WWWMM?
What is Wrong With My Metrics?

Me Myself and I

I'm about 20!

Olivier Denoo – VP CFTL – VP ps_testware

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What Is This All About?

My Tester's Midsummer Night's Dreams

Come Get Some More

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1. What Is This All About?

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Much Ado About Metrics

- Metrics are:
  - A managers' disease
    - Watch out, it is more contagious than flu!
    - …and makes many more victims
  - A convenient way to bother those who (really) do the job
- The symptoms – how to detect:
  - I'm the King of the World (Titanic)
    - …well, of my own little world (The Bromeliad - Pratchett) ACT
  - I know EVERYTHING, I know the TRUTH
    - …even the bits not fit to be told UNDERSTAND

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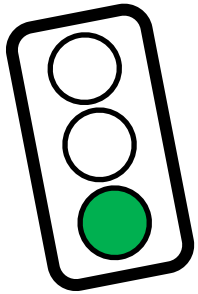
The Higher the Simpler…

- Top Managers' Favorite's



- The Ultimate One

- Even better…

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But First, You Need Some To Start With…

- Will the culprits please rise (names! names!)
  - Which ones have you got?
  - How about the others?

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2. Tester’s Midsummer’s Nights Dreams… and Many More Alas!

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Sun – Mon: 1st Dream

- How about measuring the number of defects?
- And - how splendid! - evaluate our testers based upon this figure?

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Mo – 1st Nightmare

- I've got 1000 defects – Is it good?
  - How important all in all?
  - How many are left?
  - What do you do with them?
- I've got 3 defects – Is it bad?
  - How long did you take to find them?
  - How « old » is the application – From how long do we find some?
- Who's gonna be billionnaire: Patrick with 100 useless bugs or Steve with 10 critical ones?
- Defects are like earthworms, when you cut them into parts they multiply!

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Wake Up!

- Number doesn't matter!
- What is better is the enemy of what is good
- Stop confusing: People are NOT their jobs.
- Evil thoughts for the Evil Minded:
  - Just count the ***solved*** defects in the evaluation
  - You start a big fight between Testers and Developers – Yipee!

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So, What Are We Talking About?

- Number of defects
  - Severity (impact)
  - Description, details
  - Priority (how urgent)
  - Status
  - Where (function, version…)
  - Probability of occurrence and detection

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Mo–Tu – 2nd Dream

- Let's set up individual performance goals?
- How about measuring them?
  - 10 bugs out per person (DEV) and per day
- Promote the best and warn the rest?
  - No arms, no legs, no kisses!

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Tu – 2nd Nightmare

- The goal is reached…BUT
  - Not the good but the easy bugs
  - Low hanging fruits
  - 3 times more « returned defects » - not reproducible
    - …like the tester's workload
  - …not to say a word about planning
  - It's party time!

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Wake up!

- Number is not enough!
- People are NOT products – let's not confuse.
- A very good atmosphere between Testers and Developers – guaranteed!

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What Are We Talking About?

- Number of fixed defects / unit time
- Number of found defects / unit time

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Tu-We – 3rd Dream

- How about measuring Progress?
- …Oh! And let's infer planning from there?
- Cool!

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We – 3rd Nightmare

- To infinity and beyond
  - Requirement? Test Design? Test Case? Validation Point?…Where is it worth to measure?
  - …at what cost?

- When 1 is not equal to 1
  - Some are more complex
  - Some are repeated (add, modify, delete)
  - Some contain more or less data
  - Not to say anything about their own quality

$$a = b$$
$$a^2 = ab$$
$$a^2 - b^2 = ab - b^2$$
$$(a+b)(a-b) = b(a-b)$$
$$a+b = b$$
$$\therefore\ b+b = b$$
$$\therefore\ 1+1 = 1$$
$$2 = 1$$

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Wake Up!

- It is all about Complexity and granulometry
- The same goes for Quality metrics
  (% passed product vs % coverage)
- Progress is neither good nor bad, only the story counts…
- …and they arrived all together in the end.

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What Are We Talking About?

- % Coverage
  - Design
  - Execution

- Requirement, Test Design, Test Case
- %Coverage / unit time

- Linear or non-linear regression?

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We-Th – 4th Dream

- How about « boosting » the team efficiency so as to cope with our top notch « high performance culture »?

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Th – 4th Nightmare

- So cool! But what do we reward exactly?
  - Developers, building and then fixing defects?
  - Testers who find them and make sure they are fixed?
- What is the context?
  - Brand new unpolished application or 20 years old system
  - How about techniques, maturity, HR positioning, training,,,?
  - How old is the captain by the way?

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Wake Up!

- Fast is OK, too fast is chaos
- You measure what you control (and vice-versa)
- …in the end we all cross the line together.

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What Are We Talking About?

- Defect detection rate, efficiency
- Defect fixing rate, efficiency
- MTBE, MTBF
- %Errors in test
- %Test maintenance

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Th-Fr – 5th Dream

- Let's build an ultimate dashboard that is sooo good that competition would love to hate it!!!

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Fr – 5th Nightmare

- Brilliant! I want more…and more
  - Big mid-season price today
    …weather forecast + fitness program + whosdonewhat + …
- Supersize me…but go to the slightest detail as well
  - No…all Mercedes Class C, 220D, 5 doors that are licensed in department 59 with an owner living in Ronchin must get this premium…it only applies to the blue ones
- …until you're lost in space
  - My defect…where is my defect?

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Wake Up!

- Too much info kills the info!
- The more you get, the more you want!
  … victims of their own success
- How much are you ready to pay for this?
- What do you (exactly) get out of there?
- …can you (really) act upon it?

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What Are We Talking About?

ps.testware Software Testing Services

Test Weather Report

Date 27/08
Sprint 2
Release

# Testers	Effective	Cum. % planned resources for SP2.3
Execution test designs	5,5	58%
Check printed documents	3	
Ad hoc tests	5	63%
Quotation (Product Management)	0	100%
Re-test SP1 + SP2 ad hoc defects	0	100%
Traduction	0	100%
Total resources coverage Release 3	**13,5**	**62%**

Availability - Lost time

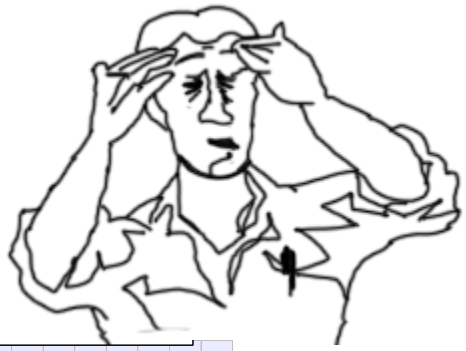
		week 1/5	week 2/5	week 3/5
Availability of the application that day	**100,0%**			
Average availability for SP2.3	85,7%	80,1%	78,6%	95,6%

# Defects							
# encoded defects that day	18	Urgent	High	Medium	Low		
# active defects in Defect Tracker for SP2.3	102	20	51	24	7		102
# active defects in Defect Tracker	411	29	257	110	15		411
	Open	IT exam	Pend. TEST	*Sub-total*	*Active*	*Whole*	
IT Factory	65	0	21	*86*	411	2419	
	Ready TLF	Pend. TLF	User Exam				
Test Factory	2	297	26	325			
	Closed	Deferred	Archived				
Not active defects	454	47	1507	*2008*			
			Test exam				

Remarks :

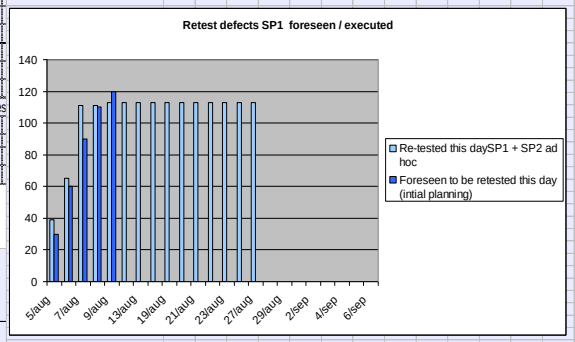
Today :
Finalised retest of fiches linked to "marques-modèles" has been done
Application has been better regarding response time but a lot of instabilities

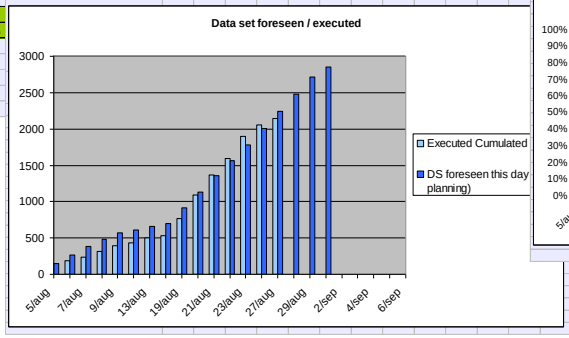
Program for tomorrow :
Same as today

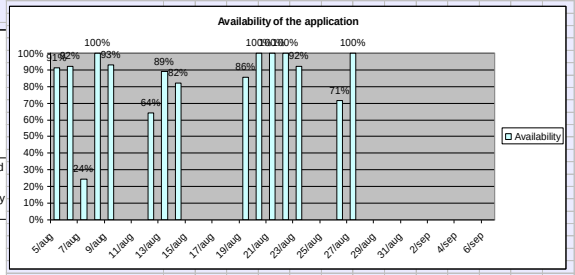


Test execution (2849 data sets)					
# data sets **foreseen** that date	170				
# data sets **tested** that date	90				
% data set coverage SP2.3 - against planned ds	53%	OK	NOK	Not testable	*Interm*
# data sets executed SP2.3	2148	1850	233	0	
% data sets executed SP2.3		86,1%	10,8%	0,0%	3
% data set coverage SP2.3 - against total ds	**75,4%**				*Docs wa*
# SP2 defects **foreseen** to be re-tested during SP2.3	445				
# SP2 defects **re-tested** that date	22	OK	NOK	Not testable	
# SP2 defects **re-tested** while executing ds SP2.3	211	184	26	1	
Cumul # SP2 defects re-tested while executing ds SP2.3		87,2%	12,3%	0,5%	
% re-test defects coverage	**47%**				
Average datasets/p/d **foreseen for SP2.3**	19,9	*Average test*			
Average datasets/p/d **effective that day**	16,4				
Average datasets/p/d **effective in SP2.3**	17,3				
Re-test SP2 AD HOC defects					
# SP2 ad hoc defects **foreseen** to be re-tested during SP2.3	106				
# SP2 ad hoc defects **foreseen** that date	0				
# SP2 ad hoc defects **re-tested** that date	0	OK			
# SP2 ad hoc defects re-tested in SP2.3	99	81			
Cumul # SP2 ad hoc defects re-tested in SP2.3		81,8%			
% SP2 ad hoc defects re-test coverage	**93%**				
Average defects re-tested/p/d **foreseen for SP2.3**	10,0				
Average defects re-tested/p/d **effective that day**	-				
Average datasets/p/d **effective in SP2.3**	-				

ps.testware Software Testing Services — **Fitness Program**







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Sa – 6th Dream

- How about exploring the unknown lands of quality and discovering strange and exotic estimators?
  - UML for Dummies
  - Test Planning for Dummies

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Sa – 6th Nightmare

- *What? Oh technical tests should be in…and automated…and you considered they are part of the deal. Hmmm! Oh and they should also fit with MsOpenJava_on_Rail for mainframe… in a vitualized environment, of course, piece of cake!…no, no nothing to change. Anyway the contract is signed, right?*

- *Yes of course we planned two regression test campaigns…for sure…I think*
  Can you remind me what you call like this by the way?

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Wake Up!

- What do we know for sure?
- What do we master?
- What are the rules and how explicit are they?
- What is under control and what is not?
- What are the expectations and how clear are they?

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What Are We Talking About?

- Test (effort) Estimation
- Test Planning / Estimation
- Test Strategy
  (test techniques, test levels, test types…)
- Iterative approach and estimation

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3. Want Some More?

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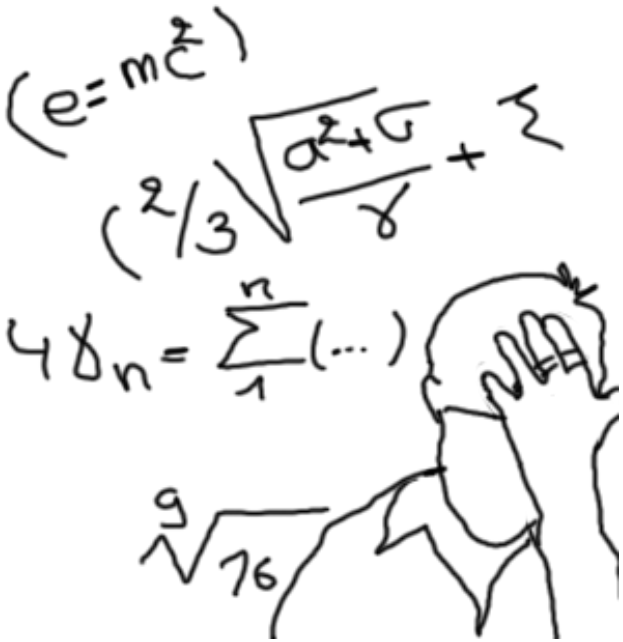
Su – Get A Rest

- Let's learn the lessons of all this?



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What Are We Talking About?

- Test Metrics
  - Are NOT the Truth but in the best case a partial representation of it
  - Have no intrinsic value – they are only worth in a given context, compared with each others or because of their evolution
  - Are NOT the goal, They are only means to better understand and act
  - Don't make politics…but have a serious affinity for it
  - Are no better than the story behind them
  - Are incompatible with people
- So, should we stop measuring then?

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Wake Up!

- No way folks! It’s Sunday
- Stay reasonable and everything will be for the best in the best of all possible worlds

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Thank You Very Much

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