

Do more with less:

How to address the capital project productivity imperative



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CEO Flowledger

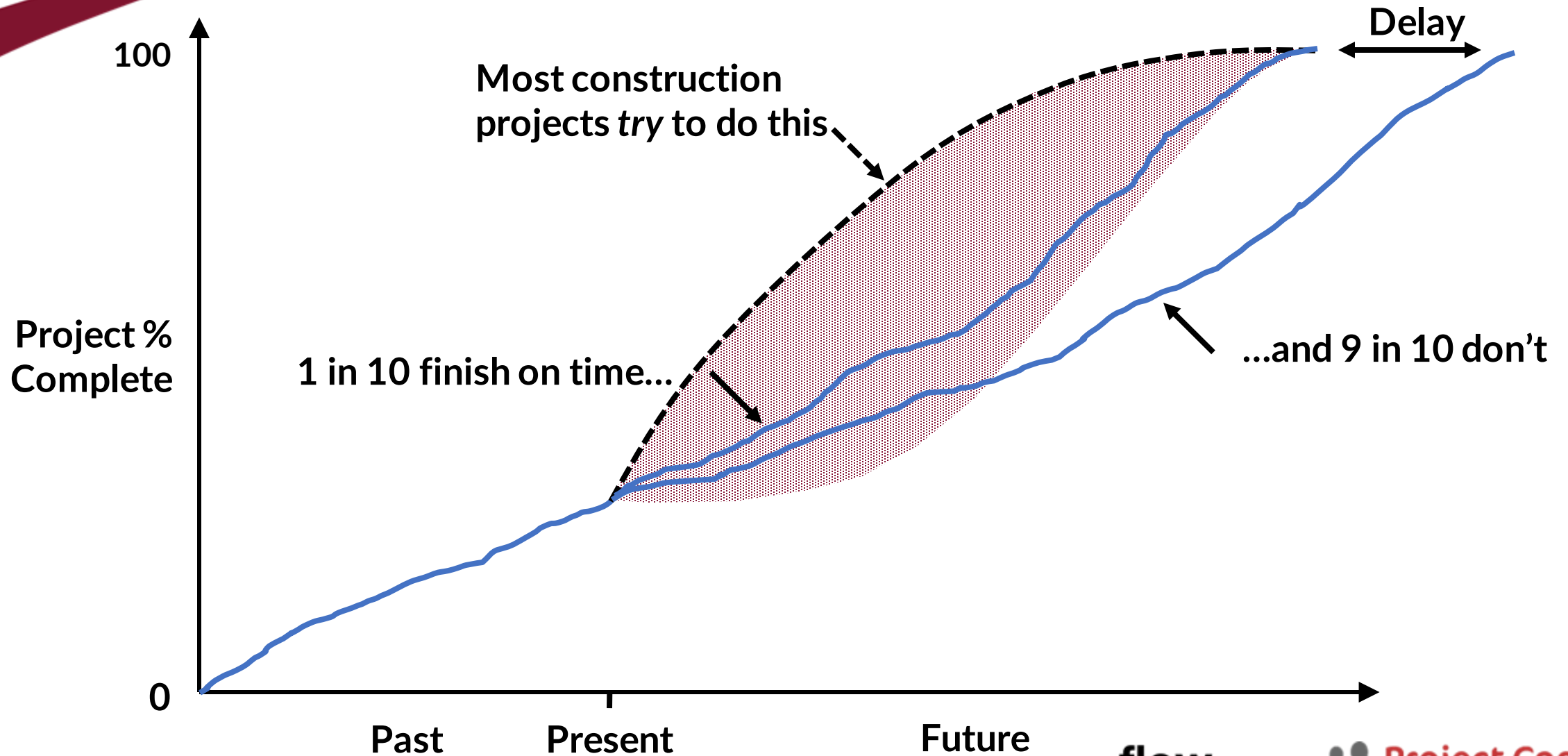


John Fitzsimmons
CIO Flowledger

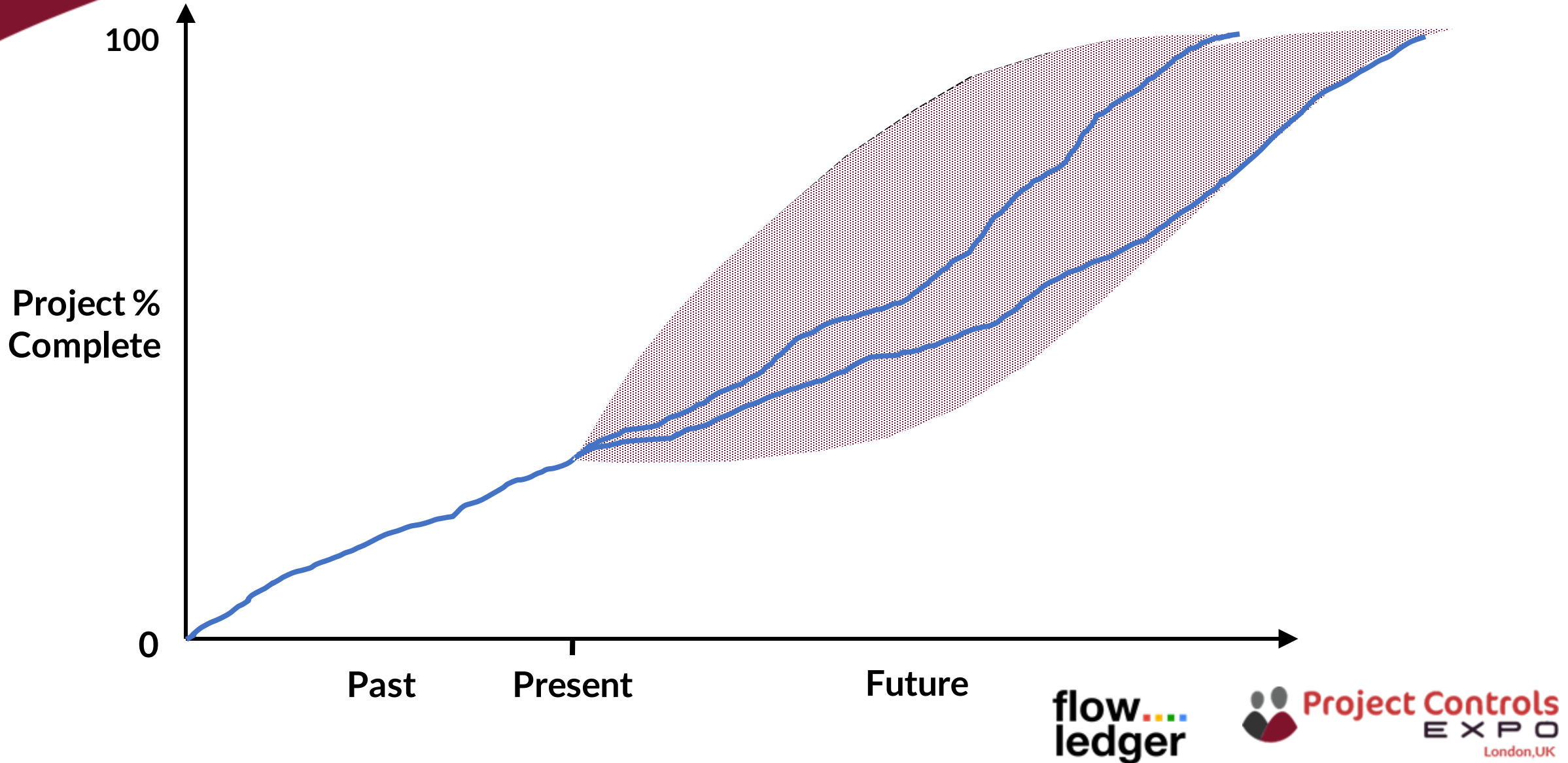
There is evident correlation
between excess activity duration
and excess work density

Limit work in progress
+
Manage float erosion
=
Reduce schedule delay
and cost overrun

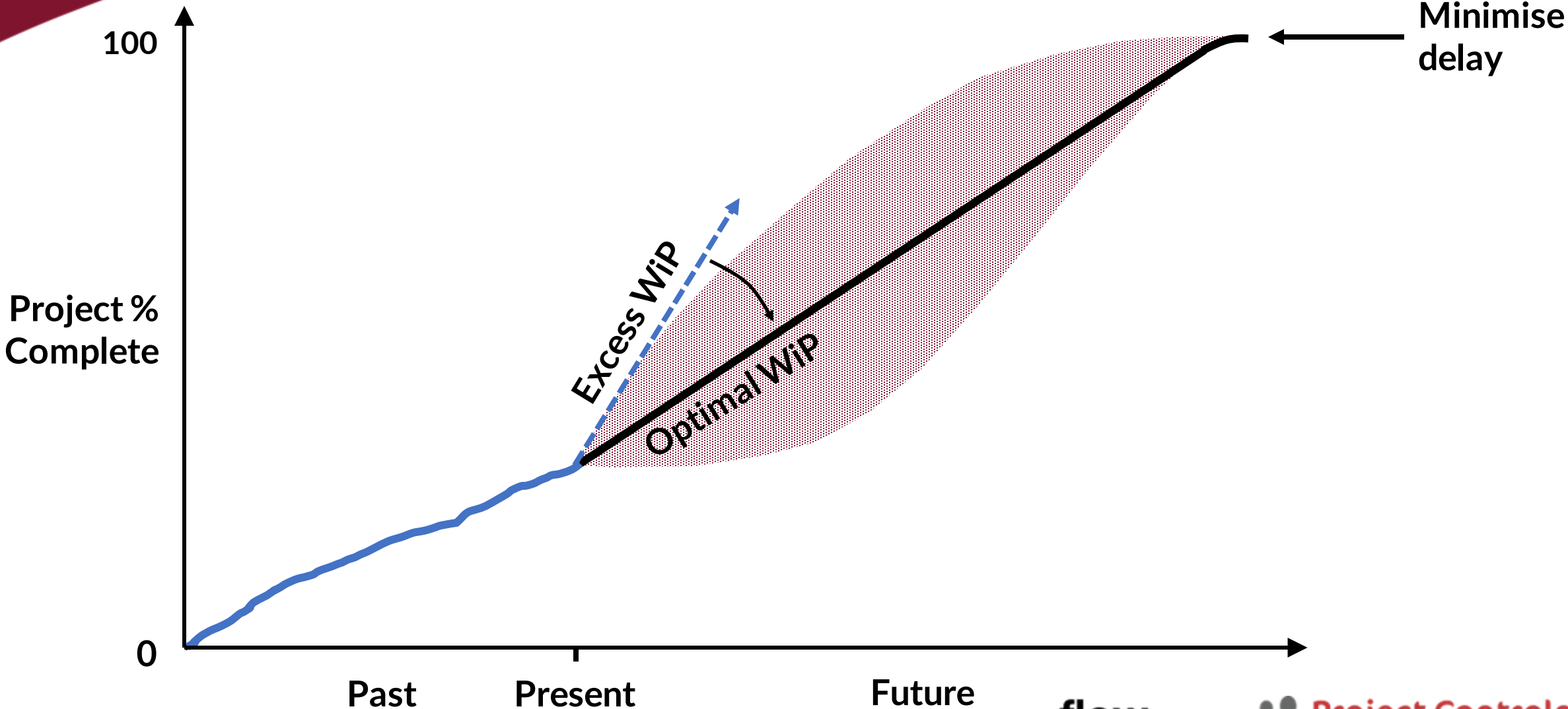
Boom & Bust



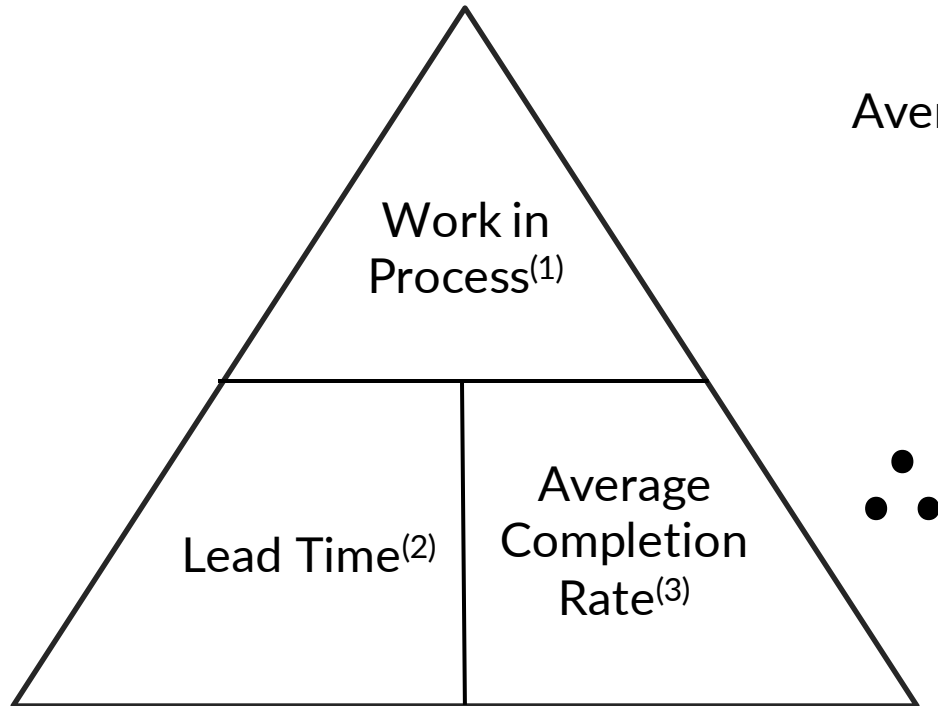
Move the goalposts?



Or improve your aim?




Little's Law



$$\text{Average Task Duration} = \frac{\text{Work in Process (WiP)}}{\text{Output Rate}}$$

Work in Process (WIP) >>> Average Task Duration



1. Number of tasks being worked on
2. Average task duration
3. Average task completion rate

Research Question

“How does minimising workflow affect the productivity of a construction project?”

Dataset

554

Infrastructure
Projects

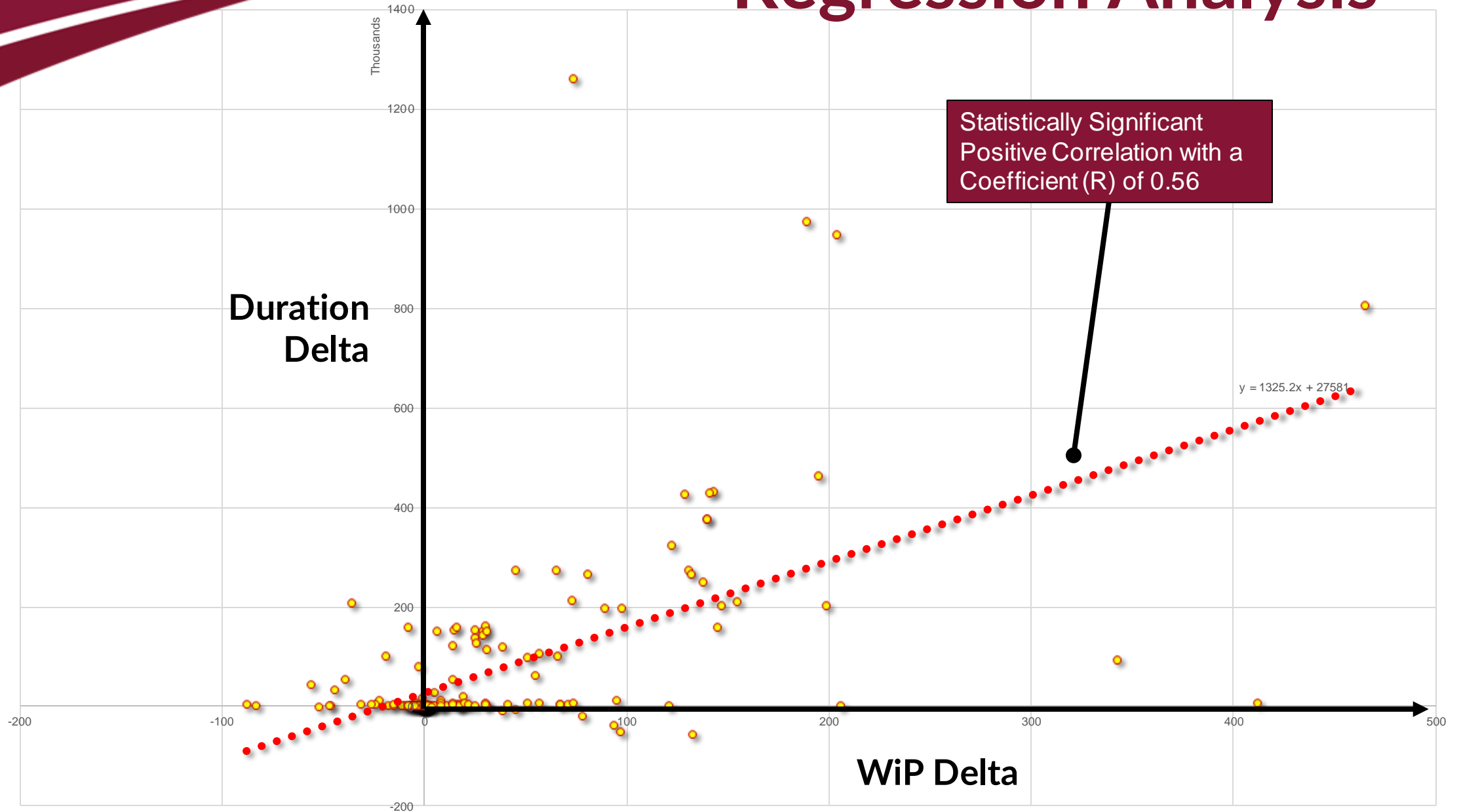
1.3M

Schedule Tasks

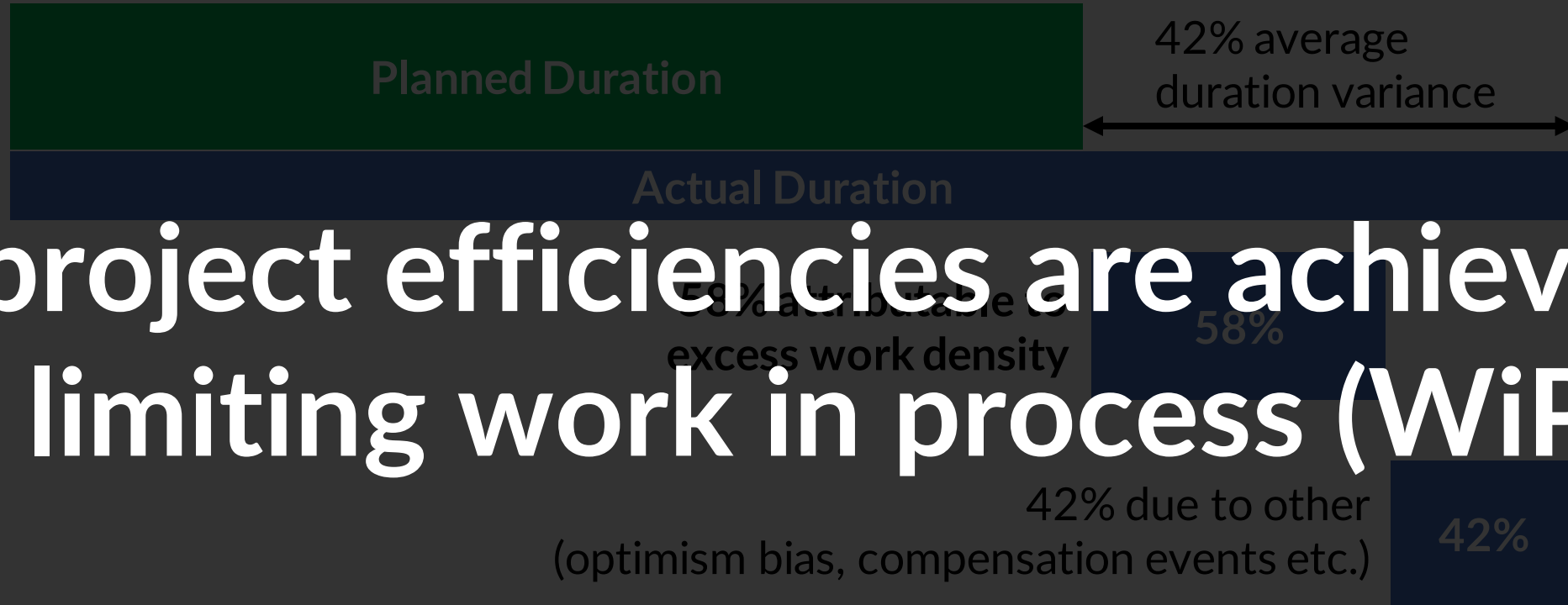
£26B

Estimated
Portfolio Value

Regression Analysis



Conclusion

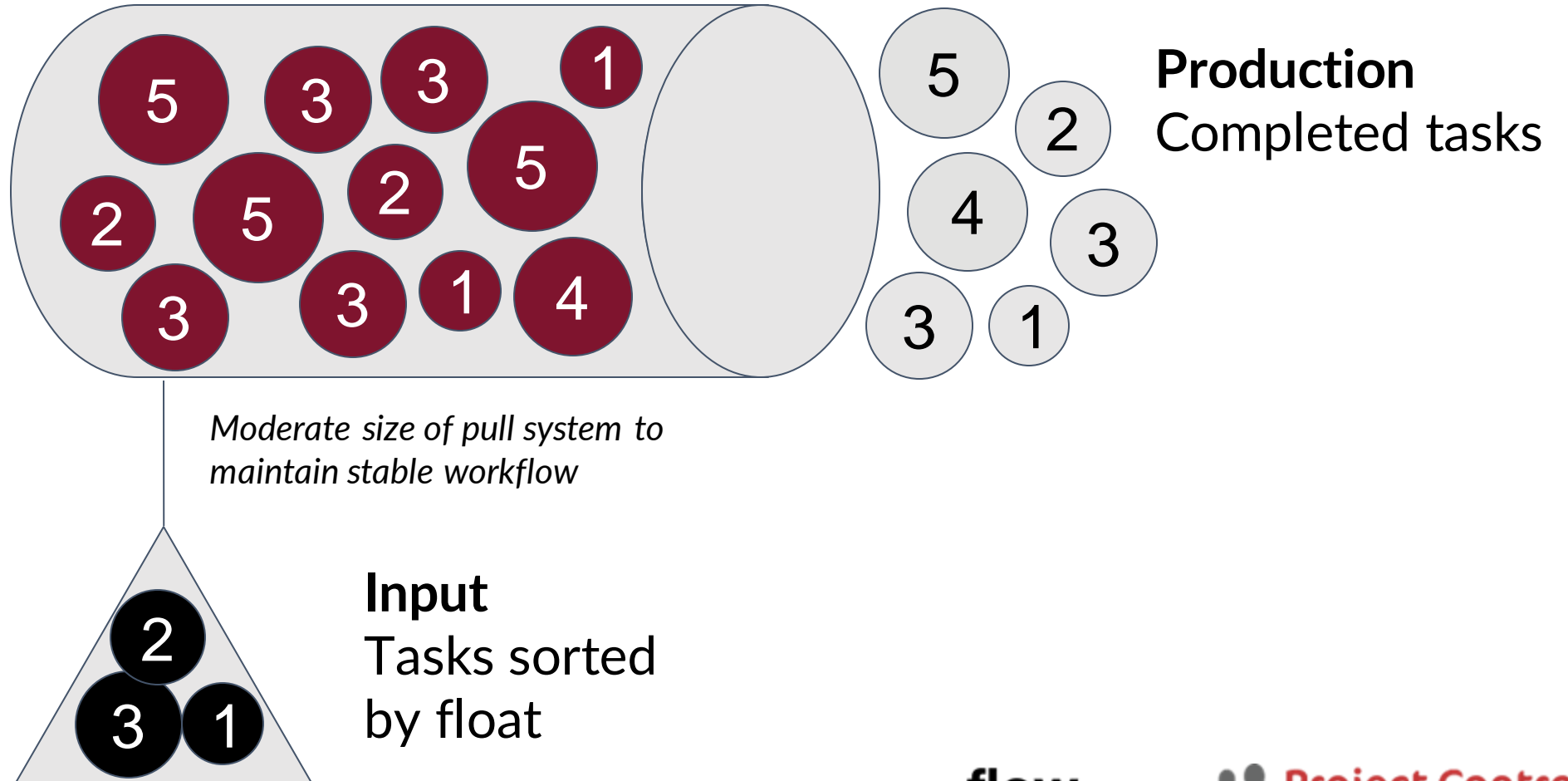


26% project efficiencies are achievable by limiting work in process (WiP)

Pull System

Pull System

Regulate tasks in progress



Input

Tasks sorted by float

Close

If all projects in the UK optimised their workflows, GDP would be increased between 1 and 2%

Q & A