

The VALUE of Value Stream Mapping

Daniel Breston Virtual Clarity: DevOps, Lean, ITSM coach & advisor



What do you expect when you turn on a tap??



ITSM, Agile,
DevOps: we all love
Flow, Feedback and
to Improve
Continuously

Value Stream Mapping







Value Stream Mapping (VSM)



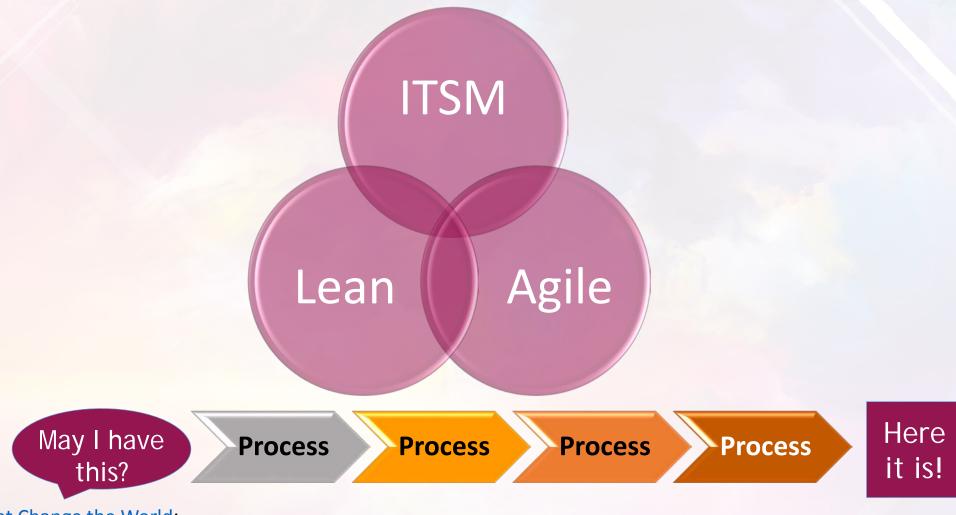
Value Stream Mapping is a lean leadership technique that visualizes the flow of information and resources to aid in identifying improvements to fulfil customer requests.







DevOps: Flow + Feedback + Continuous learning



The Machine that Change the World:

Womack, Jones, Roos 1990





Culture

Automation

LEAN

Measures

Sharing

CALMS & VSM





Is your river of Change fast flowing?



Or full of obstacles?











Transformation Charter: Let's agree

| | _Current S | State Problems & Business Need | s |
|---|---------------------------|--------------------------------|-----|
| 1 | Current | Acte i i obiemo e pasmeso neca | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| | Perforr | nance Improvement Objectives | |
| | Metric or Condition | From | То |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| | | Mapping Activity Scope | |
| | Value Stream | | |
| | Specific Conditions | | |
| | First Step | | |
| | Last Step | | |
| | Demand Rate (Work Volume) | | |
| | Boundaries & Limitations | | |
| | Improvement Timeframe | | |
| | Affected Fo | unctions/Roles & Key Stakehold | ers |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| | Current S | tate Data & Information Neede | d |
| 1 | | | |
| 2 | | | |
| 3 | | | |

| | Accountable Parti | es A | greement |
|----|---|------------------------------|----------|
| | Formation Comment | Signature | |
| | Executive Sponsor | Date | |
| | Value Stream | Signature | |
| | Champion/Owner | Date | |
| | Facilitator | Signature | |
| | racilitator | Date | |
| | Logistics Coordinator | | |
| | Briefing Attendees ** required * optional | | |
| В | riefing Dates & Times | | |
| | | Mapping Team | |
| | Function/Area | Name | Title |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 3 | | | |
| 9 | | | |
| 10 | | Mapping Team On-Call Support | |
| | Function/Area | Name | Title |
| 1 | runction, Area | Name | Title |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| | | Mapping Activity Logistics | |
| | Mapping Activity Dates & Tim | | |
| | Location | | |
| | Own | er | |

https://www.ksmartin.com/books/value-stream-mapping/

Current State Day

What they thought:

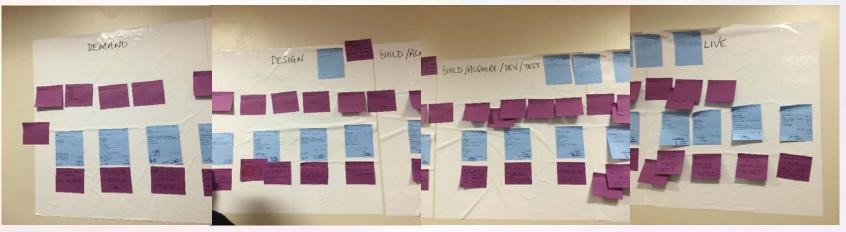
- 5 people reviewing and approving in one cycle
- 20 people doing the work to create the new product
- **30** elapsed days to deliver the product
- 98% quality of the product to approve go live

• 1% of incidents associated to this

product

The Reality

- 55 people reviewing and approving in one cycle
- 268 people doing the work to create the new product
- 364 elapsed days to deliver the product (180 real work)
- 98% quality of the product to approve go live
- 12% of incidents associated to this product









How to create the Current State

What do we do today? Who do we do it for? What Value do we both get? Steps & Who Measures Other data

The goal is to get the participants to identify the steps and inefficiencies in their current way of working....





Measures

Time: Lead time, Touch or process time, Wait time

Quantity: unplanned, deployments, automation

Value: cost, customers, staff, risk, non-value

Quality: % Complete & Accurate – how good was that outcome of the work upstream?





Current State Example

Requirement Gathering

Design work planning

Project Kick-off Work started: Design, Dev, Test

Perform/Non-**Functional Testing** Controlled Non-Funct. testing

Go-live

LT: 25 days AT: 7 days %C&A:75% Min 2 iterations

LT: 20 days AT: 15 days 4-5 cycles %C&A:80% 3-4 iterations

LT: 5 d AT: 2 d ays Multiple cycles %C&A: 88%

LT and AT average 1 month

%C&A %C&A: 95-98% 75% after Unit and initial Component

LT: 30 days AT: 20 days %C&A: 85% (10% Dev & 15% Req or Design

LT: 10 days AT: 10 days %C&A: 85% entering, 98% when complete

At least 15 areas

15-20 areas with multiple hand-offs or reviews

15-20: PM, Dev, Env, Test and maybe OPS

8-12 people cross functional

8-12 people cross functional

8-12 people cross functional

Initial scoping, planning, resource

allocation, env

set-up

Project kicked off, Led by PMs, PID, Scope, Planning detail

Code, test, env set-up, release niotes, component testing. NOTE: 80% of release complete at this stage. Perf testing optional

Main tools which are outdated and slow things down

When this stage, team goes to next piece of work. Available after go-live

Available as needed. Any retrospective is a waste of time

Estimating & Triage causes confusion

Need to involve Security, Ops, Support, BA and client or internal requester more



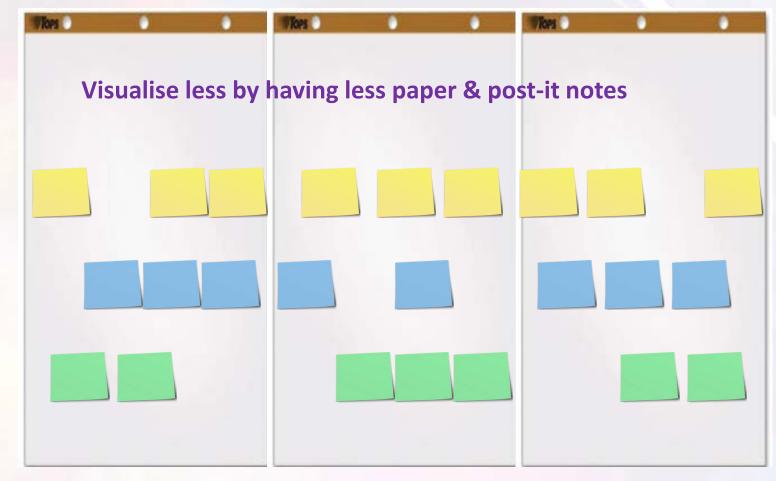
Think about the future!

How can we improve the process to make this more effective and efficient?

What steps add the most value, Which ones can we remove?

What measures can we use to help keep us on track or improve?

What resources add the most value? What can we remove?





VSM and ITSM

We built our new stream with these KPIs in mind:

Every 2 weeks something of value goes live

P2 & P3 Incidents must reduce by 30% overall within one year

95% of all work estimates accurate first time

Meetings of approval must go away within 18 months (automate approval gates)

Employee & Customer satisfaction must be over 95% within 6 months





DOWNTIME

| Source | Purpose | Examples | | | | | | |
|----------------------|--|---|--|--|--|--|--|--|
| Defects | Deviations from requirements; errors | Failures, known errors, misinformation | | | | | | |
| Overproduction | Producing more or faster than required | Excessive documentation or code | | | | | | |
| Waiting | Delays while waiting on a previous step | Delayed decisions, approvals, response | | | | | | |
| Non-use | Unused knowledge or creativity | Unused skill, innovation, communication | | | | | | |
| Transportation | Moving products from one location to another | Multiple hand-offs, emails or meetings | | | | | | |
| Inventory | Carrying more materials than needed | Unused software, infrastructure, excessive backlogs or emails | | | | | | |
| Motion | Moving people or assets more often than required | Moving code or infrastructure too much | | | | | | |
| Excessive processing | Doing more than is required | Over-engineering, failing to create templates and other reusable assets | | | | | | |

First seen via CA 4-5 years ago!



Think small & slow; to fast!

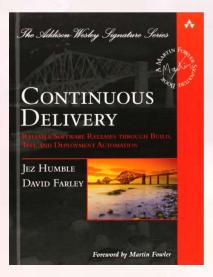
| Value Stream | | | | | Progress Review Dates | | | | | | | | | | | | |
|--------------|--|-----------------|-------------|--------------------------------|-----------------------|--------|--|---|------|--------|-------|-------|-------|--------|-----|----|--------|
| | Executive Spo Value Stream Chan Value Stream Mapping Facil Date Cro | npion itator | | | | | | | | | | | | | | | |
| Liver Const. | Evec | Exec. | 0 | Planned Timeline for Execution | | | | | | | | | | 01-1 | | | |
| Identifier | Task or Problem to be Solved | Notes | es Method * | Owner | 1 | 2 | | 4 | 5 | 6 | 7 | 8 | 9 | | 11 | 12 | Status |
| | | | | | | | | | | | | | | | | | 0% |
| | | | | | | | | | | | | | | | | | 0% |
| | | | | | | | | | | | | | | | | | 0% |
| | | | | | | | | | | | | | | | | | 0% |
| | | 2-4 we | eks repe | atable cycle | S | | | | | | | | | | | | 0% |
| | | | | | | | | | | | | | | | | | 0% |
| | | | | | | | | | | | | | | | | | 0% |
| | | | | | | | | | | | | | | | | | 0% |
| | | | | | | | | | | | | | | | | | 0% |
| | | | Ą | greement | | | | | | | | | | | | | |
| | Executive Sponsor | | | | | | | | Valu | ie Str | eam I | Mappi | ng Fa | cilita | tor | | |
| gnature: | | | | | | ature: | | | | | | | | | | | |
| ate: | | | | | Date: | | | | | | | | | | | | |

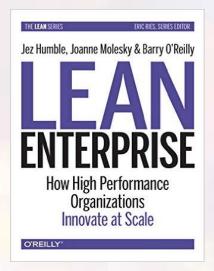
^{*} Execution Method = JDI (Just-do-it), KE (Kaizen Event), or Proj (Project)

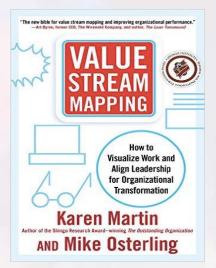
A Texas story: MTBK

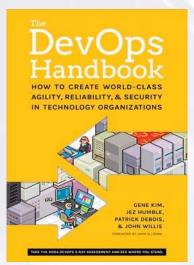


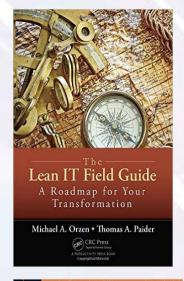
Further learning











DevOps Institute

DevOps.com

IT Revolution

ITSM. Tools

IT Chronicles

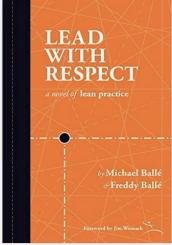
www.devopsinstitute.com

www.devops.com

www.itrevolution.com

www.itsm.tools

www.itchronicles.com



VSM take-aways

Get leaders/managers to engage regularly

Don't be afraid to see the truth!

Set bold targets, explain them and then let the teams deliver them







Thank you for attending this session.

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