

The Road to Understanding Dependable Lean Software Delivery

Capacity-Constrained Bottlenecks

A bottleneck can constrain process flow at any point in software delivery. This is often as a result of skills mismatches within the team, and is particularly common in teams made up of specialists.

Non-instant Availability

Non-instant availability will often look like bottlenecks, but are caused by policy or avoidable delays incurred by waiting for a business resource or policy constraint rather than a limited capacity.

Variability - Work Item Type Mix

Sudden changes in the type of work undertaken by a team can clog the delivery process causing a reduction in predictability.

Coordination Costs

Some overhead in communication is unavoidable to ensure effort is coordinated.

Variability - Class of Service Mix

Sudden changes in the works class of service/priority (e.g. too many fixed deadline items) can adversely impact the efficiency of the process.

Variability - Work Item Size

Rogue work items which are substantially more complex or more involved than originally envisaged, can clog up the development process resulting in unpredictability.

Transaction Costs

Transaction costs do not add value, but are likely to be critical to a successful outcome (e.g. setup/clean up costs). Transaction costs however need to be carefully understood and controlled.

Failure Loads

Failure Load is introduced by the delivery of lower than anticipated quality. Resultant support calls and remedial work will likely become an impediment to future delivery.



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"About the author"

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