Driving a Kaizen Culture

using regular Operations Reviews

David J. Anderson GOTO Copenhagen May 2011



Agile Management Book



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Applying the Theory of Constraints for Business Results

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DAVID J. ANDERSON Foreword by Eli Schragenheim

THE COAD SERIE

Operations Review Chapter 14

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What brought us to Kanban is described in this first book

And New Kanban Book

KANBAN

STUCK.

Successful Evolutionary Change

I'M IOLE

David J. Anderson

Foreword by Donald G. Reinertsen

ABOUT IT

for Your Technology Business

I'M TOO BUSY.

Detail information about Kanban can be found in this new book

Operations

Review

Chapter 14

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LEAN-Kanban University

http://leankanbanuniversity.com

http://www.limitedwipsociety.org

Yahoo! Groups kanbandev Yahoo! Groups kanbanops

Like this...

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European Lean & Kanban Events

October 2011

European Lean Kanban Conferences 2011



Benelux

Oct 03 – 04 Antwerp www.leankanban2011.be



Central Europe

Oct 17 – 18 Munich www.lean-kanban-conference.de

LESS

Oct 30 – Nov 02 Stockholm http://less2011.leanssc.org/

Kanban Training

- With David J. Anderson
- http://www.trifork.com

• 30-31 May, 2011





Feedback Loops



Daily standup meeting becomes a central enabler of a Kaizen culture



In this example more than 40 people attend a standup for a large project with 6 concurrent development teams. The meeting is usually completed in approximately 10 minutes. Never more than 15.

Spontaneous Quality Circles form after the standup to focus on immediate process issues

- Kanban board gives visibility into process issues ragged flow, transaction costs of releases or transfers through stages in process, bottlenecks
- Daily standup provides forum for spontaneous association to attack process issues affecting productivity and lead time
- For example, 3 day freeze on test environment was a transaction cost on release that caused a bottleneck at "build" state. This was reduced to 24 hours after a 3 person quality circle formed to investigate the policies behind the freeze. Result was improved smoother flow resulting in higher throughput and shorter lead time

Monthly Operations Review is used to reflect on quantitative objective performance measures



Why monthly?

- More often is too much overhead
 - Preparing data
 - Expensive meeting (lots of people)
 - 2.5 hours is a lot of time
 - Need enough time & data to show trends
- Quarterly is not frequent enough
 - No one can remember events from 3 months ago
 - Learning value is undermined
 - Too much data

Lead off with finances – you are running a business



Guest speaker from another business unit worked well



Managers & team leads present department demand & capability



Discussion items scribed on a flip chart



Improvement opportunities assigned to managers as last agenda item



Managers are held accountable for kaizen opportunities. Team learns how managers can add value for them



Ops Review & Metrics

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Metrics to start off with

Report Capability

- Quality (defect/rate)
- WIP (work-in-progress)
- Cycle Time (day deployed day ready = cycle time)
- Throughput (velocity)
- Issues & Blocked Work

- Across these:
 - Trend
 - Variation

Issue Management Cumulative Flow

Issues and Blocked Work Items

Count

Report Generated: 4/27/2007 3:53:50 PM by CONTINUUM\davida; Last Warehouse Update: 4/27/2007 3:31:26 PM

How many issues and blocked work items do we have?

85 57 1111111111111111111 1111/1111 41/1/11/14 41141716116 **UIRIZIE** 317517111 טטבעבעט 002/01/1 Ξ 10777714 ž



Executive Dashboard

Lead Time and Due Date Percentages	Lead Time (Average #of Days)			Due Date Performance (%)	
Interval	Target	May 2007	Dec 2006 to May 2007	May 2007	Dec 2006 to May 2007
Lead Time, Engineering Ready to Release (CRs & Bug Fixes)	30	32.5	31.1	52	50
Lead Time, Engineering Ready to Release (CRs Only)	30	32.6	40.4	50	30
Lead Time, Engineering Ready to Release (Bugs Only)	30	32.5	19.6	55	75

Change Request Backlog:





Throughput And Production Rate:

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Due Date Performance Detail







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APRIL

Control Charts supported natively in Silver Catalyst



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BBC Worldwide Bug Rates



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BBC Worldwide Days Blocked



Mean 25.8

LCL 0

Mean 12.3

LCL 0

Mean 4.9

LCL 0

DBA Team Velocity





Velocity Range Chart

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Iteration 1 Cumulative Flow

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Configuration Management: Work In Progress spiked up in June

Weeks Ending

Configuration Management: Environment availability increased.

Added SQA3 Insufficient disk space on sql servers.

DEV2 Insufficient disk space on sql server.

SQA1 – SQL server issues with failed replication and DBs not installed.

TFS – bad switch port caused connection issues for 90 min.

Configuration Management: Build Quality is improving but Release quality is not.

Configuration Management: The number of environment incidents increased.

Configuration issue in web.config

Throughput example showing trend of releases Delivered monthly. Sept sustainment release stuck waiting on major release. Code branching strategy prevented check-ins.

Automated testing was seen as too expensive

Demonstrate vs. rant

Continuous Integration reporting

Configuration Management: Build Duration

Build Duration

Max Duration (seconds)

Average Duration (seconds)

Configuration Management: Build Quality Reporting available thru Cruise Control

Build Report

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So why is hardly anyone doing Operations Reviews?

Let's make a list

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Here is one I prepared earlier...

- Requires management support
- Spans across teams and requires middlemanagement participation
- Some middle-managers fear transparency
- Fear of showing "bad" results / lack of capability
- Requires management discipline to collect data
- Expensive meeting

Thank you!

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About...

David Anderson is a thought leader in managing effective software teams. He leads a consulting firm dedicated to improving economic performance of knowledge worker businesses – improving agility, reducing cycle times, improving productivity and efficiency in technology development.

He has 25+ years experience in the software industry starting with computer games in the early 1980's. He has led software teams delivering superior productivity and quality using innovative agile methods. He developed **MSF** for CMMI Process Improvement for Microsoft. He is a co-author of the SEI Technical Note, CMMI and Agile: Why not embrace both!

David is the author of 2 books, **Agile Management for Software Engineering** – *Applying the Theory of Constraints for Business Results*, and **Kanban** – *Successful Evolutionary Change for your Technology Business*.

David is Vice President of the Lean Software & Systems Consortium, a not for profit dedicated to promoting greater professionalism and better economic outcomes in our industry. Email... dja@djandersonassociates.com

