



# The Technology Value Stream

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# Agenda

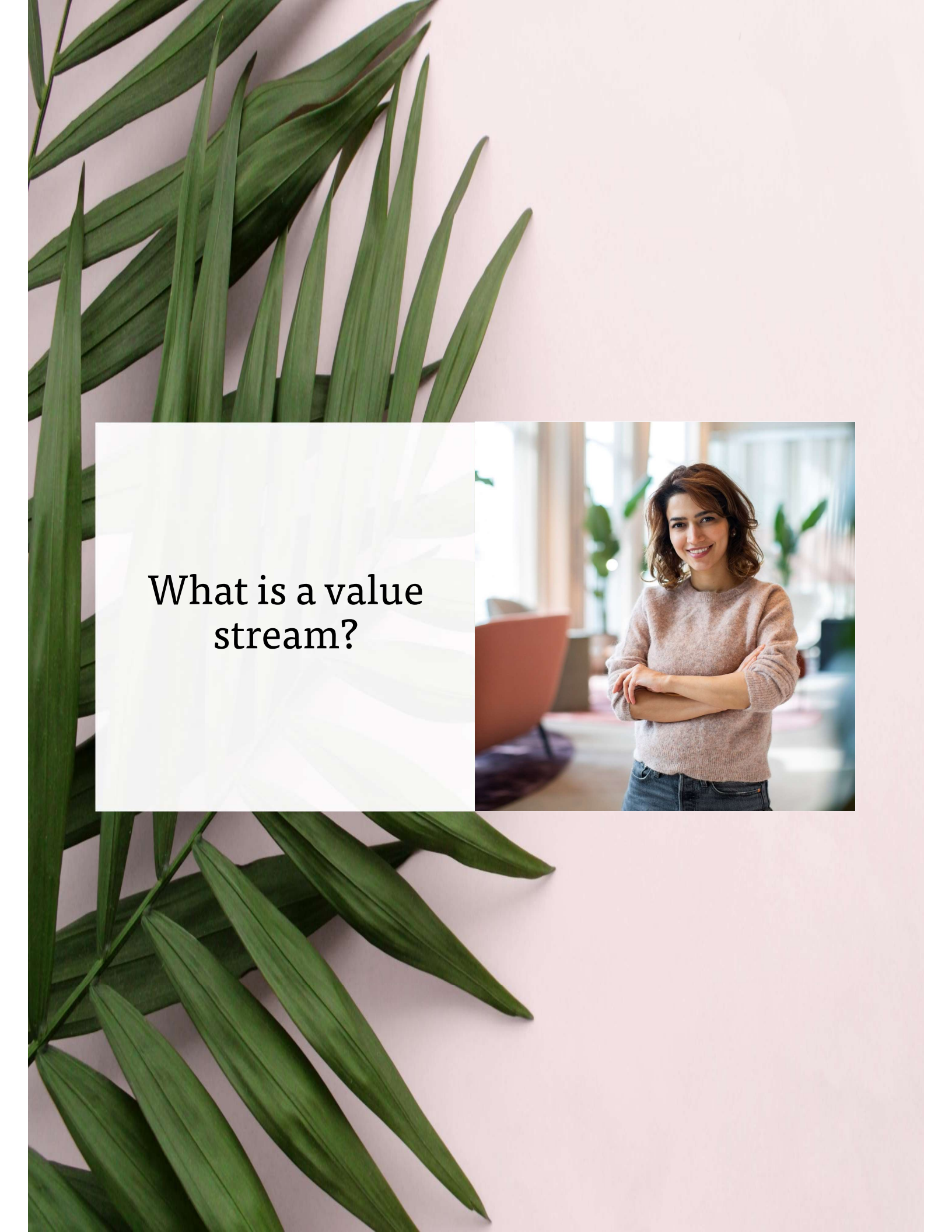
What is a value stream?

Lead vs Processing Time

The Common Scenario

Example Elongated value stream

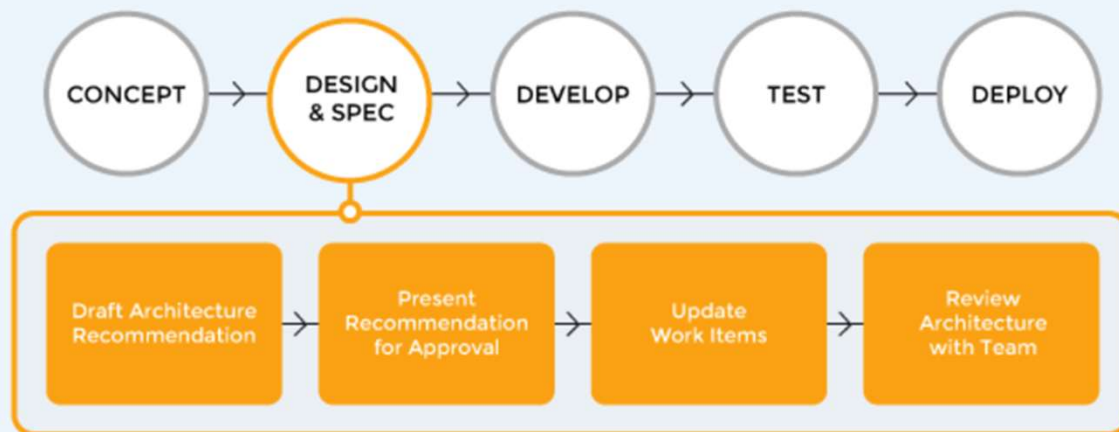
The DevOps Ideal

The background of the entire slide is a light pink wall. In the top-left and bottom-left corners, there are large, vibrant green palm fronds. A semi-transparent white rectangular box is positioned in the center-left of the slide, containing the text.

What is a value stream?



A value stream is a near exhaustive list of all the processes required to bring the final valuable product to the customer. This should include items that are part of planning and preparation. Example value stream map for software by [Plutora](#).

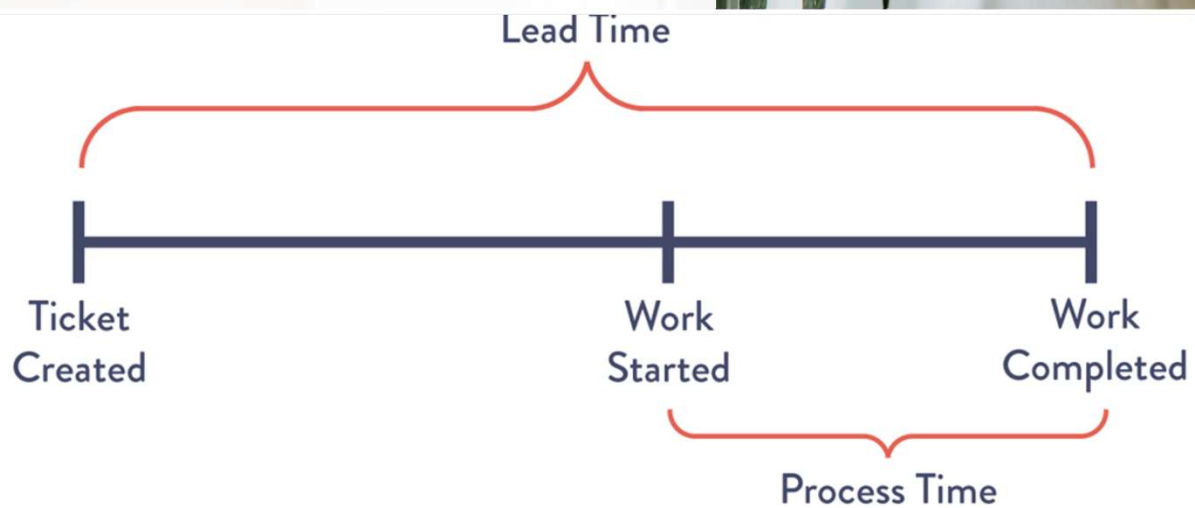


“Mapping value streams reveals dependencies, roadblocks, inefficiencies, and waste that bust budgets and delays delivery. “ - [Atlassian](#)



What is the difference between lead time and processing time?

A: The wait.



Graphic from DevOps Handbook,  
Second Edition

## Lead VS Process

Primarily, the value stream hiccup in technology is time. This hiccup, often referred to as lead time, or the time a customer waits for their value, is too long. Viewing the value stream map, we can see how to improve processes and how to reduce wait times before work is started.

It's important to note that lead time is not just how long it takes to complete the task, but how long it takes the task to leave the system from creation. This means that lead times include backlogs, vacations, approval to begin, and other various things that creep in before new work can be addressed.

# Rudimentary Value Map:

## New Software Feature

Most commonly, companies and customers find lead times too long. For example, say I am a stakeholder who requests feature xyz be included in the next deployment, 2 months away, as it is urgent to stay competitive. The value stream for the new feature could exist as the following:

I make the request	Day 1
Project Manager reviews request	Day 2
PM consults team on possibilities	Day 4
PM requests approval from finance	Day 5
Finance Dept. reviews request	Day 12
Finance requests explanations	Day 15
Finance requests budget increase	Day 20
Budget increase denied by CFO	Day 25
Finance informed, PM informed	Day 25
Stakeholder informed and confused	Day 26
Stakeholder re-submits to CFO	Day 27
CFO requests new ticket	Day 28
PM Repeat steps for approval	Day 29
Approval granted	Day 36
Begin new feature dev	Day 37
Feature ready for testing	Day 47
Feature ready for security review	Day 57
Regularly Scheduled release missed the stakeholder)	Day 60 (Now we're too late for
Security declined for risk abc	Day 62
Project re-configured for security	Day 68
Project approved for deployment	Day 75
DB Admin on vacation	Day 80
Final feature deployed	Day 90
Stakeholder dissatisfied	Day 91



## Reviewing the previous process:

The previous value stream is detrimental to success for several reasons. The bureaucratic processes took much longer than the development, despite being spearheaded by the stakeholder. The request took nearly 30 days before anyone with capabilities to enable it was able to view it and then more issues followed. To boot, this example doesn't include any software issues for regression testing, coinciding module compatibility, and endless things that could happen inside the development timeline.

PM consults team on possibilities	Day 4
PM requests approval from finance	Day 5
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Finance requests explanations	Day 15
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Budget increase denied by CFO	Day 25
Finance informed, PM informed	Day 25
Stakeholder informed and confused	Day 26
Stakeholder re-submits to CFO	Day 27
CFO requests new ticket	Day 28
PM Repeat steps for approval	Day 29
Approval granted	Day 36
Product owner continues development	Day 37





## The Ideal

Having an ideal value stream would eliminate some of the delays immediately by providing more autonomy for budget and stakeholder requirements to the project manager. Had the PM been able to make autonomous decisions over their project, days 5- 36 would have been eliminated. In addition,

the use of automation could reduce the security reviews from 10 days to possibly 5 or fewer by having the basic tests performed automatically at the unit level before the entire feature is ready for security review. While this example is for a full new feature, smaller instances could result in much faster corrections or additions if simplified to developer approval levels. For example, to add a display of metric units for non-imperial users could be a ticket resolved in minutes rather than months given that testing can be automated, and autonomy allotted for live publications as completed.

## So, what's the point?

If your team is suffering from longer than viable lead times, reviewing the value stream from top to bottom can help highlight areas that contribute to the problem. Once those areas are more functional, the lead time will reduce, and the value is available to the customer more quickly, as is profit.

# Thank you

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## Sources:

Atlassian:

<https://www.atlassian.com/agile/value-stream-management#:~:text=What%20is%20a%20value%20stream,aren't%20labeled%20as%20such>

Plutora:

<https://www.plutora.com/blog/value-streams-in-software-guide>

The DevOps Handbook, Second Edition, 2021, G. Kim, M. Humble, P. Debois, J. Willis, N. Forsgren