

Single Point Lesson: Lean Development

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Definitions

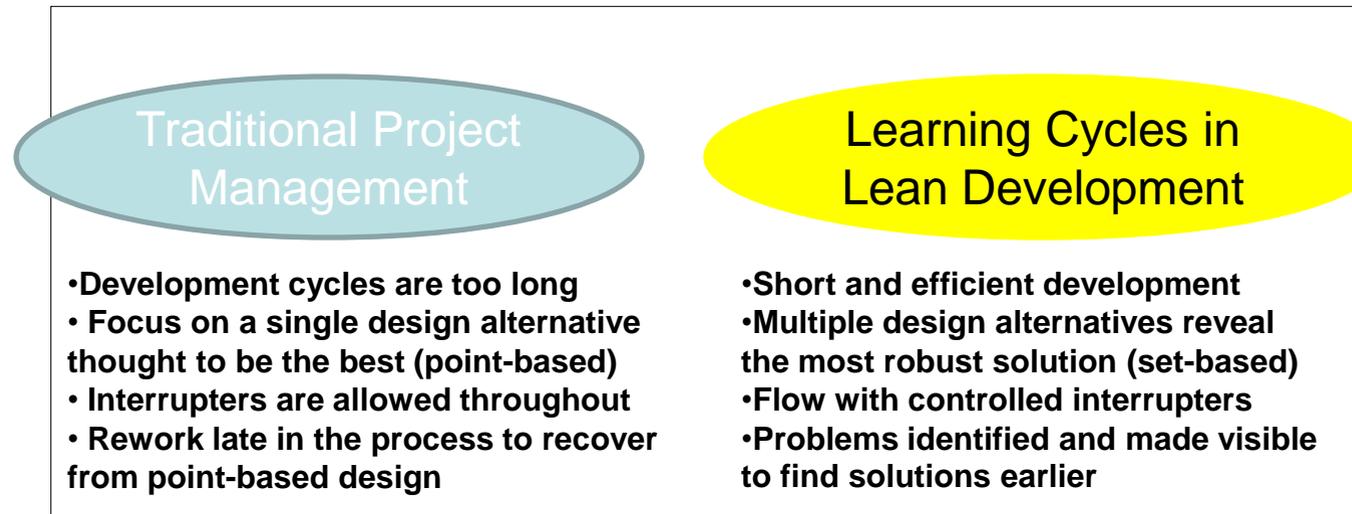
Accountability Board: A visual system for tracking individual tasks	development tasks
Flow Interrupter: Anything that interrupts the flow of development	Stage Gate: An approval step in a traditional waterfall process that projects must pass
Learning Cycle: Short, focused development bursts, usually 2 to 4 weeks in duration	Set-based design: The technique to move multiple design options forward in parallel, in contrast to single-point design which carries forward only a single solution
Pace: The time it takes to complete	

Situation

Observations of stage-gate project development at Steelcase showed that the pace and progress of development is not exposed, with the following symptoms:

- Development status is not completely known
- The method to help the team is unclear
- Development problems are exposed too late
- Development stretches out due to late exposure of key problems
- Stage-gate check points are too far apart to maintain pace
- Discovery and knowledge capture are not emphasized

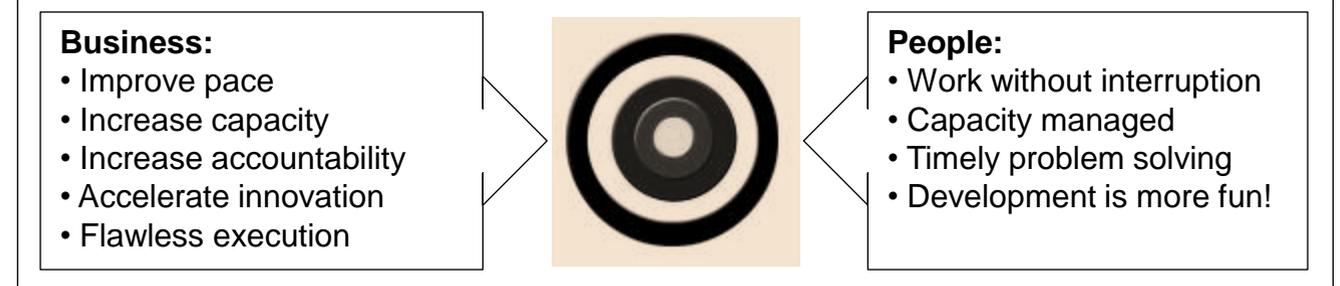
Problem



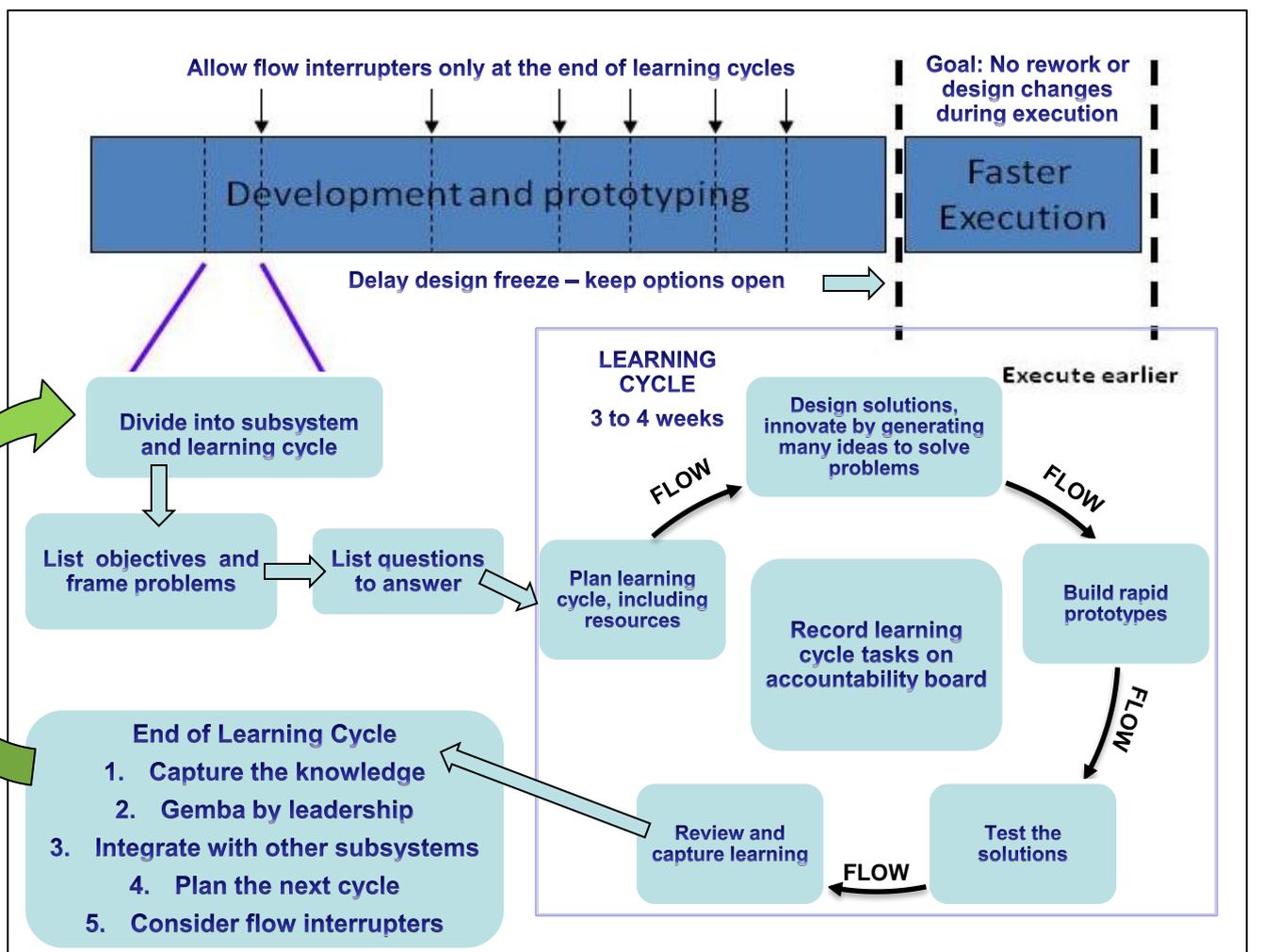
Reflection and analysis

1. Infrequent stage-gates not measuring development pace	1. Accountability within each learning cycle maintains pace
2. Tasks broken down	2. Problems broken down
3. Global resource plan	3. Learning cycles resource plan
4. Timeline based	4. Knowledge based
5. Deliverables measured	5. Learning Measured
6. Linear	6. Iterative
7. Separate Testing Phase	7. Prototype in every cycle
8. Point-based solution design	8. Set-based with many concepts

Objectives



Trial solution



Outcomes

- Higher quality/innovative solutions
 - Development pace measured
 - Earlier project cancellation
 - Cycle time reduced by 50%
 - Fewer test failures in execution
 - Knowledge captured along the way
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Resources and Contact Information

Schipper, Timothy H. and Swets, Mark D. *Innovative Lean Development: How to Create, Implement and Maintain a Learning Culture Using Fast Learning Cycles*, New York, Productivity Press, 2010

Huthwaite, Bart. *Lean Design Solution*. Mackinac Island, MI. Institute for Lean Innovation, 2004

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