DevOps Institute
ADVANCING THE HUMANS OF DEVOPS

How to Implement Value Stream Management

HELEN BEAL
CHIEF AMBASSADOR at DevOps Institute
CHAIR of the Value Stream Management Consortium

Value Stream Management

FLOW

- WHAT IT IS
- WHAT THE ANALYSTS SAY
- HOW TO IMPLEMENT
- WHO THIS IS FOR
- HUMAN ASPECTS
- PROCESSES AND PLATFORMS

What Value Stream Management Is

AND WHAT IT IS NOT

Value Stream Mapping	Value Stream Management
Human-centric, storytelling and narrative	Tools-centric, science and insights
Opinion-driven, qualitative	Data-driven, quantitative
Visual collaboration	Visibility and continuous inspection
Walls and post-it notes (virtual!)	Integrations, dashboards and AI
Builds an initial business case	Ongoing incremental optimization
Highlights waste	Automates for continuous compliance

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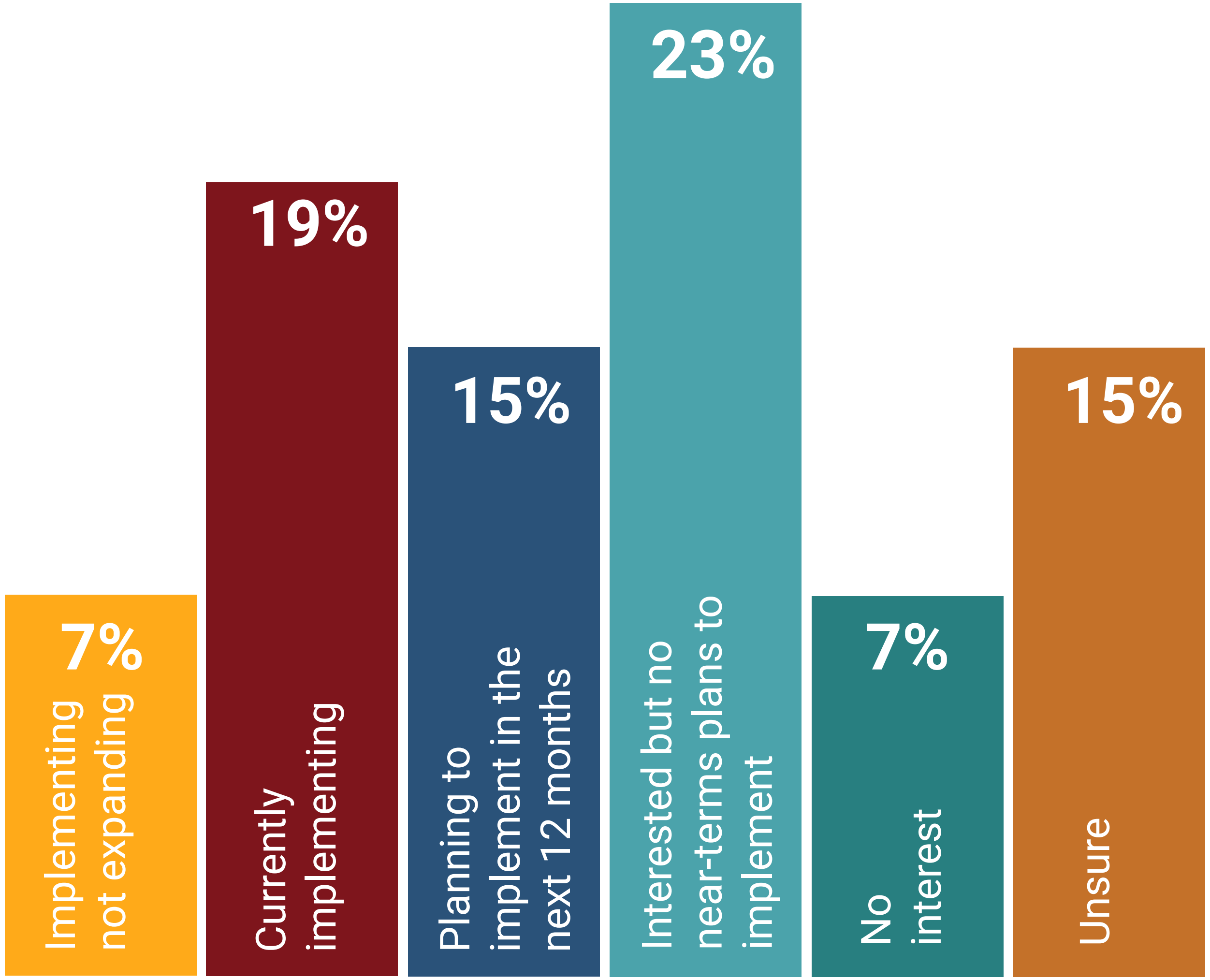
Value Stream Management Adoption



14th State of Agile Report

"Value Stream Management is a combination of people, process and technology that maps, optimizes, visualizes, measures, and governs business value flow through heterogeneous software delivery pipelines from idea through development and into production."
Forrester

"By 2023, 70% of organizations will use value stream management to improve flow in the DevOps pipeline, leading to faster delivery of customer value."
Gartner

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What the Analysts are Saying

"To accelerate development and enable continuous delivery of customer value, organizations need to reach the next level in their agile and DevOps practices. I&O leaders and application leaders must focus on value stream management to maximize flow, improve delivery efficiency and drive innovation."

Gartner

'Predicts 2021: Value Streams Will Define the Future of DevOps' by Daniel Betts, Chris Saunderson, Ron Blair, Manjunath Bhat, Jim Scheibmeir, Hassan Ennaciri. Published 5 October 2020

"Value Stream Management is a must-do not a nice-to-do. Enterprise organizations are realizing that increasing the velocity and quality of software delivery are not the only goals.Business teams and product owners are looking for what are the returns on investment and how they are delighting customers."

Research in Action

Vendor Selection Matrix^{TM} Value Stream Management: Top Global Vendors 2020' by Eveline Oehrlich, published July 2020

"When we published our first VSM evaluation in 2017, few AD&D leaders had heard of VSM; since then, the VSM tools market has evolved rapidly as have prospective buyers of VSM tools. AD&D planners, engineers, and release experts understand VSM and want it to help them plan, create, and deliver software experiences that align to both the business' and customers' needs."

Forrester

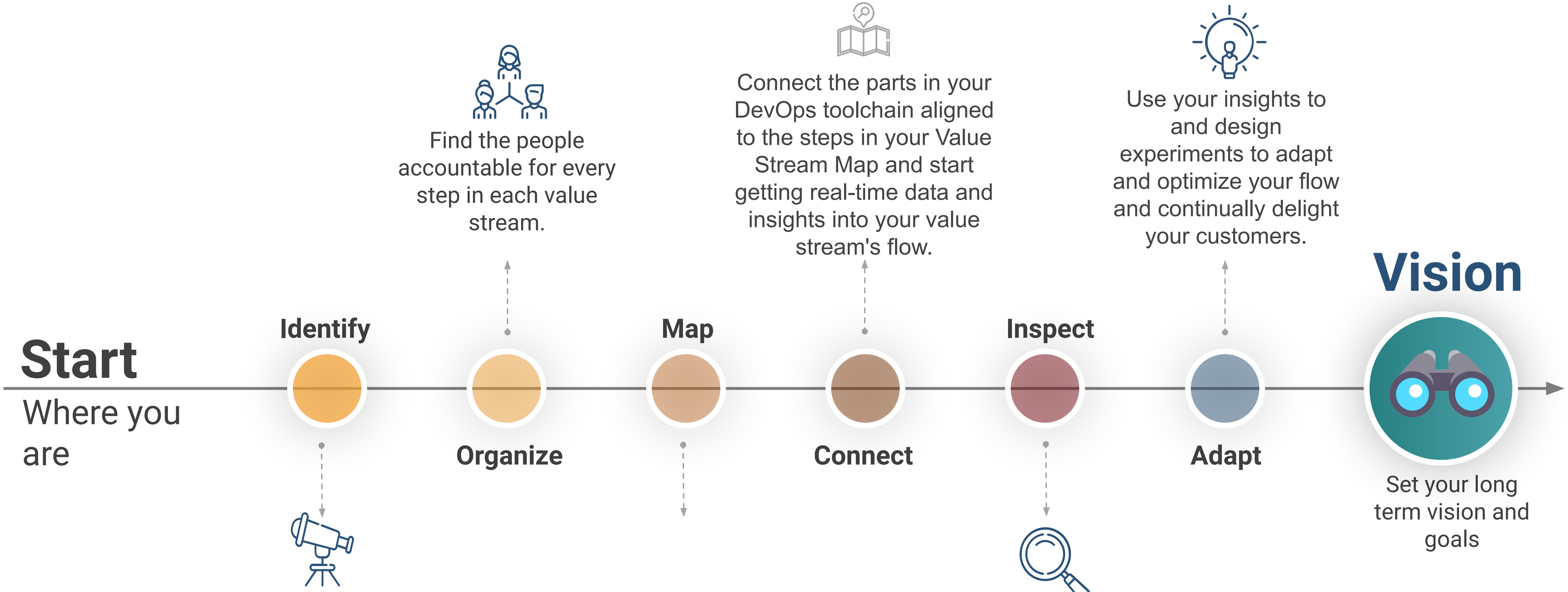
The Forrester Wave^{TM}: Value Stream Management Solutions, Q3 2020' by Chris Condo with Christopher Mines, Diego Lo Giudice, Andrew Dobak, and Kara Hartig, published July 15, 2020

"Value stream management is a market in which large enterprises had massive expectations back in 2018 Q2. Currently, vendors appear to be delivering against these expectations given the nearly 50% growth in penetration that is expected to occur in 2020 and 20+ percent growth in 2021."

EMA

'DevOps 2021: Evaluating High Growth Markets in the DevOps Pipeline' by Stephen D. Hendrick, published April 2020

How to Implement Value Stream Management



Start

Where you are

Identify

Start by identifying your value streams - a value stream is anything that delivers a product or service. You're aiming to accelerate the flow of value to the customer.

Organize

Find the people accountable for every step in each value stream.

Map

Bring the players in your value stream together for a mapping exercise: find where the idea starts, track every step until the value is delivered.

Connect

Connect the parts in your DevOps toolchain aligned to the steps in your Value Stream Map and start getting real-time data and insights into your value stream's flow.

Inspect

Now you've automated your value stream map, use it! Set yourselves goals and use your retrospectives to look at where you are.

Adapt

Use your insights to and design experiments to adapt and optimize your flow and continually delight your customers.

Vision

Set your long term vision and goals

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Who Value Stream Management is For

FLOW If you want to:

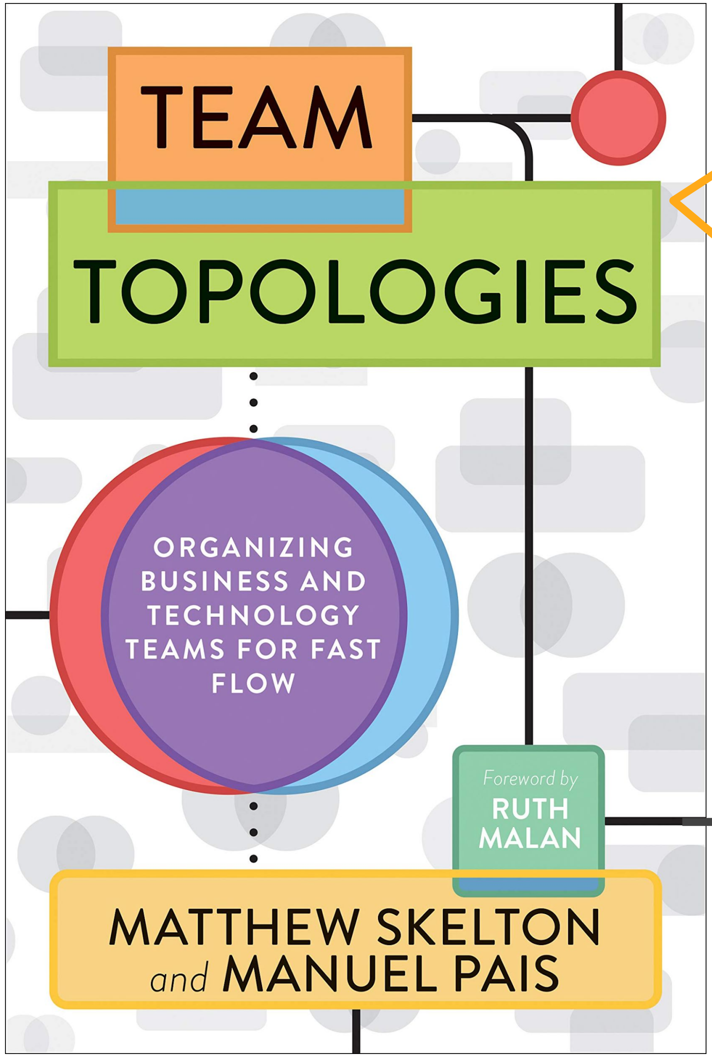
- ➔ Know how long it takes to deliver value to your customers
- ➔ Accelerate value to your customers
- ➔ Gain insights into where waste is
- ➔ Collaborate end-to-end on your product lifecycle
- ➔ Have data-driven conversations
- ➔ Have traceability through your DevOps toolchain

REALIZATION If you want to:

- ❖ Estimate the value your work will deliver
- ❖ Build hypotheses for the value of your work
- ❖ Understand how much value your work realized
- ❖ Amplify and shorten feedback loops
- ❖ Make better informed business decisions
- ❖ Maximise your value stream's profitability...

...then value stream management is for **you**

Human Aspects

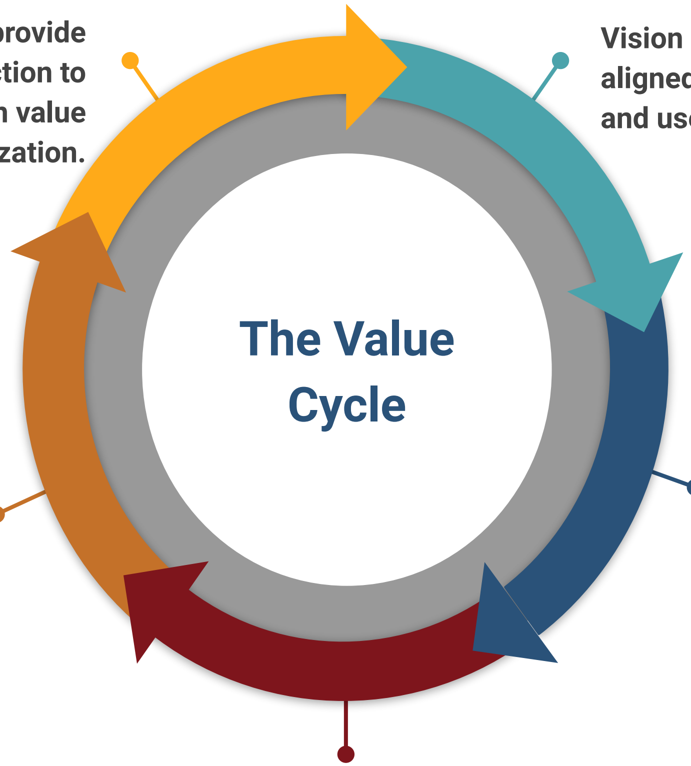

TEAM
TOPOLOGIES
ORGANIZING BUSINESS AND TECHNOLOGY TEAMS FOR FAST FLOW
Foreword by
RUTH MALAN
MATTHEW SKELTON
and MANUEL PAIS

"A "stream" is the continuous flow of work aligned to a business domain or organizational capability. **Continuous flow** requires clarity of purpose and responsibility so that multiple teams can coexist, each with their own flow of work.

A stream-aligned team is a team aligned to a single, valuable stream of work; this might be a single product or service, a single user story, or a single user persona. Further, the team is **empowered to build and deliver customer or user value as quickly, safely, and independently as possible**, without requiring hand-offs to other teams to perform parts of the work."

"The stream-aligned team is the **primary** team type in an organization, and the purpose of the other fundamental team topologies is to reduce the burden on the stream-aligned teams."

Value Stream Management Processes



INSIGHTS AND ANALYSIS

Monitoring and observability provide insights into customer reaction to changes and report on value realization.

PORTFOLIO AND BACKLOG

Vision and goals are set and aligned to epics, features, PBIs and user stories.

CONTINUOUS INTEGRATION

Code is created, artifacts incorporated, versions controlled, code is built in a trunk based manner.

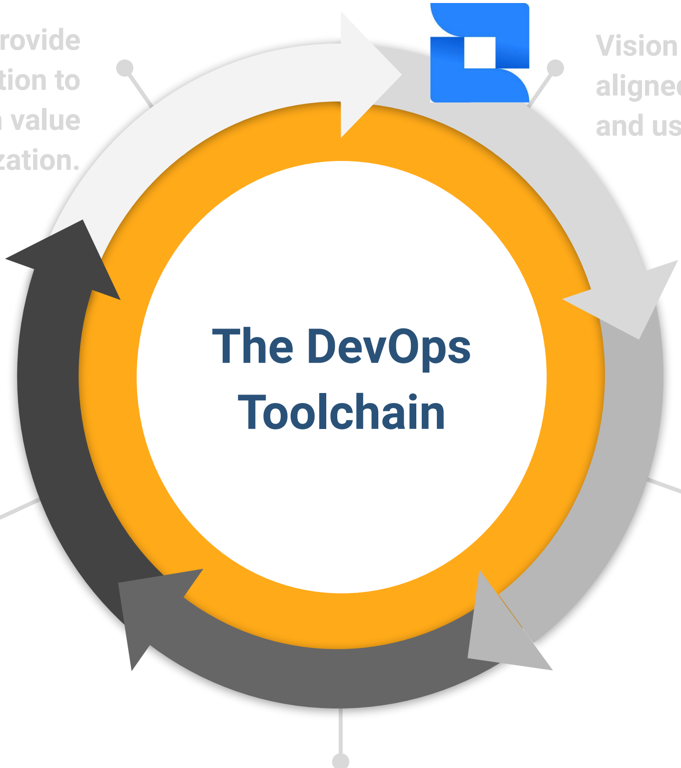
CONTINUOUS TESTING

Functional and non-functional testing takes place at every commit at every step or gate through route to live.

CONTINUOUS DELIVERY

The changes are approved, released and operated in the live environment.

Value Stream Management Platform



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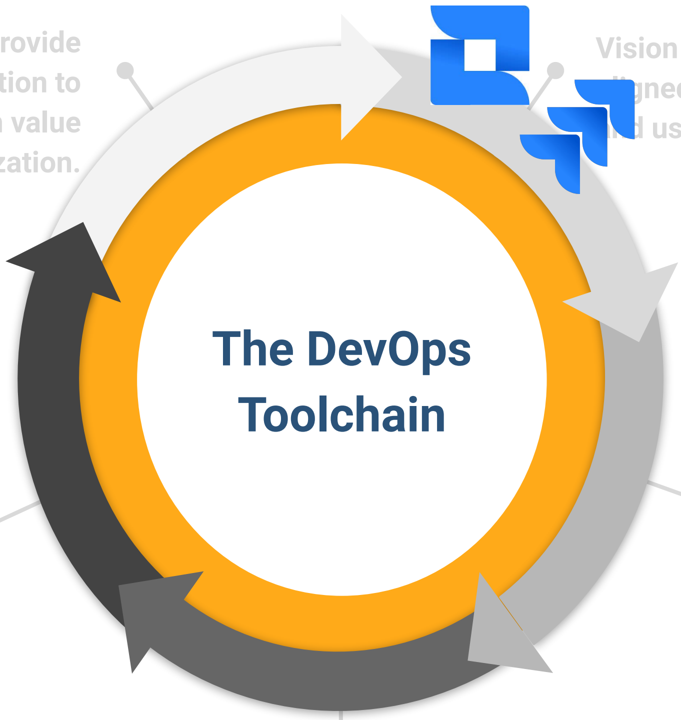

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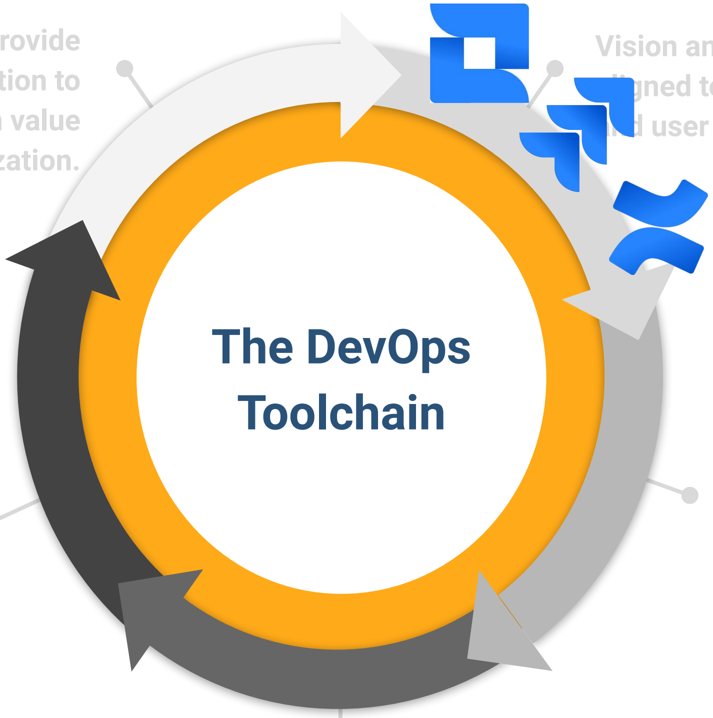

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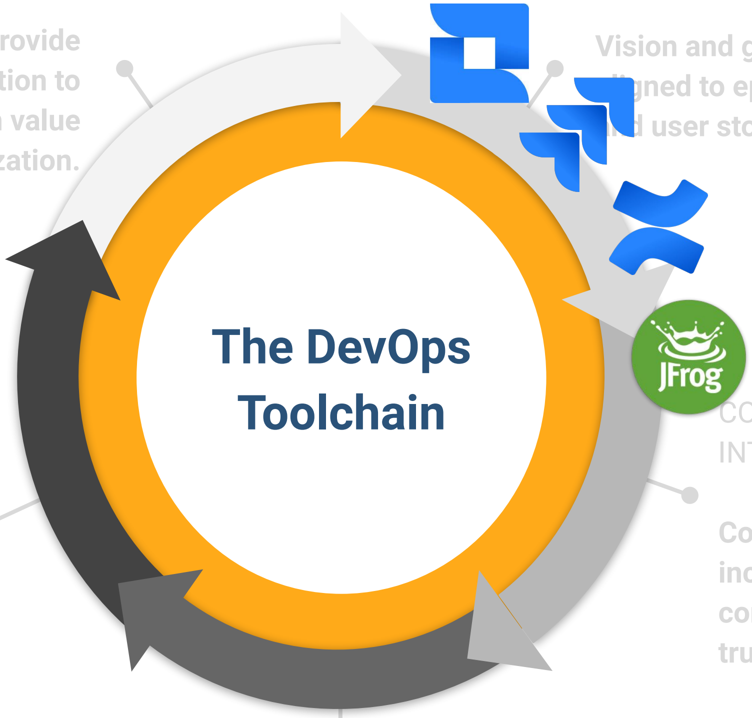

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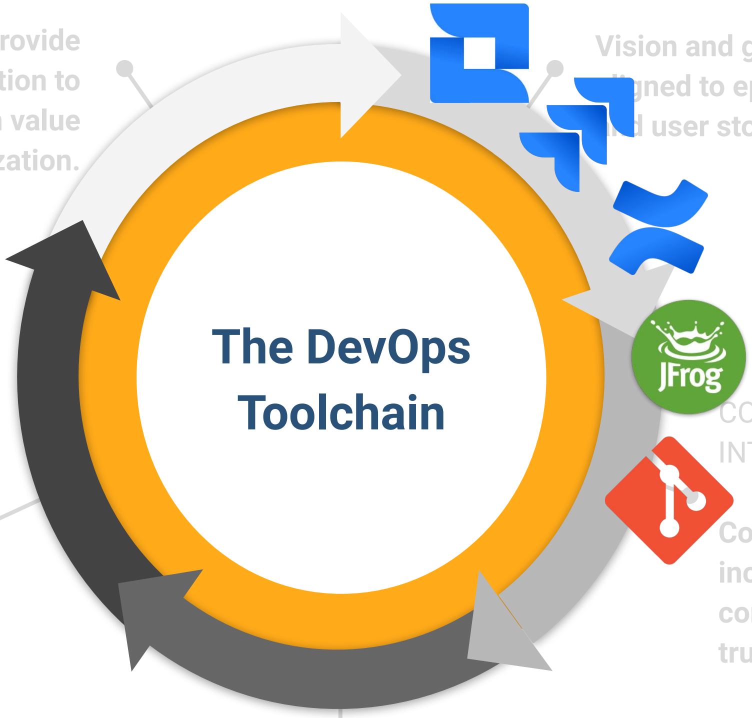

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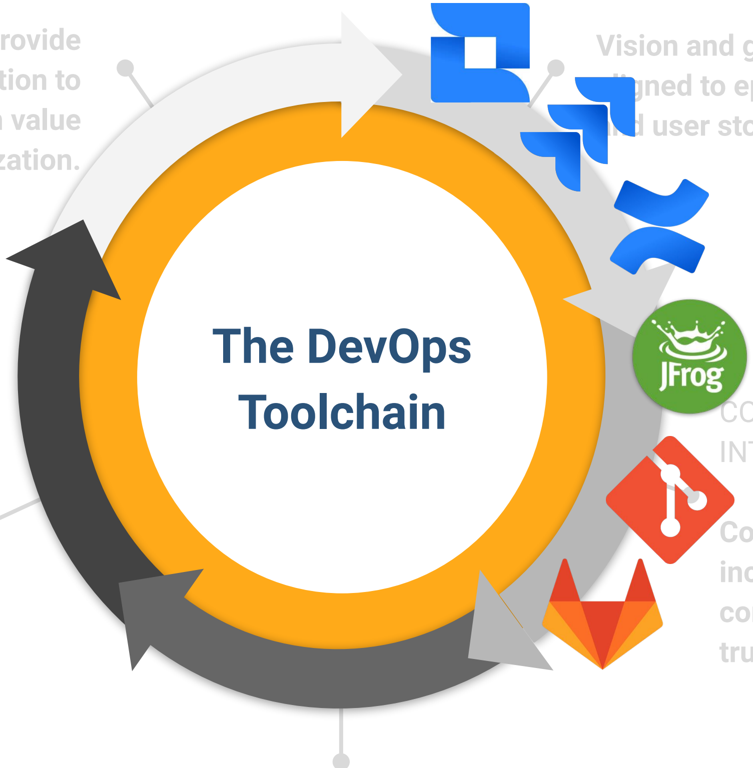

The DevOps Toolchain

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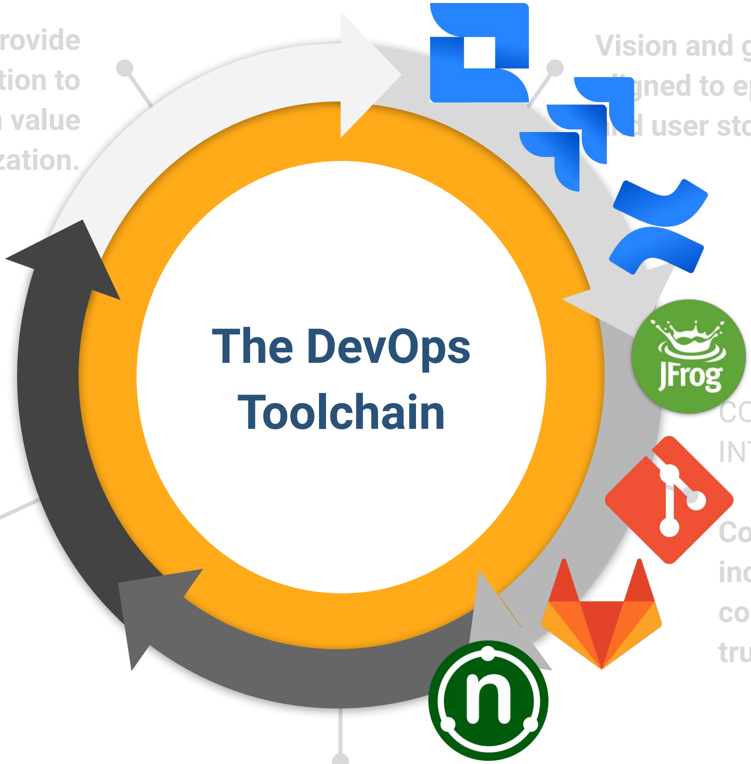

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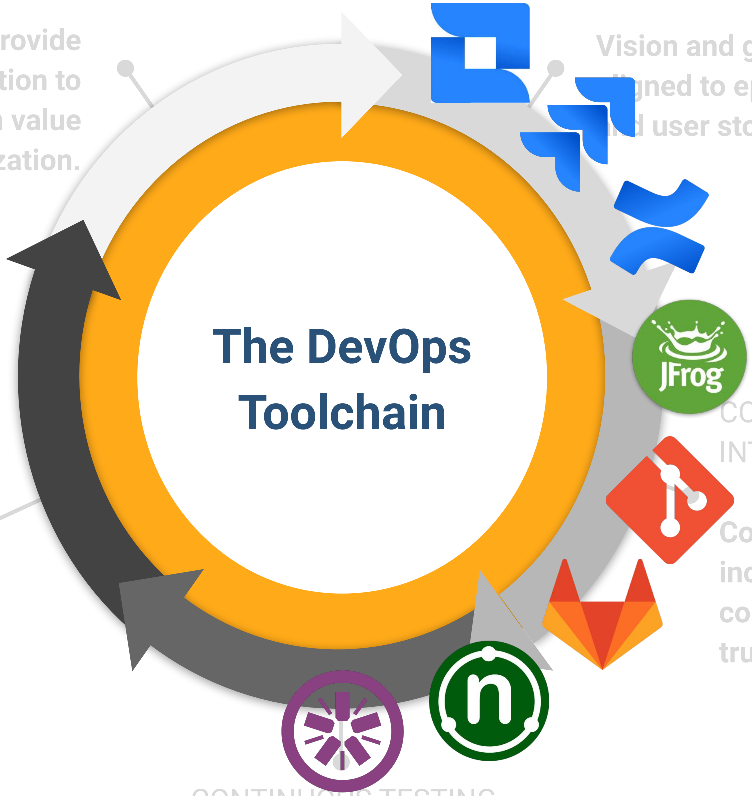

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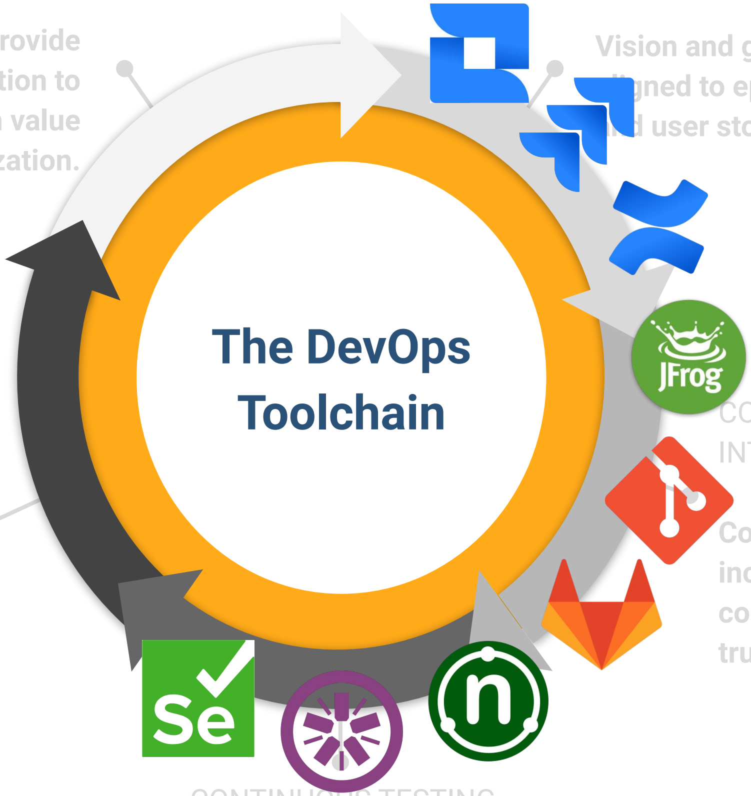

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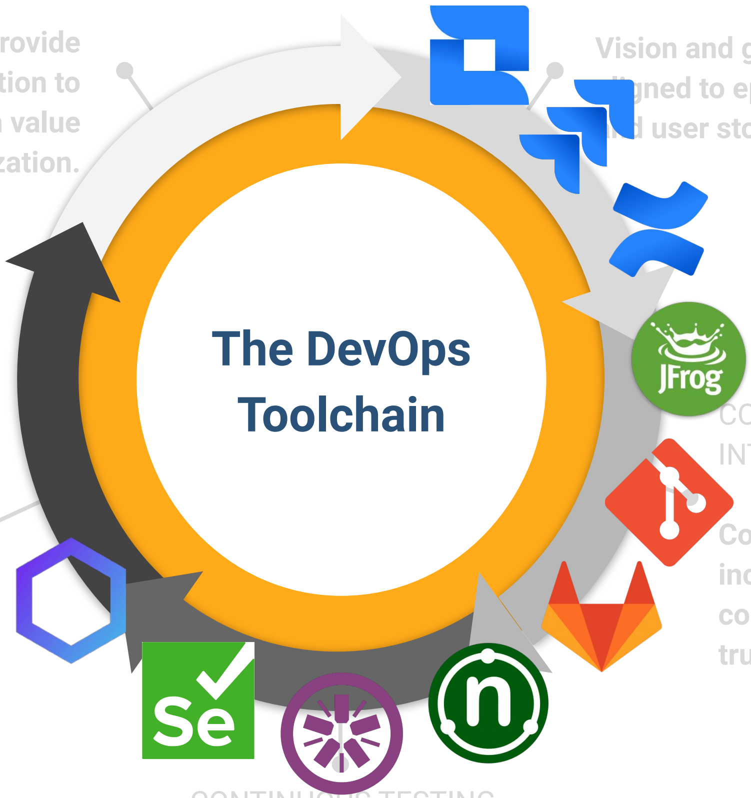

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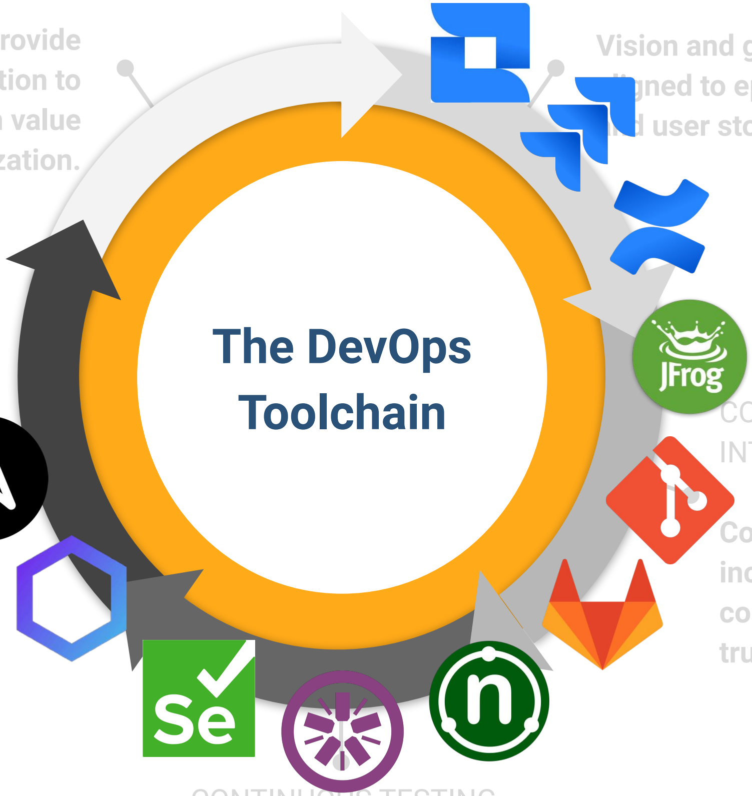

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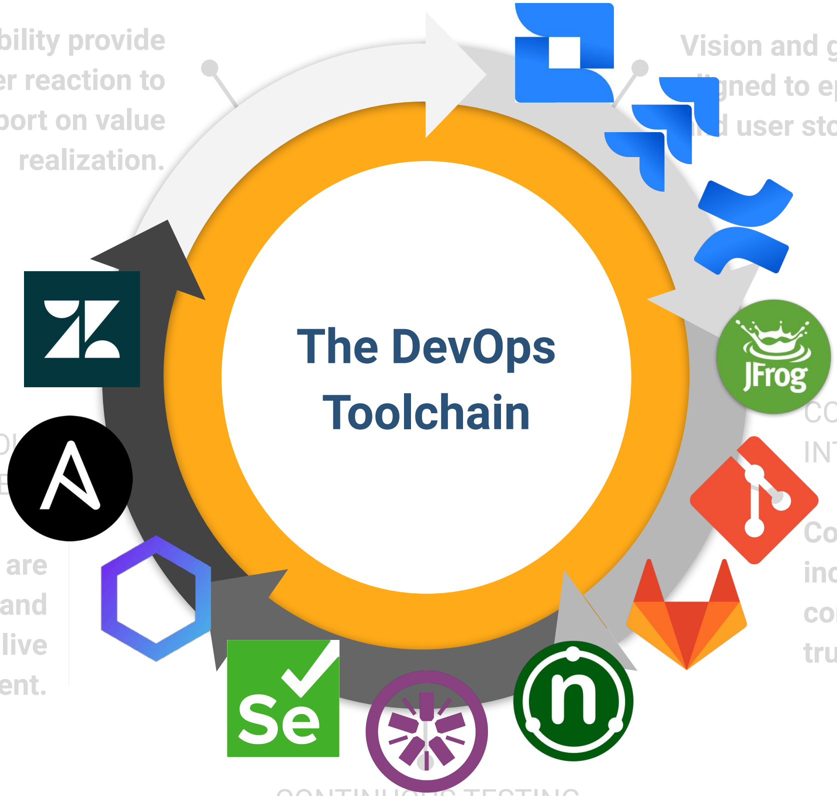

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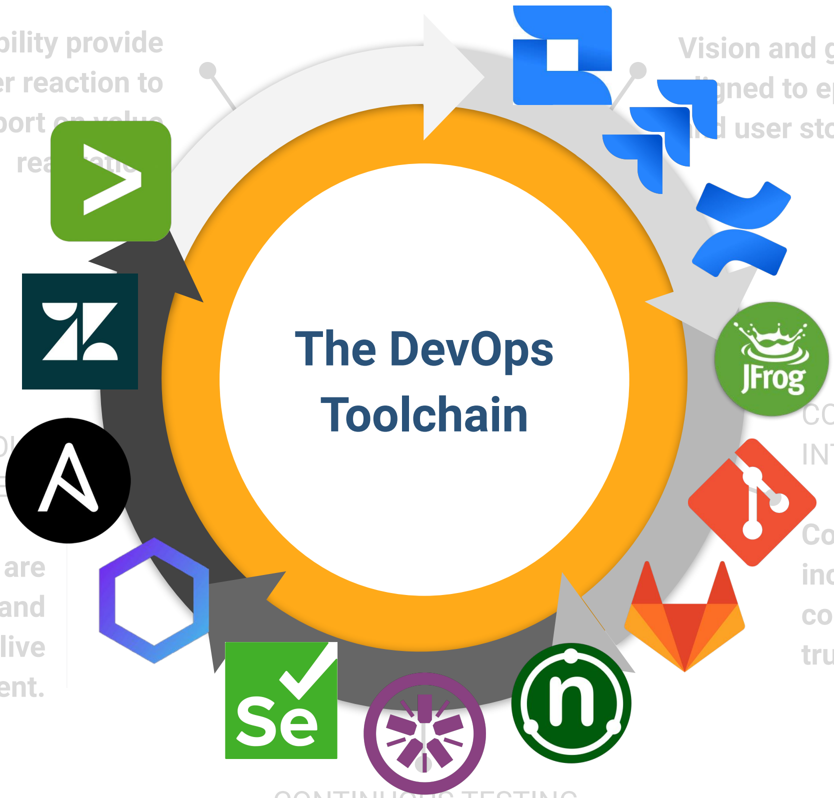

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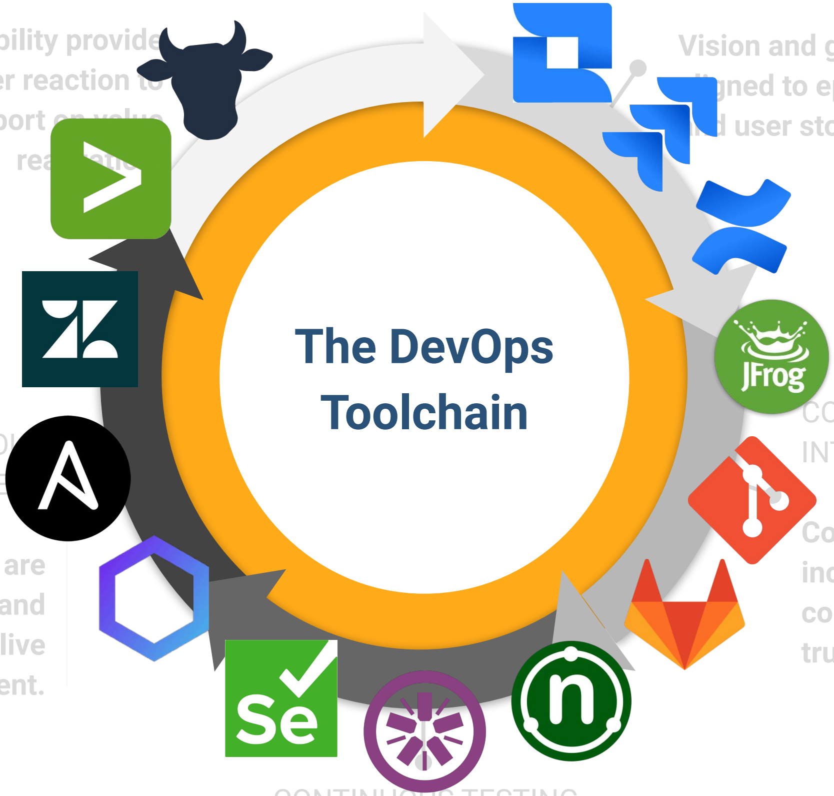

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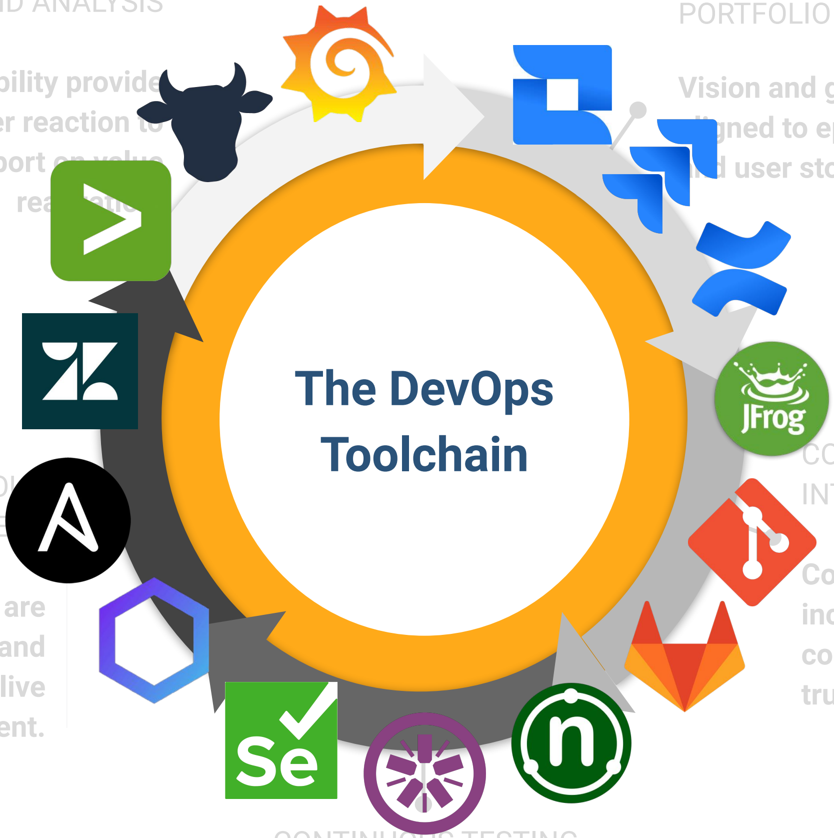

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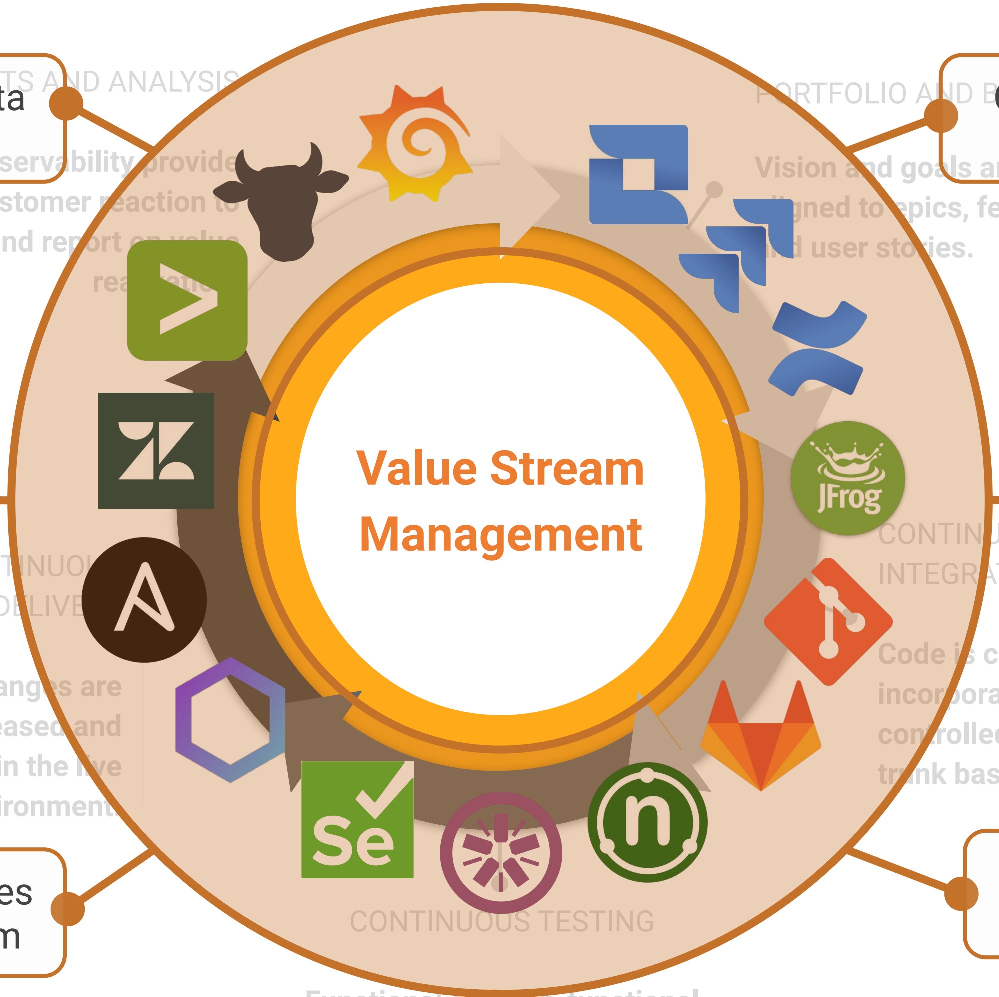
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JFrog
Se

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Connect planning to delivery

Gain insights into waste; optimize flow

Visibility into cross value stream changes

Manage dependencies while you break them

Trace user stories as they travel

Continuous compliance

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