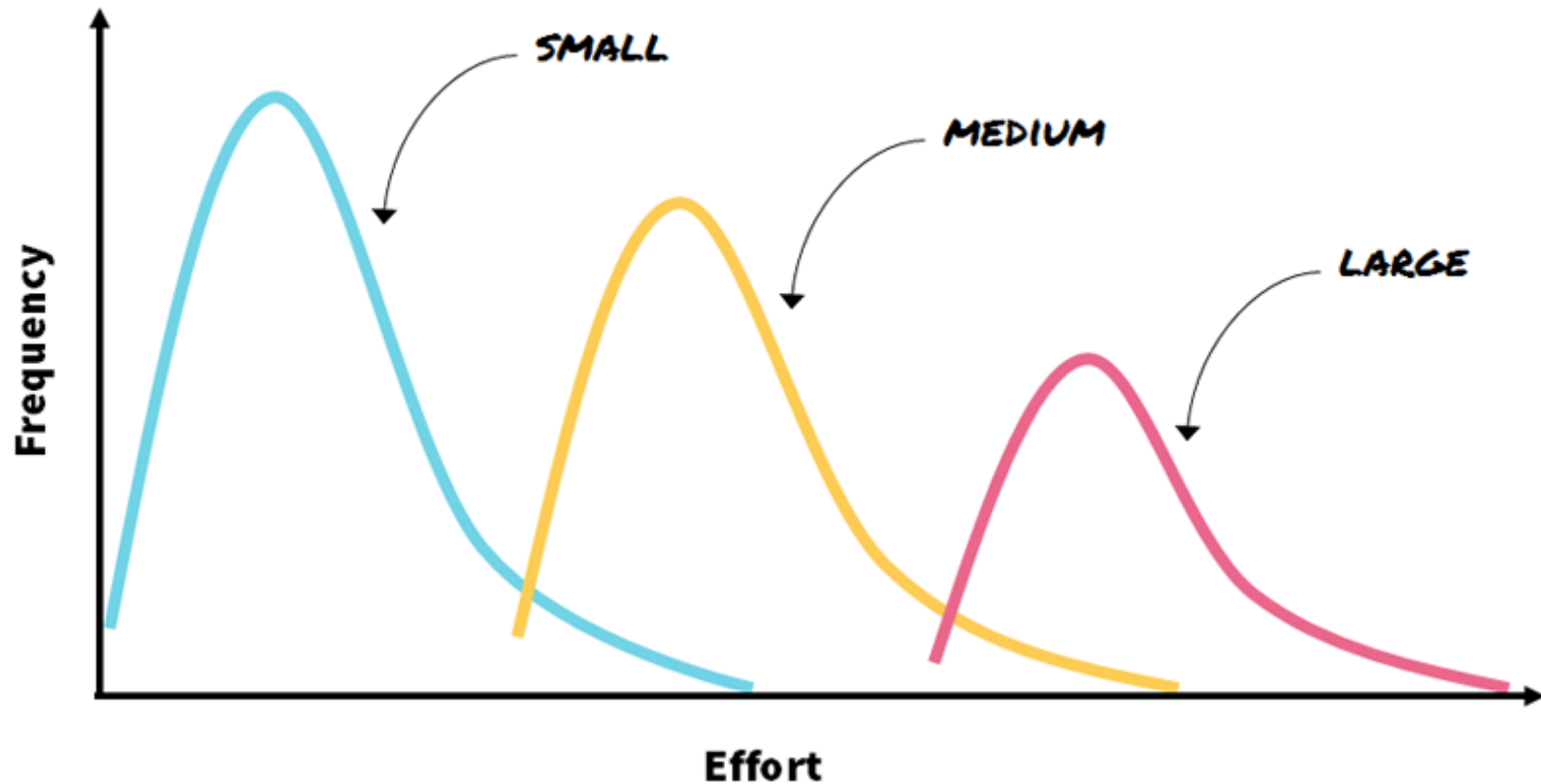
How estimates really work

“Guesstimate” is not a real word

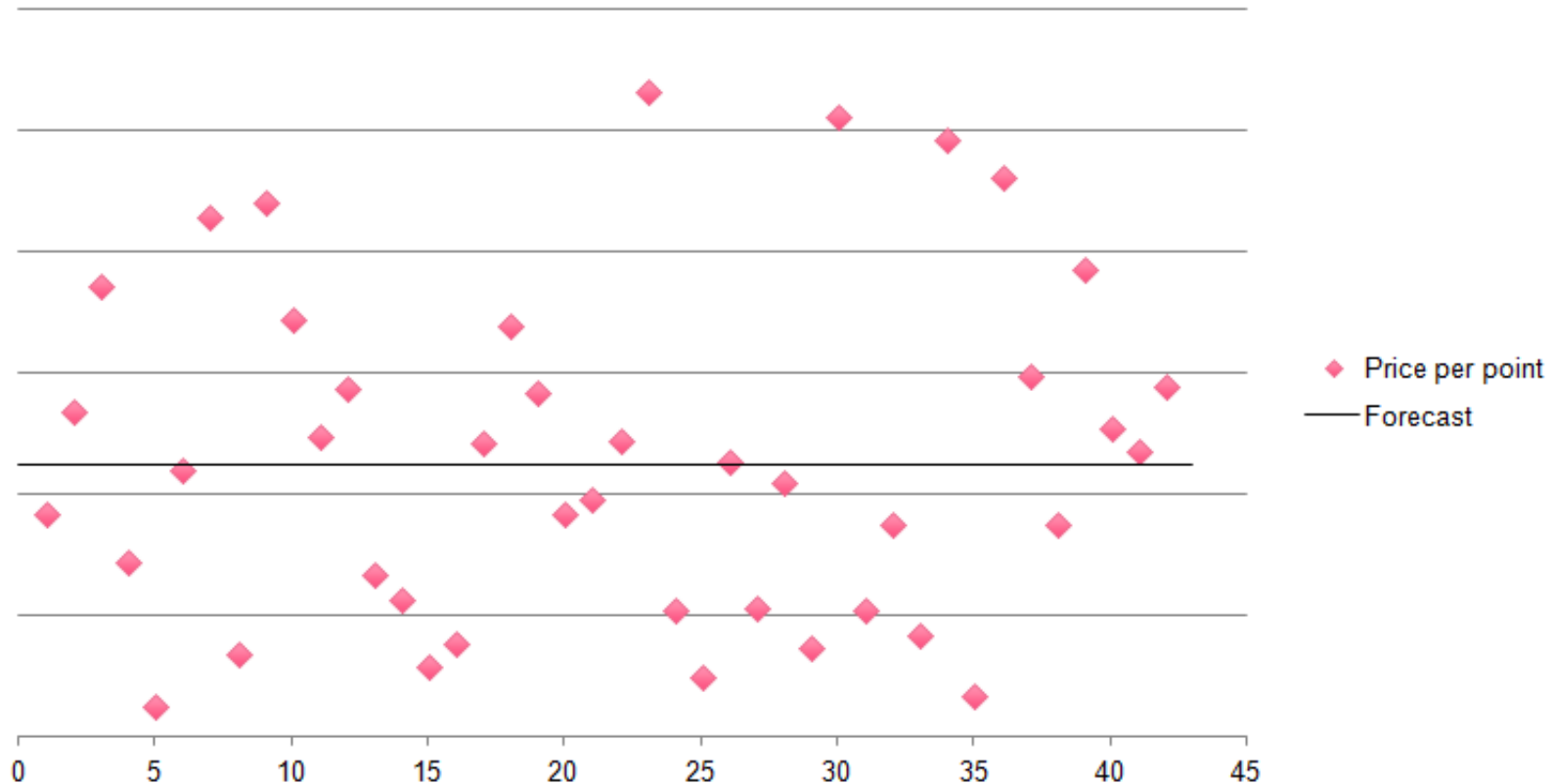


Estimates are not single numbers

Distribution with overlapping tails



Don't give up on Predictability

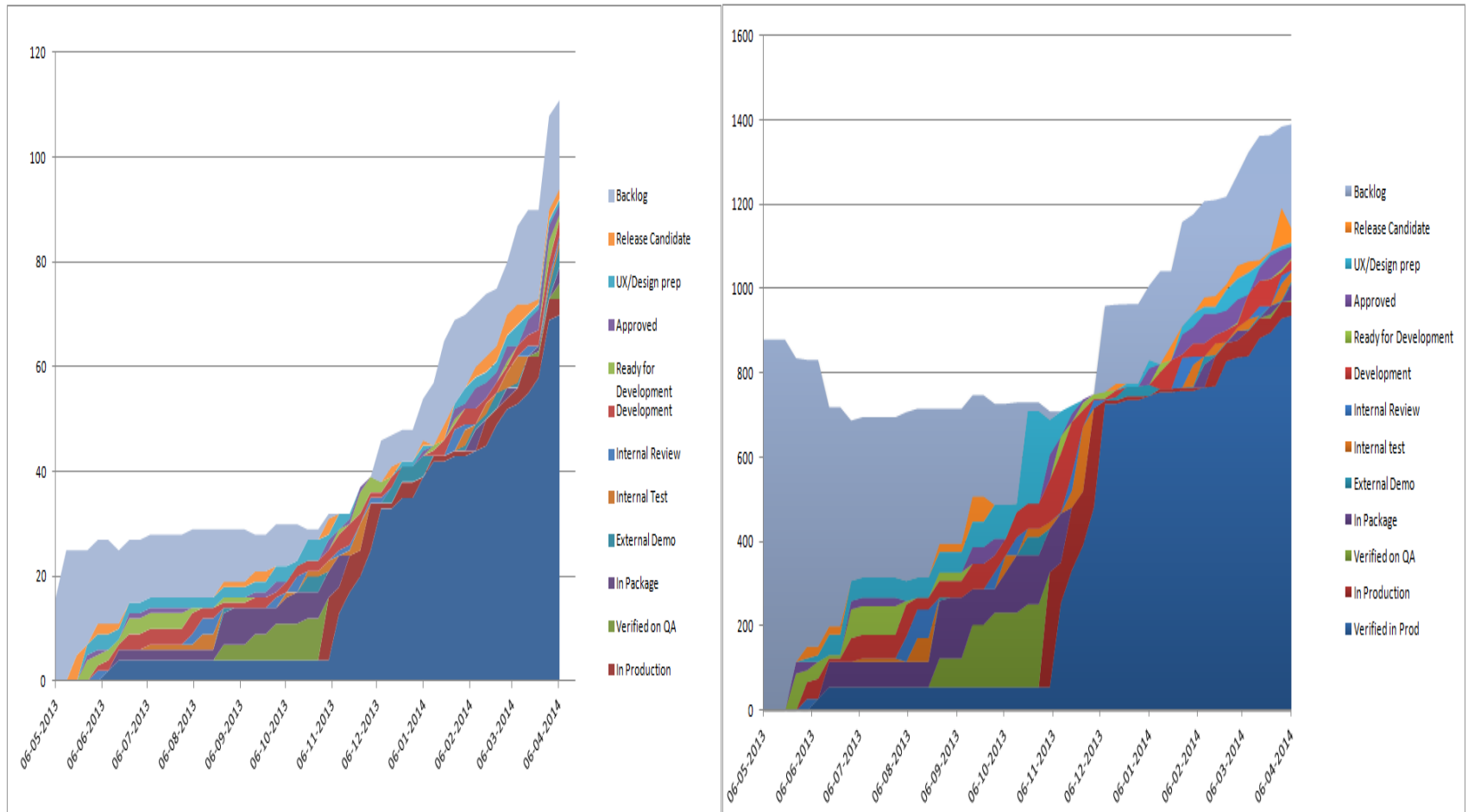


Story points considered harmful



► [http://
softwaredevelopment
enttoday.blogspot.
co.uk/2012/01/
story-points-
considered-
harmful-or-
why.html](http://softwaredevelopmenttoday.blogspot.co.uk/2012/01/story-points-considered-harmful-or-why.html)

#NoEstimates - problems





THE SIMPLE ALTERNATIVE

T-shirt Sizes and story points



Keep it comparative

Small - 3	Medium - 8	Large - 20	XL - 40	XXL - 100
<div>US3937 Morten Dybdal</div> <div>My profile "core data" edit UserName/Email</div> <div>US3938 No Owner</div> <div>My profile "core data" edit simple data</div> <div>US4044 Jesper Boeg</div> <div>Give feedback - (S)</div> <div>US4103 Jesper Boeg</div> <div>Copy Content from Prod to QA - (XS)</div> <div>US3898 Morten Dybdal</div> <div>My profile menu (profile, my course, my documents) - (S)</div> <div>US3928 Jakob Lekke Madsen</div> <div>My profile "core data" edit password</div> <div>US3856 Camila K</div> <div>New "box" without bullets for modules (building blocks) - (S)</div>	<div>US4015 Jakob Lekke Madsen</div> <div>Setup Performance Tracking - Creuna Experiment - (M)</div> <div>US3918 Jakob Lekke Madsen</div> <div>Save portal event to your own calendar - (M)</div> <div>US3941 Jesper Boeg</div> <div>New yes/no segmentation - (M)</div> <div>US3925 Jesper Boeg</div> <div>Possibility to see which candidates have signed up for an event in Umbraco - (M)</div> <div>US3729 Bo Wibrand</div> <div>Display News - (M)</div> <div>US3864 Jakob Lekke Madsen</div> <div>We need a new top menu due to Video issues (M)</div> <div>US3781 Jakob Lekke Madsen</div> <div>Implement new design on FAQ and simple building block - (M)</div> <div>US3785 Jesper Boeg</div> <div>[Building Block] How do I read on change - simple building block - (M)</div> <div>US3682 Bogdan S</div> <div>Setup Automated Test for AS3 - (M)</div> <div>US3684 Bo Wibrand</div> <div>Setup new Repository - GIT - (M)</div> <div>US4131 Jesper Boeg</div> <div>MVP: Candidate overview - (M)</div> <div>US4122 Jesper Boeg</div> <div>MVP: Log in as a candidate - (M)</div> <div>US4067 Jesper Boeg</div> <div>Accept terms, agreements and alumni - (M)</div> <div>US4028 Jesper Boeg</div> <div>Evaluation - (M)</div> <div>US3917 Jesper Boeg</div> <div>Setup Analytics - (M)</div> <div>US4130 Jesper Boeg</div> <div>MVP: (Frame War into Counselor Portal - (M)</div>	<div>US3844 Jesper Boeg</div> <div>Resume - view examples - (L)</div> <div>US3634 Jesper Boeg</div> <div>Applications - view examples - (L)</div> <div>US3870 Morten Dybdal</div> <div>My profile "personal meetings and activities" - (L)</div> <div>US3627 Camila K</div> <div>See my counselor's profile - (XL)</div> <div>US3869 Camila K</div> <div>My profile "core data" Display - (L) 1/2</div> <div>US3831 Camila K</div> <div>My feedback notes for modules - (L)</div> <div>US3827 Cecile Steentoft</div> <div>Feedback on Building Blocks (L)</div> <div>US3825 Camila K</div> <div>Show Videos - (L)</div> <div>US3845 Morten Dybdal</div> <div>Building block overview - (L)</div> <div>US3630 Jesper Boeg</div> <div>Applications - my uploads - (L)</div> <div>US3719 Alexander Sosna</div> <div>Setup QA and Prod environments - (L)</div> <div>US3787 Bo Wibrand</div> <div>Segmented Interface - content - (L)</div> <div>US3663 Morten Dybdal</div> <div>Setup Virtual Machines - New Umbraco installation - (L)</div> <div>US3715 No Owner</div> <div>Setup new test server for AS3 - (L)</div> <div>US4132 Jesper Boeg</div> <div>MVP: Candidate Details - core data - (L)</div> <div>US4022 Jesper Boeg</div> <div>Library - (L)</div>	<div>US3637 Morten Dybdal</div> <div>EPIC: Evaluation forms, mid term and closing - (XL)</div> <div>US3631 Morten Dybdal</div> <div>my documents - (XL)</div> <div>US3681 Alexander Sosna</div> <div>Setup build for AS3 - (XL)</div> <div>US3730 Jesper Boeg</div> <div>Calendar and Events - (XL)</div> <div>US3629 Morten Dybdal</div> <div>[AS3] FAQ - (M)</div> <div>US3625 Jakob Lekke Madsen</div> <div>Login/user handling - (XL)</div> <div>US3786 Bo Wibrand</div> <div>Segmented Interface - backoffice - (XL)</div> <div>US4028 Jesper Boeg</div> <div>Integration to ISAK - (XL)</div> <div>US4032 Jesper Boeg</div> <div>Integration to A2Bt - (XL)</div> <div>US4030 Jesper Boeg</div> <div>Company Search - (XL)</div> <div>US4031 Jesper Boeg</div> <div>Jobdatabase Search - (XL)</div> <div>US4123 Jesper Boeg</div> <div>MVP: Counselor Portal login incl. FAQ POC - (XL)</div>	<div>US3686 Cecile Steentoft</div> <div>[Building Blocks] Professional Competencies (XL)</div> <div>US3798 Jesper Boeg</div> <div>Personal Frontpage - (L) + (XL) course data included</div> <div>US3716 Alexander Sosna</div> <div>Setup Automated deployment for AS3 - (L)</div>

Why both T-shirt and points?



How do we know the ratio?

T-shirt size	Assigned ratio	Actual ratio
XS	1	1.08
S	3	2.59
M	8	8
L	20	21.28
XL	40	35.49 (limited data)
XXL	100	NA

Follow these simple rules

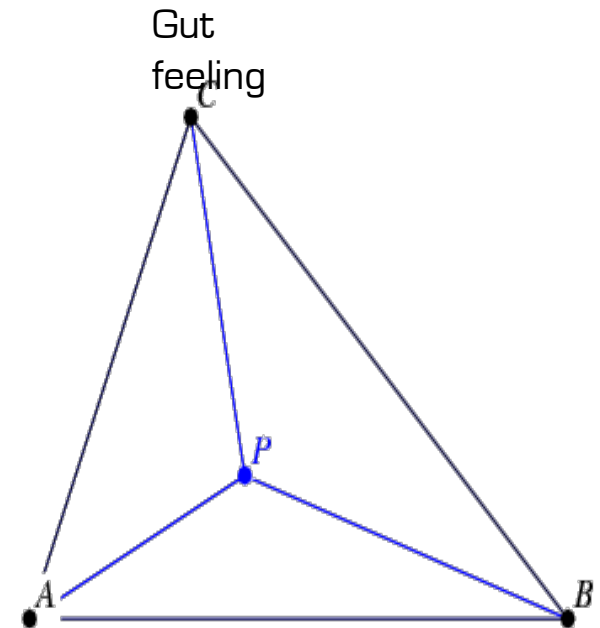
- New items in the backlog are estimated at the daily standup-meeting
- ALL estimates are comparative and in story points
- User Stories are ONLY re-estimated if they drastically change or are broken down
- All defects are assigned the same estimate (in our case XS) and only count if they are found on functionality that has been more than 1 month in production
- Completed points are based on features deployed to the production environment (or similar)
- Point -> \$ is based on data (as soon as it becomes available)

**Roughly 0.4 percent is spent on
estimation – that is 1/250**



New team on a new project IS different

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	US	rr	T-shirt	Point	Time	Beløb	Justeret Beløb	Frontend faktor	Frontend timer												
2	Parmen		25 L		20	208	26400	0.7	18360	0.6	13040										
3	Booking Guide	2 M	L		20	208	26400	1	26400	0.6	13040										
4	Booking	10-15+ 15 VL			40	416	43680	1	43680	0.6	26200										
5	Screening	7 M			8	832	87360	0.35	35716	0	0 x										
6	Medbooking Indgang	1 S			3	312	32760	0.35	11468	0	0 x										
7	Aftalen (Gam Klasse)	3.6 L			20	208	26400	0.35	7640	0	0 x										
8	Jobopslagslog	4.6 M			8	832	87360	0.35	35716	0	0 x										
9	Aktivitetlog	5.6 M			8	832	87360	0.35	35716	0	0 x										
10	Booking Knytning	15 S			3	312	32760	1	32760	0	0 (x)										
11	Madeoversigt over tilmedte mu Ny	S			3	312	32760	0.35	11468	0	0 x										
12	Anullering af møde	15, 20 M			8	832	87360	1	87360	0.6	52416										
13	Redigering af møde	15, 20 M			8	832	87360	1	87360	0.6	52416										
14	InfoVideo	8 S			3	312	32760	1	32760	0.6	18556										
15	Finalestat	17 S			3	312	32760	0	0	0	0 x										
16	Arrangementer	21-23 L			20	208	26400	0.35	7640	0	0 x										
17	Forordemodul-progessbar	26 S			3	312	32760	1	32760	0.6	18556										
18	Forordemodul-Aktuel	26 S			3	312	32760	1	32760	0.6	18556										
19	Forordemodul-Kalender	26 M			8	832	87360	1	87360	0.6	52416										
20	Forordemodul-MinInfo	26 S			3	312	32760	1	32760	0.6	18556										
21	Forordemodul-Mine Klub	26 S			3	312	32760	1	32760	0.6	18556										
22	Forordemodul-Avsnedsboks/teks	26 S			3	312	32760	1	32760	0.6	18556										
23	Krifa Boks	24 M			8	832	87360	0.5	43680	0.4	34944	x									
24	Krifa Boks Teaser	Ny S			3	312	32760	0.5	15380	0.4	12104	x									
25	HjælpFAQ	9 M			8	832	87360	0	0	0	0 x										
26	Miljøoplysning	tech L			20	208	26400	0.5	13200	0.5	10500										
27	Brugertest	test M			8	832	87360	0	0	0	0 x										
28	Krifa.dk koordineringsinstruktion koordinat	M			8	832	87360	1	87360	0.8	69888										
29																					
30	I alt estimert					26312	2762760		1823640		1036480										
31	Ved sammenligning med andre projekter					674.93	1933671		1191653.75		694407.5										
32	Ved maveformennelse					1628.8	1752290		1167210		691400										
33	Bestcase estimat					2281.19	2374247		1567180.625		882101.25										
34	Worstcase					4032.19	4233797		2794461.625		1671001.25										
35																					
36	Target Cost					2432.86	2555553		1688867		949494										
37																					
38	Frontend					Fuld scope	Frontend	Frontend måneder	Begænset scope	Frontend Timer	Frontend måneder ved 260 timer										
39	I alt estimert					1578.72	5.047111		577.6		3.76										
40	Ved sammenligning med andre projekter					944.855	3.493833		585.15		2.259763823										
41	Ved maveformennelse					1011.88	3.710667		620.4		2.381533845										
42	Bestcase estimat					1356.71	5.024867		840.125		3.22125										
43	Worstcase					2432.21	8.36047		1490.125		5.76270221										
44																					
45						Gennemsnit	1482.32	5.408578	Gennemsnit	904.28	3.478										



Comparison
with other
projects

Worst/Best/
Realistic T-shirt
estimation

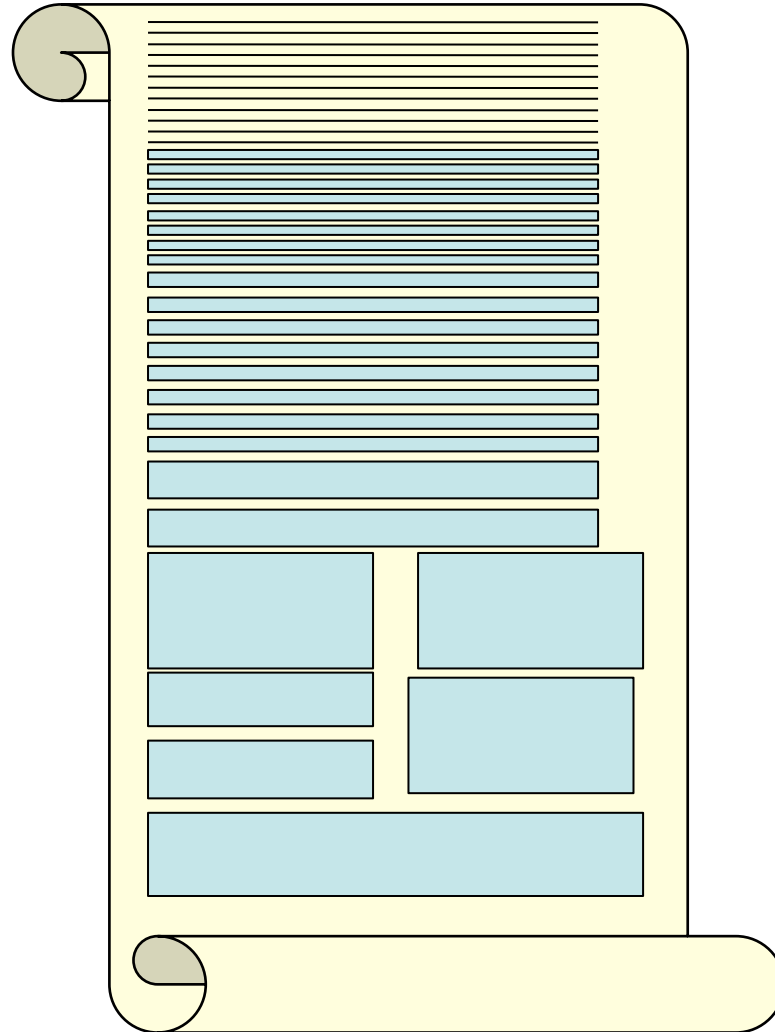


TRACKING AND REPORTING

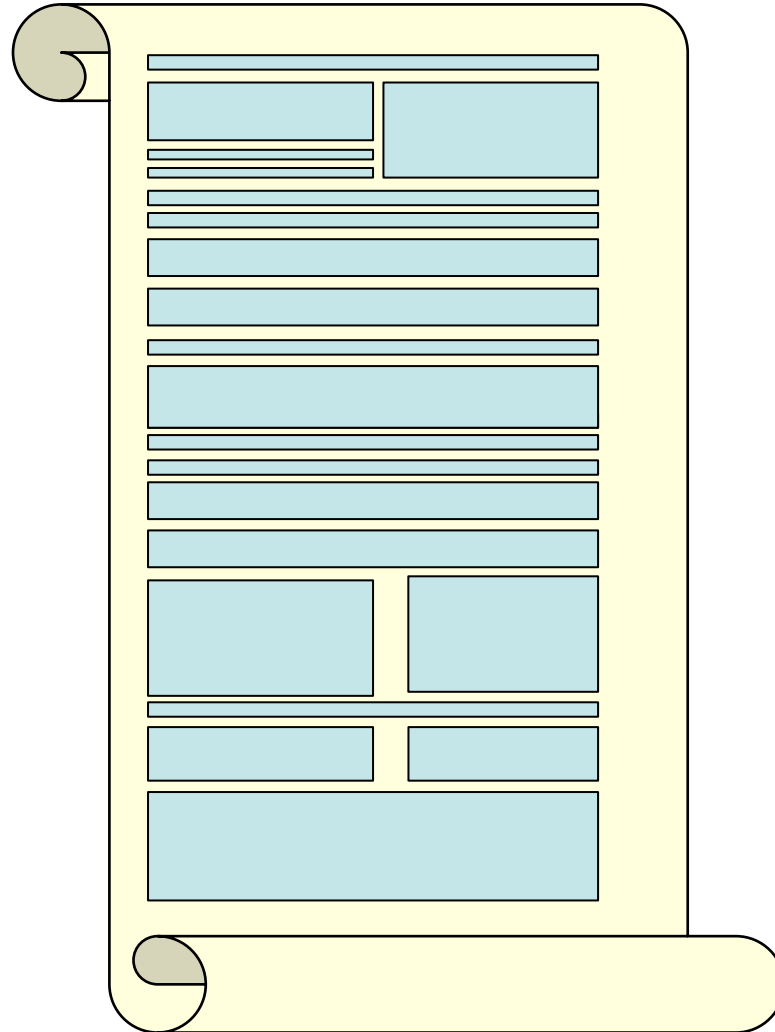
How much are you off? (cost)

- ▶ 0-10%
- ▶ 11-30%
- ▶ 31-50%
- ▶ 51-100%
- ▶ 100+ %
- ▶ No idea

Real backlogs do not look like this



But fortunately more like this

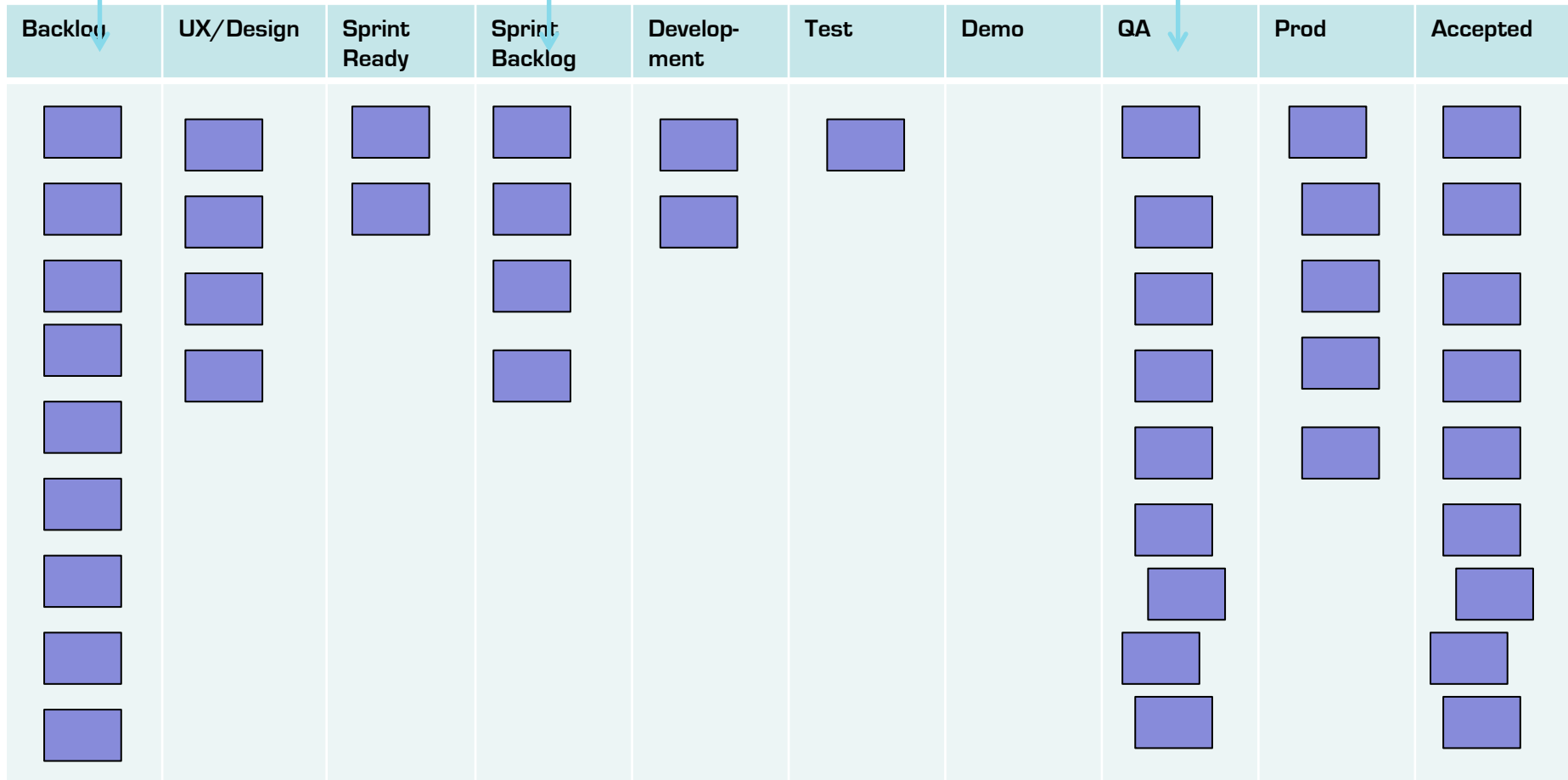


Predictability

Really we want it here

Too many focus here

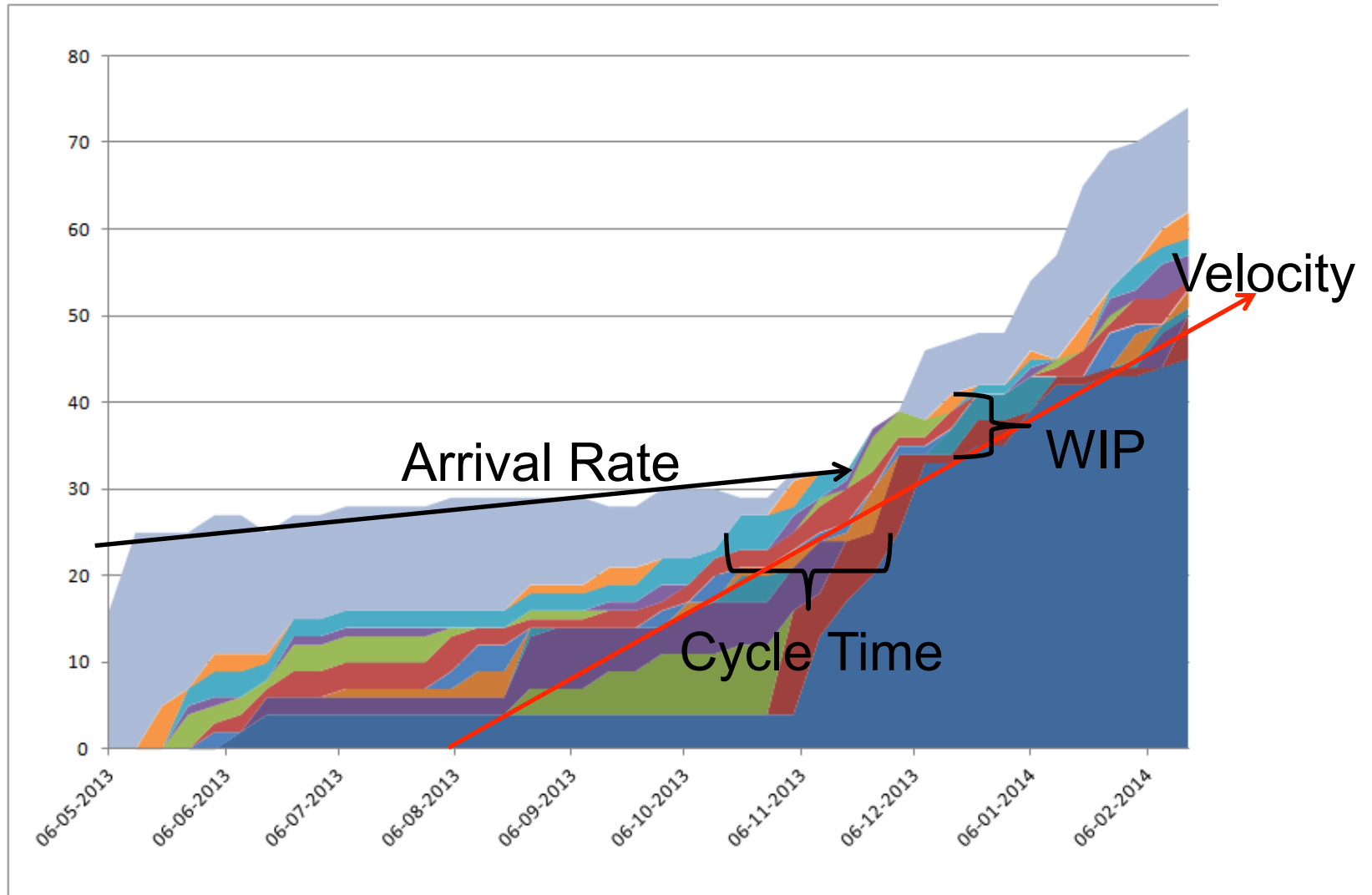
Easy from here



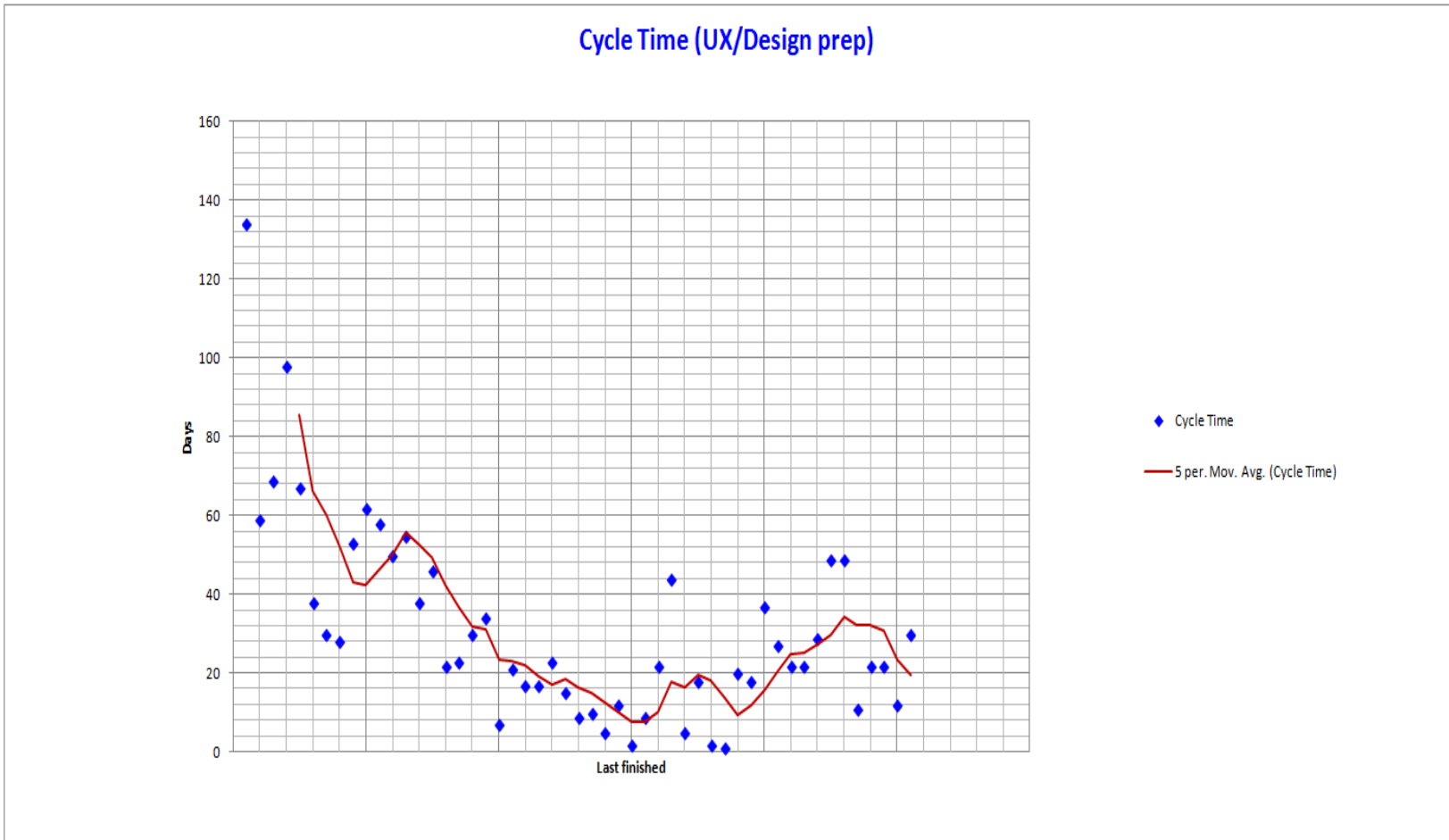
Velocity is the easiest metric to game



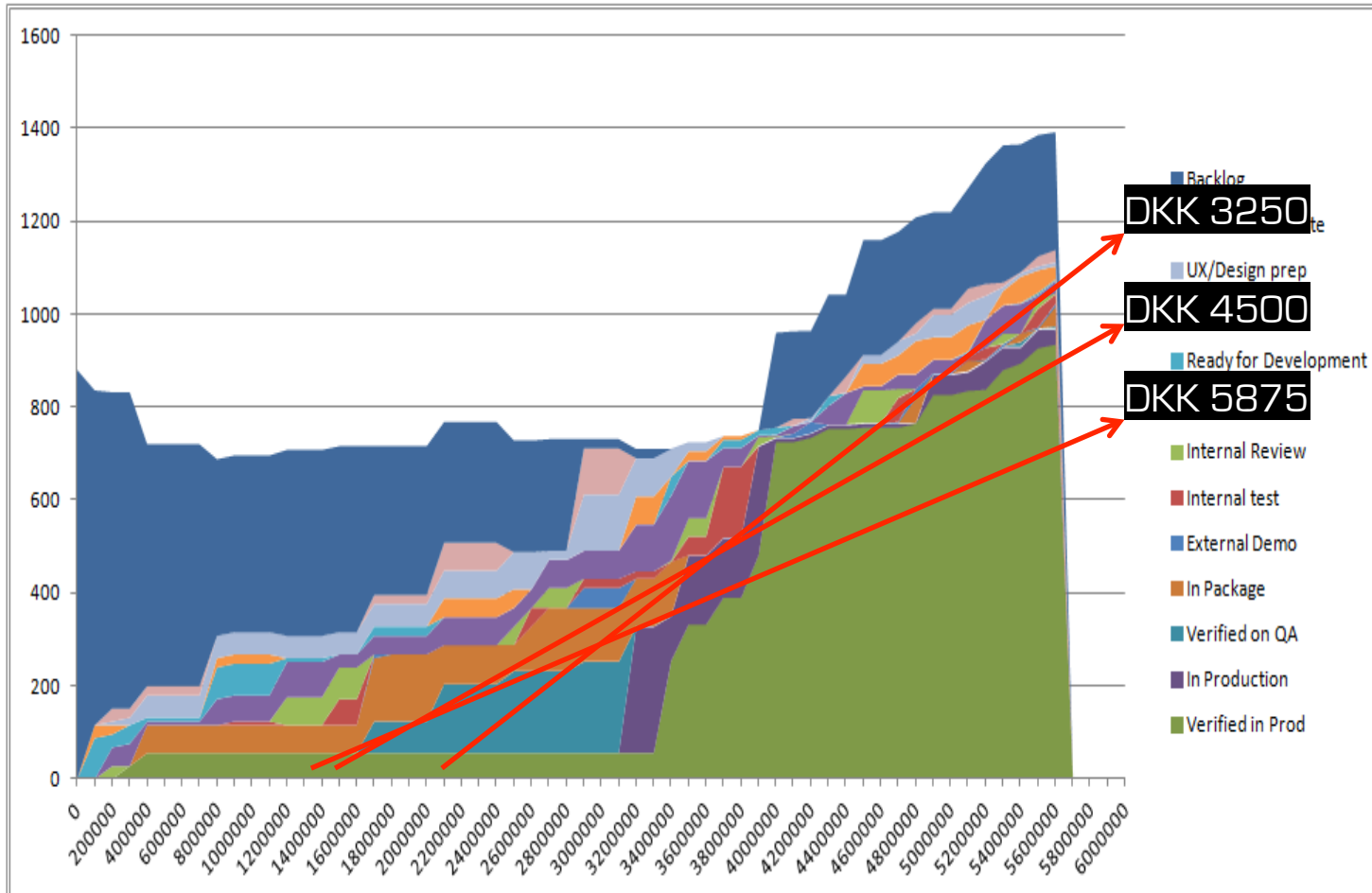
CFD



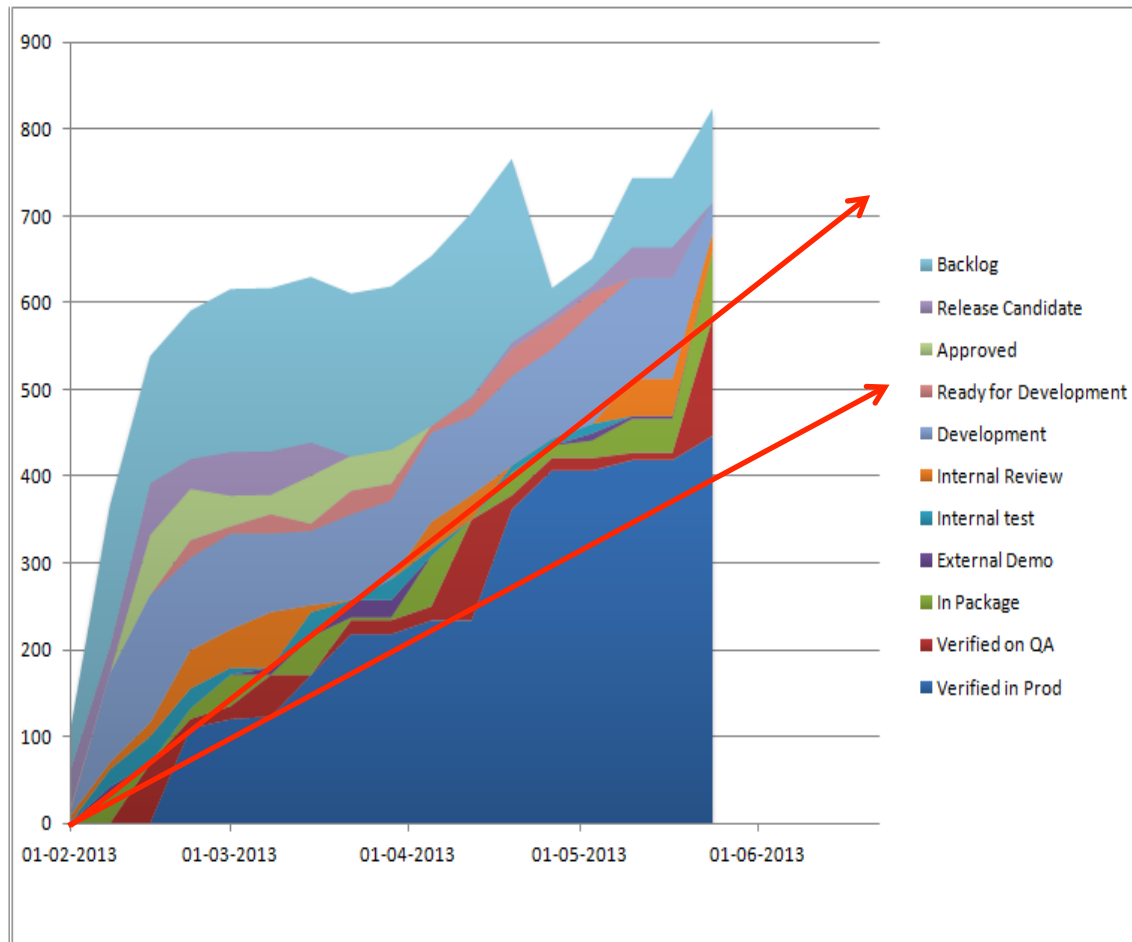
Cycle time



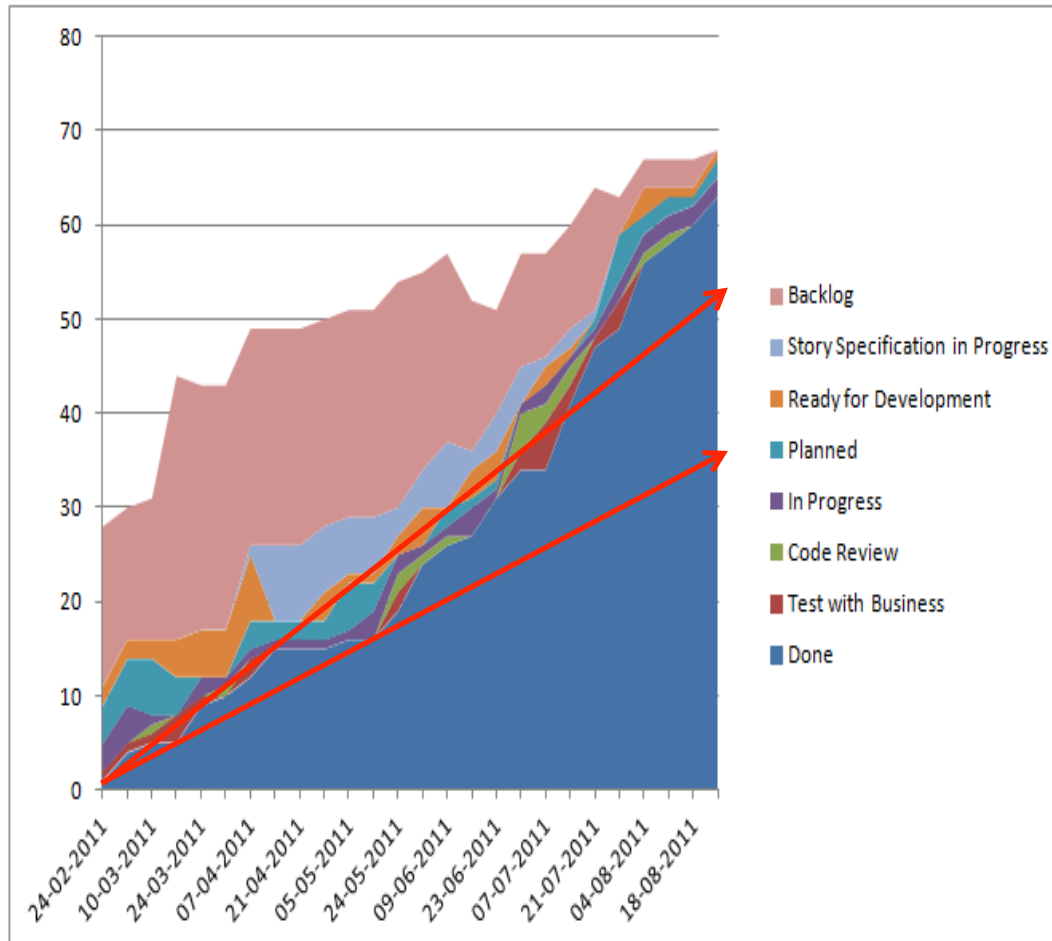
Data eats detail for breakfast



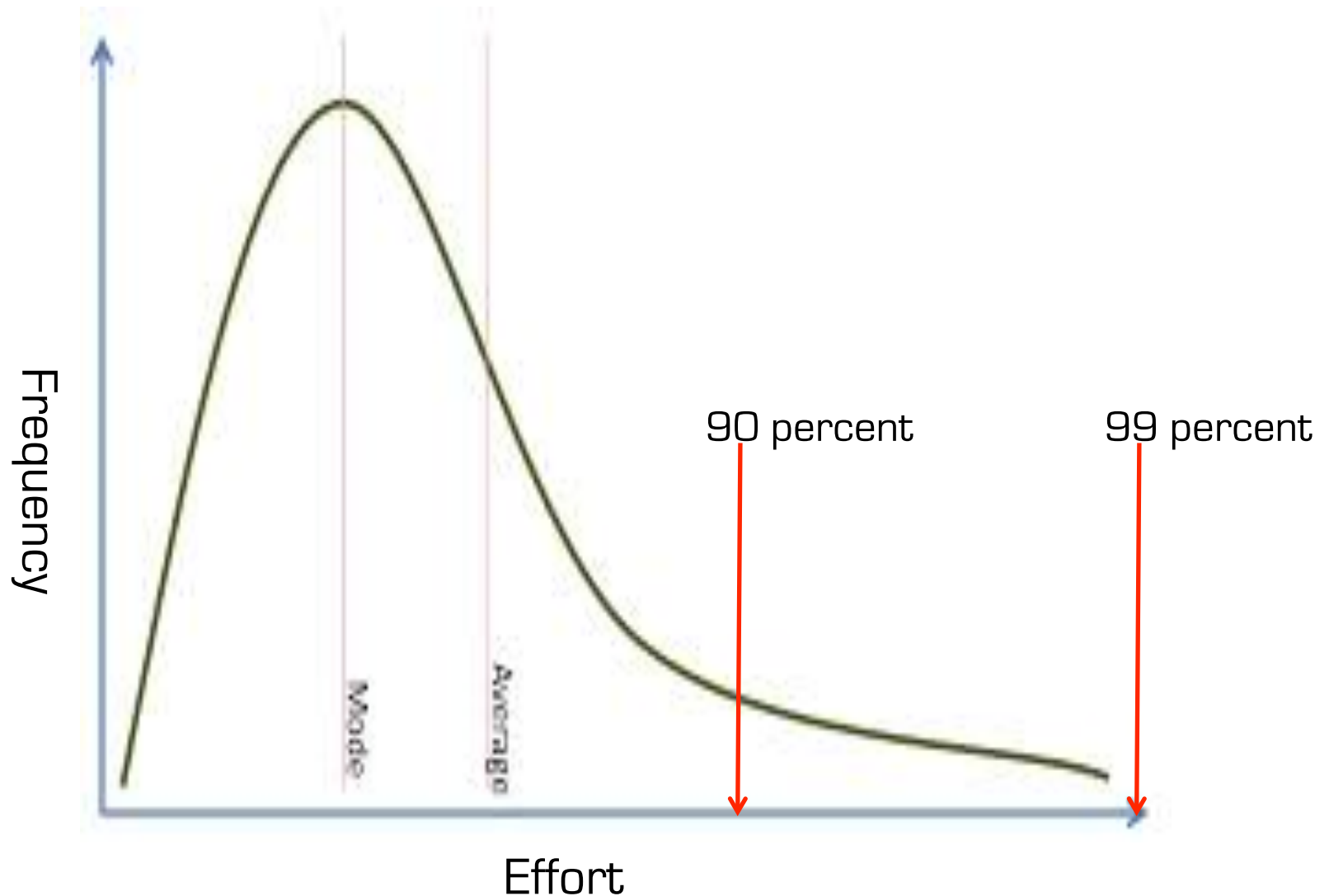
The power of data



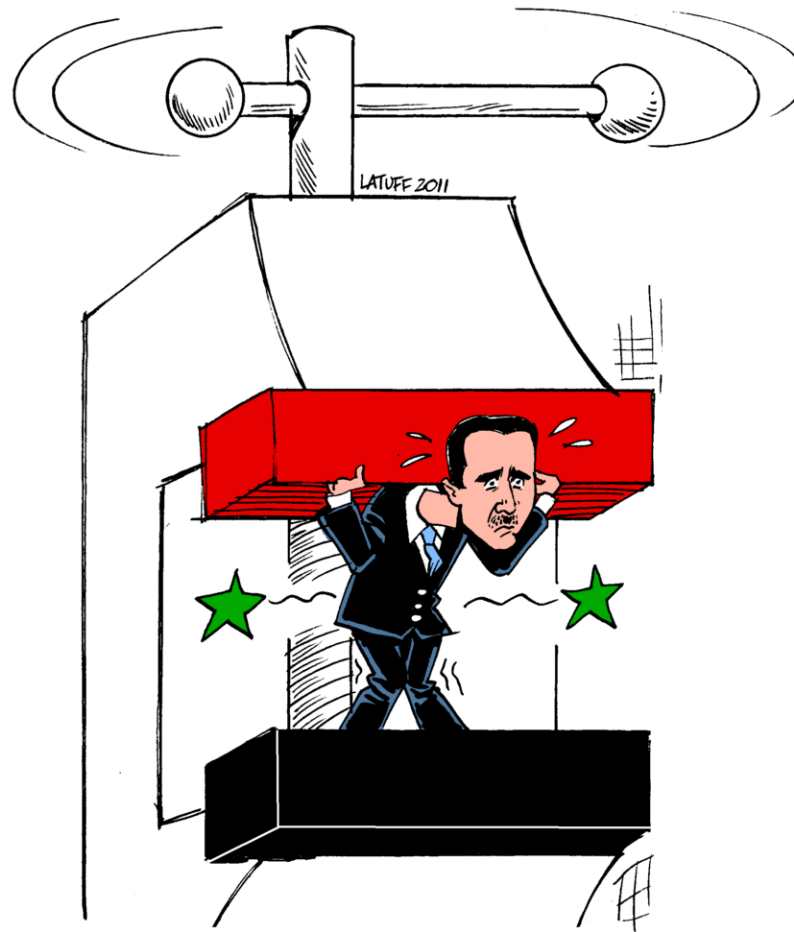
Improvement



Probabilistic forecasting



BUT! Pressure equals unpredictability



Don't forget the vision



To The Future

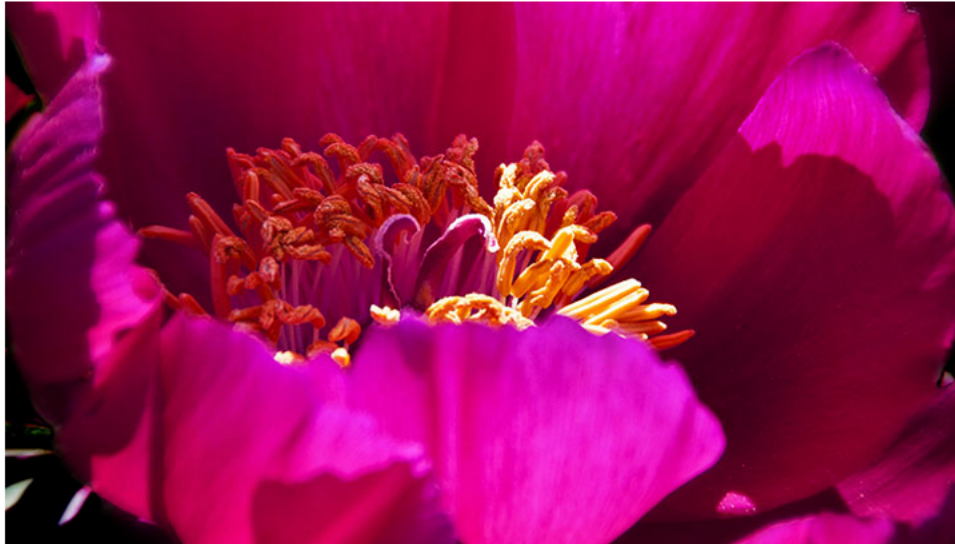


Take-aways

- Don't use estimates for blame games and don't expect the team to know
- Estimates are a distribution – NOT a single number
- #NoEstimates is an interesting movement but with a narrow focus on predictability
- Story Points and T-shirt sizes can make it much easier to acknowledge uncertainty
- Data beats detail every time!
- Don't make output velocity goals. Velocity is far too easy to game and you will lose your predictability on the way
- Don't forget the Vision

Essay on estimation

Agile Upgrade

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STOP WASTING TIME TRYING TO GET ESTIMATES RIGHT! – AND WHAT TO DO INSTEAD

By Jesper Boeg on February 13, 2015

Thanks to Frank Olsen, Klaus Bucka-Lassen, Martin Brogaard, Morten Elvang and Yuval Yeret for



RECENT POSTS

Why 90 percent gets Kanban wrong! – and getting it right
Stop wasting time trying to get estimates right! – and what to do instead
Business Value over moving Postits – drop the break down tyranny
Shared Risk contract models
It all starts with the right type of contract!

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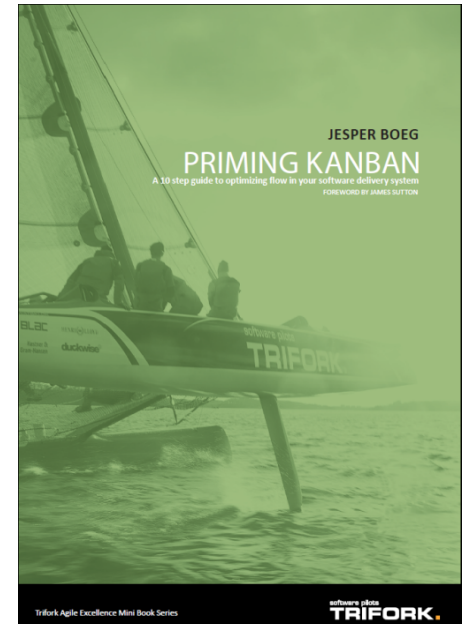
How To Reach Me

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Training/offerings

- ▶ Kanban Training

- ▶ April 13-14, Copenhagen

- ▶ April 20-21, Aarhus

- ▶ <http://gotoacademy.dk/collections/agile>

- ▶ Predictability made practical

- ▶ Hands-on in-house workshop

- ▶ www.AgileUpgrade.com



THANKS!