




The Technology Value Stream

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Introduction to Technology Value Stream

What is it?

- **Value Streams** are visual tools that enables an organization to measure and track the items that are most important to them. Essentially, it allows companies to measure and track what they believe with benefit or bring value to their customer base.



Defining Lead Time vs. Processing Time

What is Lead Time?

- When lead time is considered, it measures the total performance time it will take for a value stream to be completed/fulfilled from the moment the request is made.

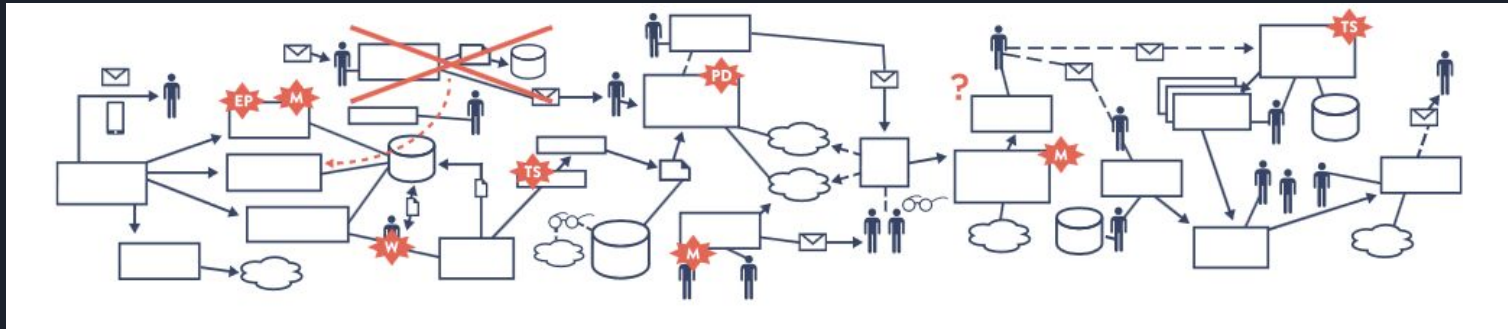
What is Processing Time?

- While processing time also measures the performance time a value stream will take, it measures the actual time spent working on the task—i.e. from the moment one *begins* actually working on the task.

The Common Scenario: Deployment Lead Times Requiring Months

What is this?

- This section describes what is often a reality, which is that deployment lead times can often take months. This can happen for a number of reasons, but typically is common with larger corporations that have complex applications and not enough resources, especially as in test environments. Approval processes/policies can also impact this, causing lead times to be longer.



Graphic of a lead time process that will take 3 months



Our DevOps Ideal: Deployment Lead Times of Minutes

What does this mean?

- Although the common scenario on deployment lead times may take months, the *ideal* is that lead times should be much, much faster. The DevOps ideal would take minutes, and could be achieved by developers receiving fast and constant feedback on the work they do, which will allow them to validate their code in a faster time frame. The book outlines this as possible through these steps:
 - a. Checking small code changes into a version control repository
 - b. Performing automated and exploratory testing on that code
 - c. Deploying it



Benefits of Reduced Deployment Lead Times

Shorter lead times are beneficial in a few ways:

- They enable more frequent deployment
- This allows quicker feedback
- It allows for iterative improvement
- Ability to outpace competitors
- Meeting deadlines more consistently
- Allows flexibility in a rapidly changing market
- Increases cash flow



Examples

Nike

- Had plans to reduce lead times for orders from 60 days to 10 day
 - Benefits
 - Increase in customer happiness since products are being received faster
 - Improves margins
 - Attained greater market shares



Sources

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