

Lean Software Development

An introduction

2009-05-14

Mattias Skarin



Who am I?

Coach



- **Lean/Scrum**
- **10+ teams**

Entrepreneur



- **Extreme Solutions**
- **Bizplant**

Engineer



- **9 years software dev**
- **Acting CTO**

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Toyota and Lean thinking

“Only after American carmakers had exhausted every other explanation for Toyota’s success – an undervalued yen, a docile workforce, Japanese culture, superior automation – were they finally able to admit that Toyota’s real advantage was its ability to harness the intellect of ‘ordinary’ employees.”

*“Management Innovation” by Gary Hamel,
Harvard Business Review, February, 2006*

We get **brilliant results**
from **average people**
managing **brilliant processes**.

We observe that our
competitors often get
average (or worse) results
from **brilliant people**
managing **broken processes**.



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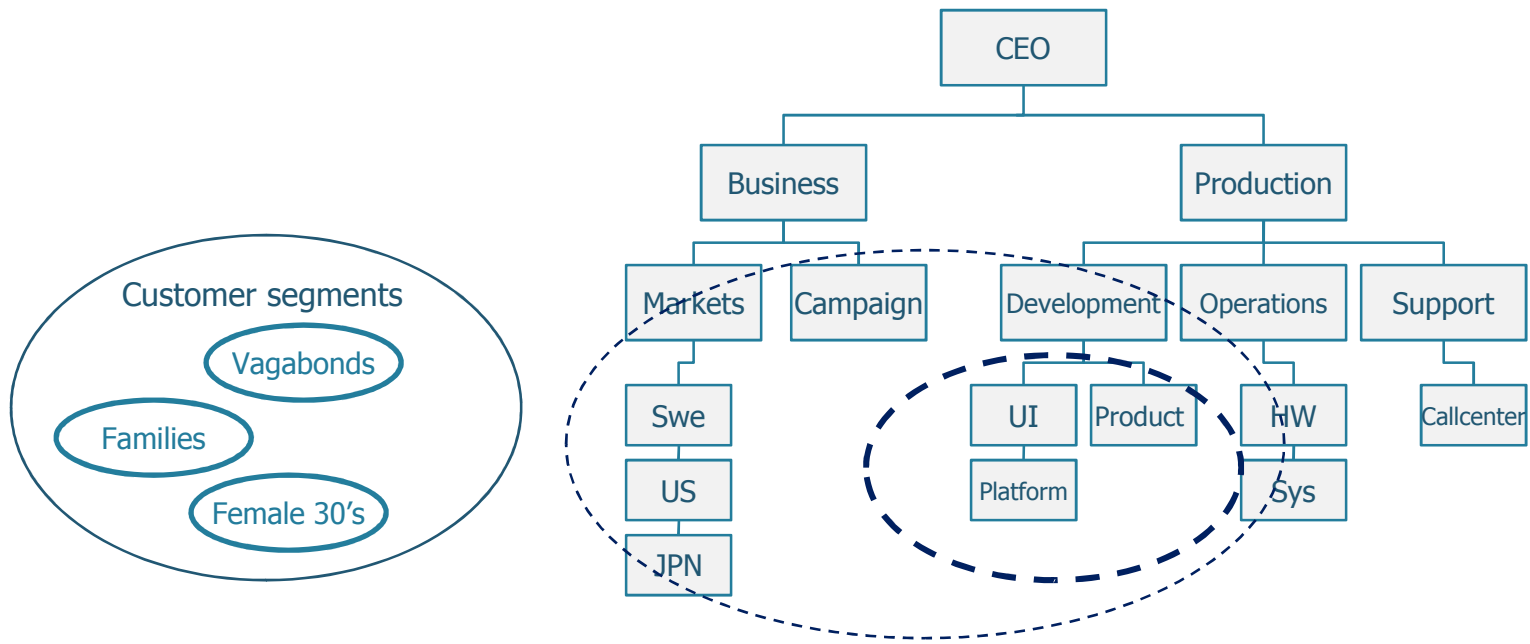
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Why Lean?



Agile is hard to scale



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Lean links functions together



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A new look at

LEAN

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Lean

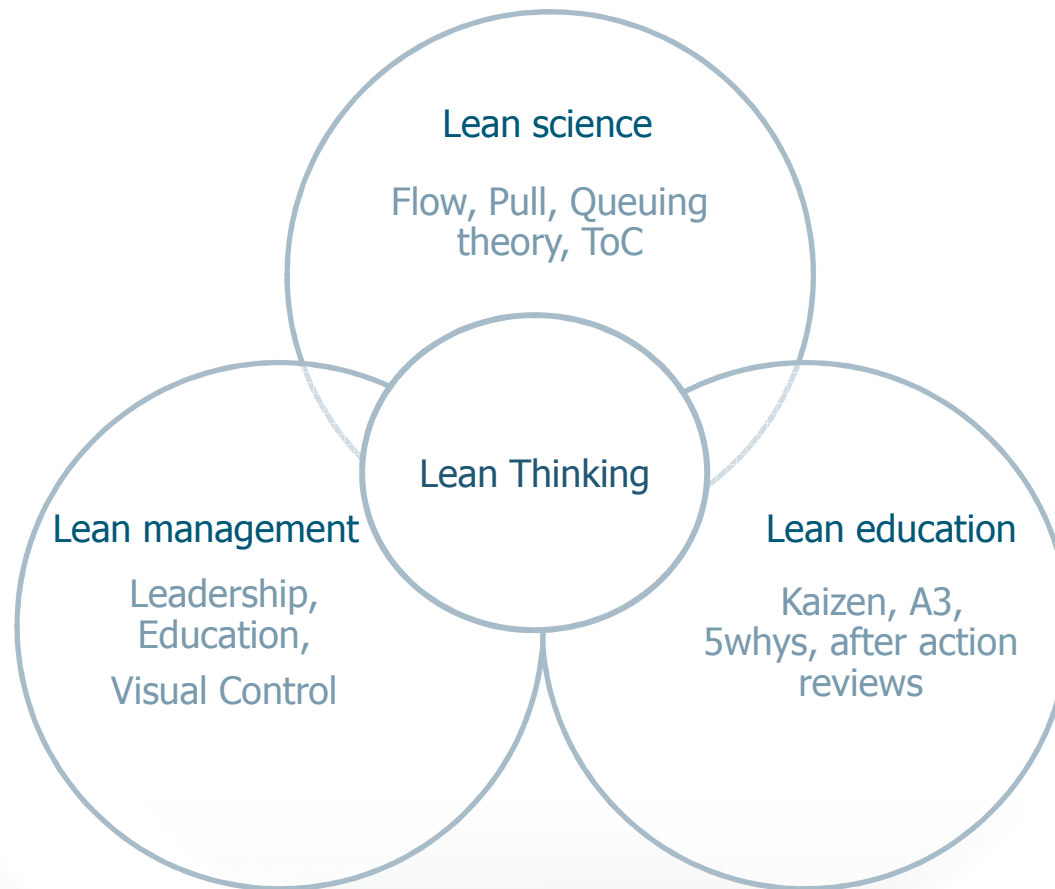


In Lean operational decisions, value trumps flow,
and flow trumps waste reduction

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Alan Shalloway, Lean & Kanban
Miami 2009

Values, principles, practices

Expandable to the enterprise

Designed for software!

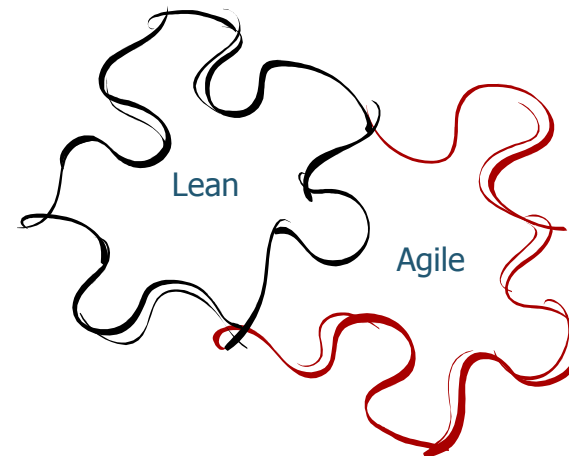
	Lean	Agile
Values	<ul style="list-style-type: none"> System thinking Respect people Always improve .. 	<ul style="list-style-type: none"> Individuals & Interaction over process & Tools Responding to change over following a plan ..
Principles	<ul style="list-style-type: none"> Value trumps flow, and flow trumps waste reduction Match work to capacity 	<ul style="list-style-type: none"> Simplicity is essential ..
Practices	<ul style="list-style-type: none"> Kanban A3 problem solving Value stream mapping Match work to capacity .. 	<ul style="list-style-type: none"> Daily standup, Sprint planning ..

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Lean extends Agile



Across functions (not just software)

Flow

Deep understanding of Engineering practices

Visual management

Risk management through classes of service

Scaling to the enterprise

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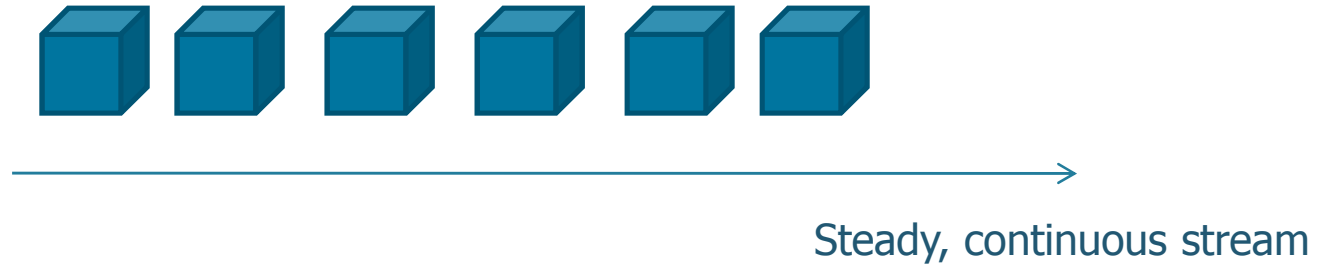
FLOW

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Flow



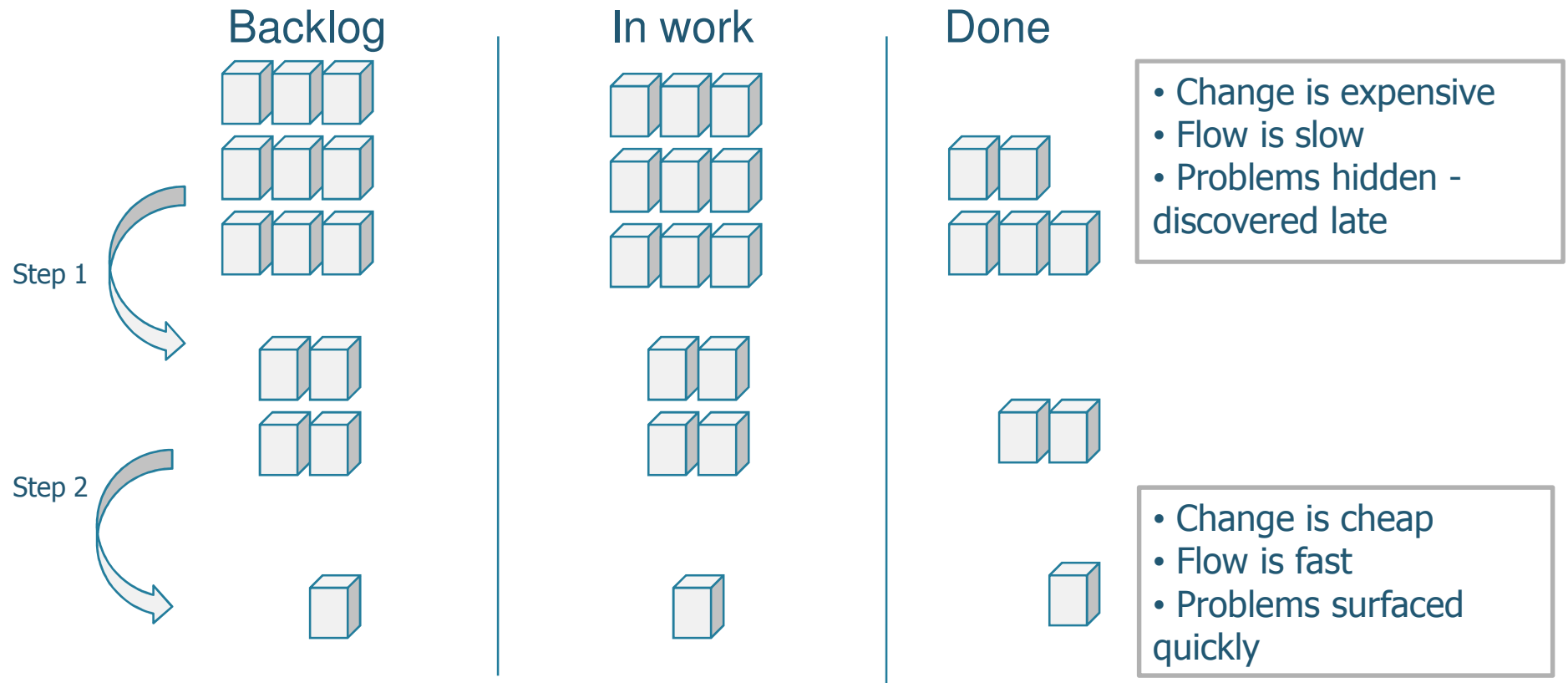
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From Batch to Flow



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Turbulence



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Thinking different
EXAMPLE

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Carrier	On time	Load factor	Flights
Southwest	0,8172	0,7260	1.164.906
Delta	0,7565	0,8060	568.862
Continental	0,7295	0,8140	411,105
United Airlines	0,6990	0,8270	480,382
American Airlines	0,6834	0,8150	792.404

2007 Statistics

- Excellent customer service
- Fewest complaints
- Rated "most admired airline"

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Sources:
Poppendieck, FAA, SEC Filings, Fortune



We are committed to provide our Employees a stable work environment with equal opportunity for learning and personal growth. Creativity and innovation are encouraged for improving the effectiveness of Southwest Airlines. Above all, **Employees will be provided the same concern, respect, and caring attitude within the organization that they are expected to share externally with every Southwest Customer.**

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Where do I start?

- Values?
- Principles?
- Practices?

Empirical evidence suggests starting with visual management using Kanban can initiate the learning process

Ideas	Market	In dev	Test	Prod
Cart	Client	History	Gui	Serv
		Login		Back
		Invite		
		Email		



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Thanks for listening!

Blog:

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