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# What Is Wrong With 100% Utilization Thinking?

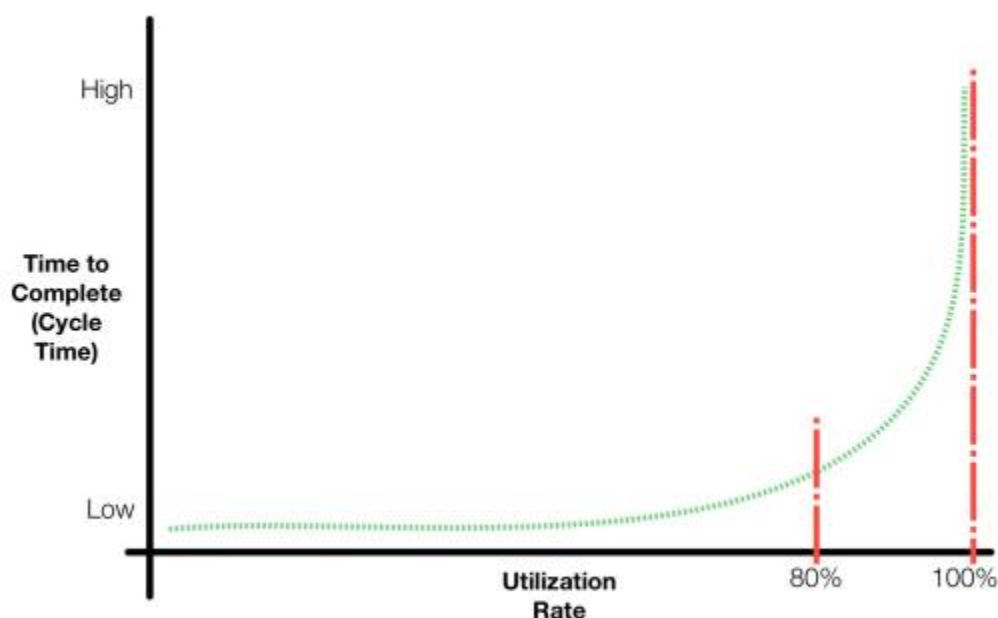
## Premise

As a person who has spent way too many years managing many projects, working with a lot of financial people, and who has worked to improve the results of a lot of organizations, one thing I was expected to focus on was “utilization rates” for people. The thinking seems straight-forward - if we are paying a certain amount of money for a person we can increase the return (value produced) associated with that person by making sure, at a minimum, that the person is working all the time and is always busy. As result I'd work to ensure that people were 90%, 100% utilized and be happy when people reported 110% utilization.

Here's the problem with this type of thinking. Its wrong. Its wrong in so many ways. And the problem is that its wrong in ways that are counter-intuitive to what seems like a pretty simple relationship between cause (people busy) and effect (more stuff).

## Understanding Real Cause and Effect of Utilization

I want you to have a look at the following chart:



This is what actually happens when you increase the utilization rate beyond a certain threshold. Basically it says that “as we approach 100% utilization the time it takes to process something becomes exponentially large.” This is an application of “queuing theory”. It turns out that every time you halve the amount of excess capacity, you double the time it takes to process something. So as you move from 60% to 80% utilization you double the time it takes to process something, and moving from 80% to 90% will double it again.

What does this say about loading up a person's work to 100% utilization? Basically if you are focussing on utilization rates there will come a point when you are valuing someone being “busy” over someone producing something in a timely manner.

I am pretty sure thats not what you want. But also know that this is a very hard thing to change in an organization when you have been thinking this way for years.

## Want to Know More?

- ["Slack: Getting Past Burnout, Busywork, and the Myth of Total Efficiency"](#) by Tom DeMarco. Discussion about the counterintuitive principle that explains why efficiency efforts can slow a company down. Fights against the concept that, for example, 100% utilization of people is the most

efficient way to get something done.

- [Economic Value of Slack Time](#)
- [A Myth of 100% Utilization](#)

Note: Results come from [The Principles of Product Development Flow: Second Generation Lean Product Development](#) - Don Reinertsen

[Enterprise](#), [Utilization](#), [Slack](#), [Risk](#), [RiskManagement](#), [FAQ](#), [PresentationIdea](#), [ToDo](#)

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