



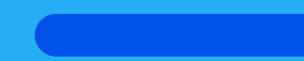


# Not all metrics are equally useful

Mikalai Kabzar



# About me



- **Lead Software Test Automation Engineer**
- **5 years with EPAM**
- **RM**
- **There were some issues with low level of Defect containment, definition and calculation of metrics on my project.**



# Defect containment

Defect containment effectiveness (DCE)

Defect detection percentage (DDP)

Fault Detection Percentage (FDP)

The number of defects found by a test level, divided by the number found by that test level and any other means afterwards.

$$DCE = \frac{\text{Pre release bugs}}{[\text{Pre release bugs} + \text{Post release bugs}]} * 100\%$$



## **Phase 1. Information gathering.**

What else can be  
measured with low defect  
containment?

60-70% DCE on my project  
with the desired >95%





Monthly report with bugs distributed by components / found by / priorities to define areas that most affect DCE.



Priority	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6
All bugs	29	13	3	6	0	24
Blocker Critical Major	6	3	1	1	0	11
Production bugs	0	2	0	6	0	24
AQA						
Blocker	1	0	0	0	0	0
Critical	2	1	0	0	0	0
Major	3	2	1	0	0	0
Minor	12	3	2	0	0	0
Trivial	11	5	0	0	0	0
Total Unique Issues:	29	11	3	0	0	0
Prod						
Blocker	0	0	0	0	0	2
Critical	0	0	0	0	0	4
Major	0	0	0	1	0	5
Minor	0	2	0	2	0	6
Trivial	0	0	0	3	0	7
Total Unique Issues:	0	2	0	6	0	24

# Findings and overhead

- 1:** 60+ persons has an access to tickets. Each one should be guided by the same rules. There were 5 Development Team Leads that used Jira bug-tickets to create their own boards and filters.
- 2:** Product owners leave component field empty or set wrong component.
- 3:** Product owners like to create P0/P1 bugs regarding minor issues that brings some inconvenience without significant business impact.
- 4:** It takes 8+ man hours each month to review tickets and clarify “component” field.





# Findings and solutions

- 1:** “Symptom” field was added to Jira tickets with required state in addition to “Component” field.
- 2:** Product bug template was created and presented to end users.
- 3:** Additional questions were added to bug triage sessions.
- 4:** The lack of functional requirements has been proven again. Additional business analyst capacity to create more detailed and well-developed requirements was added to the team.





**Phase 2.**  
**It doesn't work.**

Let's find more metrics!





# Import experience of our Western colleagues

**1:** From 1 to 3 one to one Skype sessions with each key person.

**2:** 20+ man hours of Delivery manager and 20+ man hours of key persons that were spent on meetings.





# Import experience of our Western colleagues

- 1: Nice presentation.
- 2: The most frequently pronounced problem words were “Testing” and “Bugs”.





# What to do and how to live on?

- 1:** Ask for help from the EPAM Competency Center or some external expert.
- 2:** Workshop with an external expert using Lean methodology.





# Lean

**Lean** manufacturing or lean production is a systematic method originating in the Japanese manufacturing industry for the minimization of waste (無駄) within a manufacturing system without sacrificing productivity, which can cause problems.

## The 7 Wastes of Lean





# Results

- 1:** 100+ Lean waste points were defined and presented to our customer. 90% caused by deviations from the chosen and declared SDLC and Agile processes.
- 2:** BA Team Lead position was created in the project.
- 3:** Up to 8 BAs for the ~60 FTE project.





# Advices

- 1:** Pay attention to basic deviations from classic SDLC and fix them.
- 2:** Ask for external help.
- 3:** Track time that was spent on metrics, workshops and meetings. Show all expenses to PM, DM and customer.
- 4:** Don't worry. )))



# Questions

