

Journey to the cloud

Modernizing application stacks fast & at scale

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Disclaimer

This presentation is a case study of Fidelity Investments cloud experience this is not an endorsement or recommendation of any vendor product or service.

Context

- Moving from on prem to native cloud
- Modernize the stack & architectures
- Reduce & minimize tech debt
- Repeatable
- Transformative culture

Above the value line



Accelerating value

Delivery Excellence

How we build, operate and do things.

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$$Dx = (Ex + Op\!x)$$

Delivery
eXcellence

=

Engineering
eXcellence

Operational
eXcellence

Ax
Agility
eXcellence

$$Dx = (Ex + Opx) Ax$$

Engineering eXcellence

How we build things.

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The CI Challenge





Go Local

Outcomes

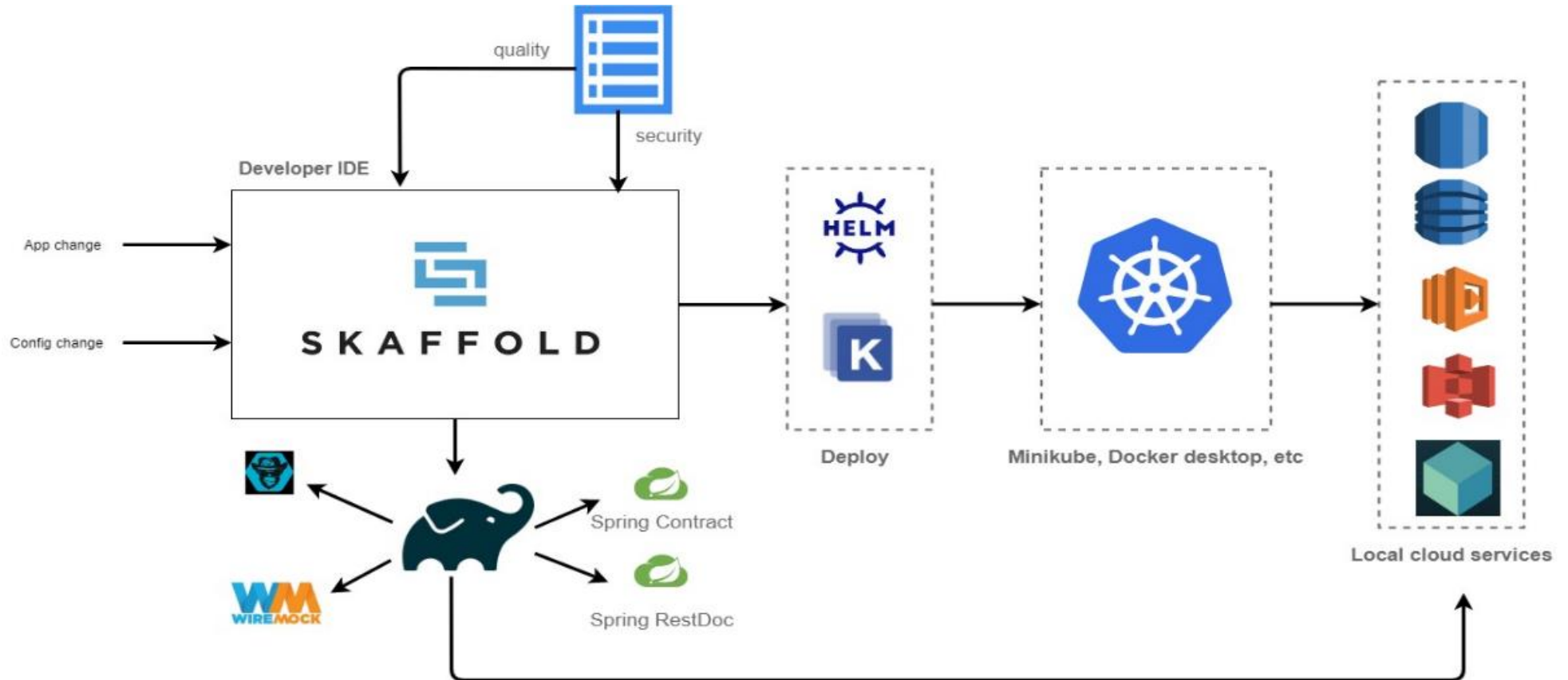
- Increase productivity
- Test changes in seconds
- Pain free debugging
- Simplified experience



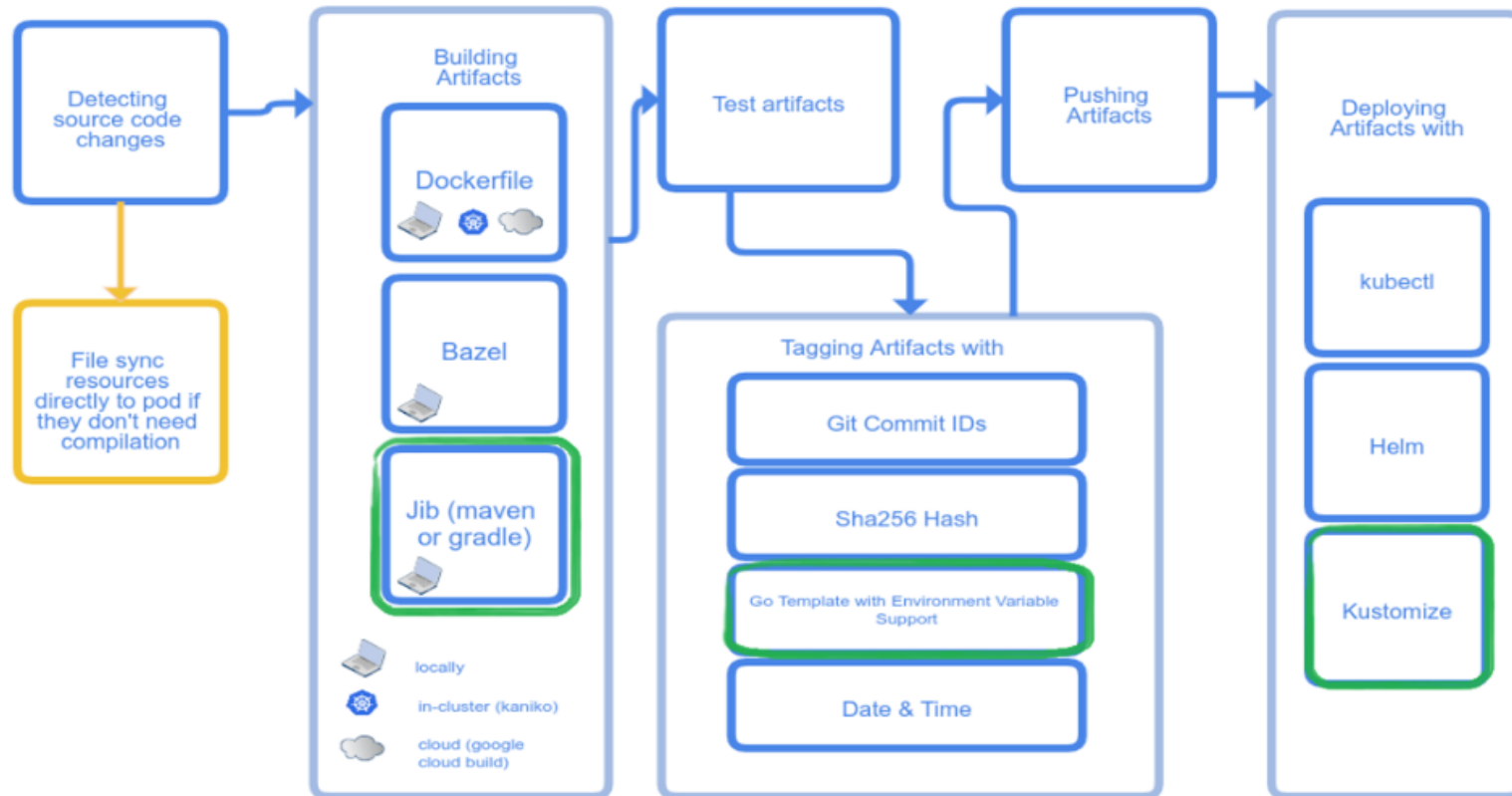


Frameworks & tooling

The 10,000-foot local view



Skaflow workflow



Beyond the pyramid

Raising the quality bar

- Effective mocking
- Contract testing
- Document driven testing
- Chaos Lite / Manic Mondays ☺
- Real time compliance
- Security gates



The CI Mirror

Getting Started

Sub-generators

Controller
Kubernetes


Features

Static Code Analysis
Static Code Quality
Api Documentation
Logging
Tracing

Releases

Evolve @ scale

- Codified EngineeringX
- Greenfield or existing projects
- CLI driven

A photograph showing several hands of different people working together to assemble white puzzle pieces on a rustic wooden table. A pen and some papers are also visible on the table. The scene is dimly lit, with the focus on the hands and the puzzle pieces.

{Laser focused on}

Principles & practices



Challenges?



Scaling Up Excellence

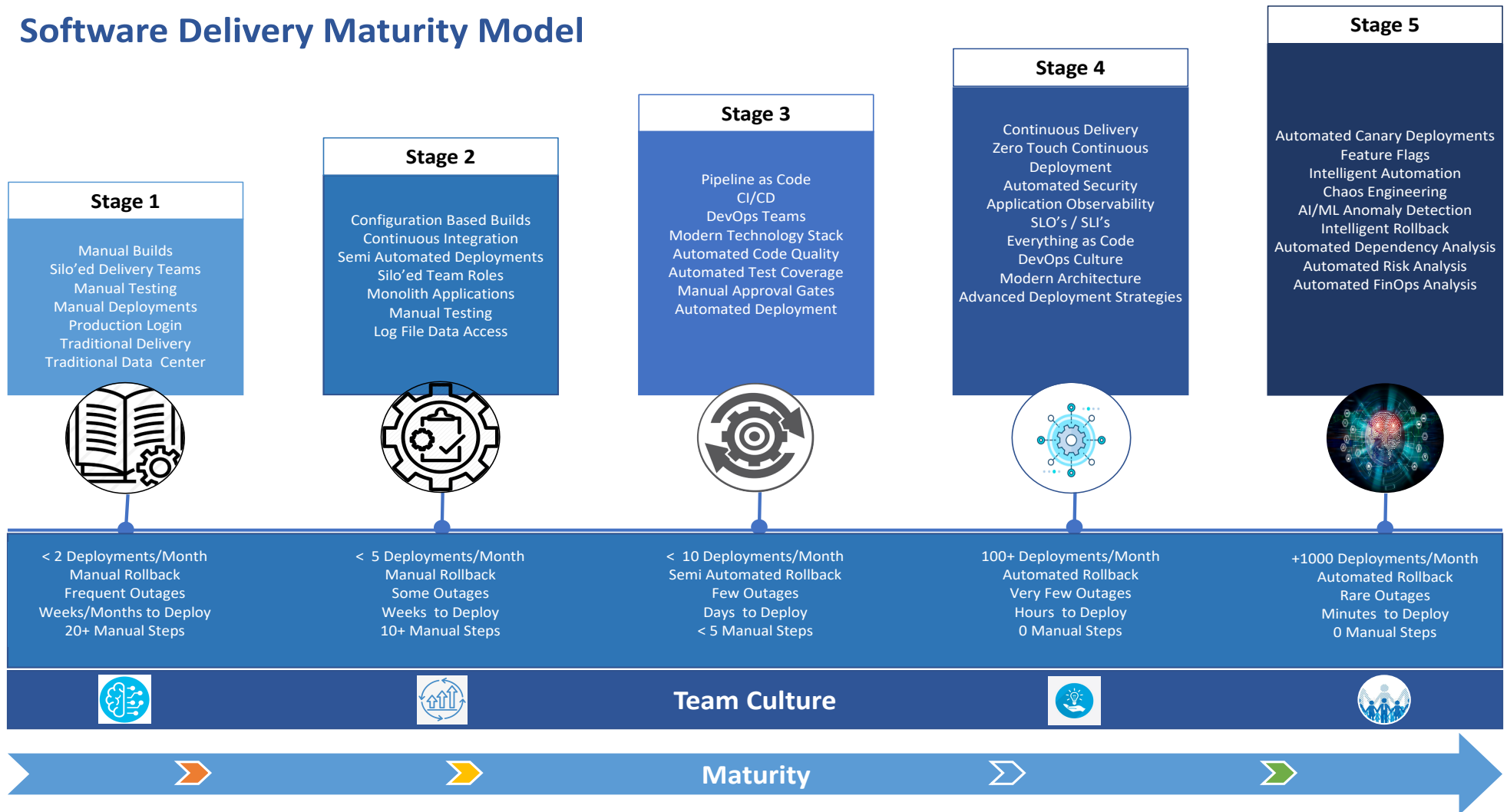
What is Agility Excellence

Agility is “a rapid whole-body movement with change of velocity or direction in response to a stimulus”.

Sheppard and Young (2006)



Software Delivery Maturity Model





Challenges

- Fast Feedback
- Dependencies
- Culture & Mindset
- Scale & Performance
- Technology
- Architectural & Design Patterns
- Legacy
- Silo's

Meeting the Challenge

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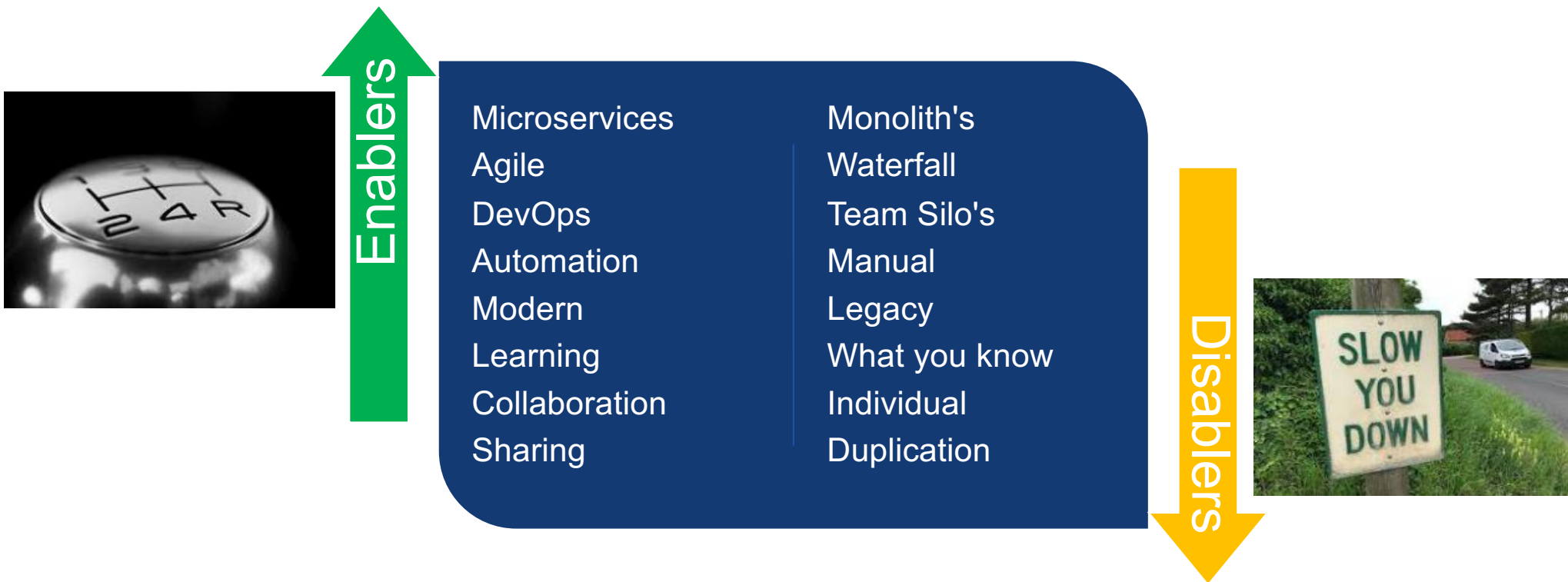
A photograph of a surfer riding a large, curling blue wave. The surfer is in a crouched position, riding the base of the wave's face. The water is a vibrant blue, and the wave is breaking over the surfer, creating white foam. The background is a dark, solid color.

The pursuit of
perfection
requires
courage and
ambition in the
goals and
outcomes we
want to strive
to achieve

A black and white photograph of a young boy in a workshop, wearing goggles and overalls, working on a complex mechanical robot. The word "Understandability" is overlaid in large white text. The boy is focused on adjusting a part of the robot's arm with a tool. The robot has a boxy head with two antennae and two circular eyes. The workshop background is filled with various tools and mechanical parts, creating a sense of a dedicated workspace for tinkering and engineering.

Understandability

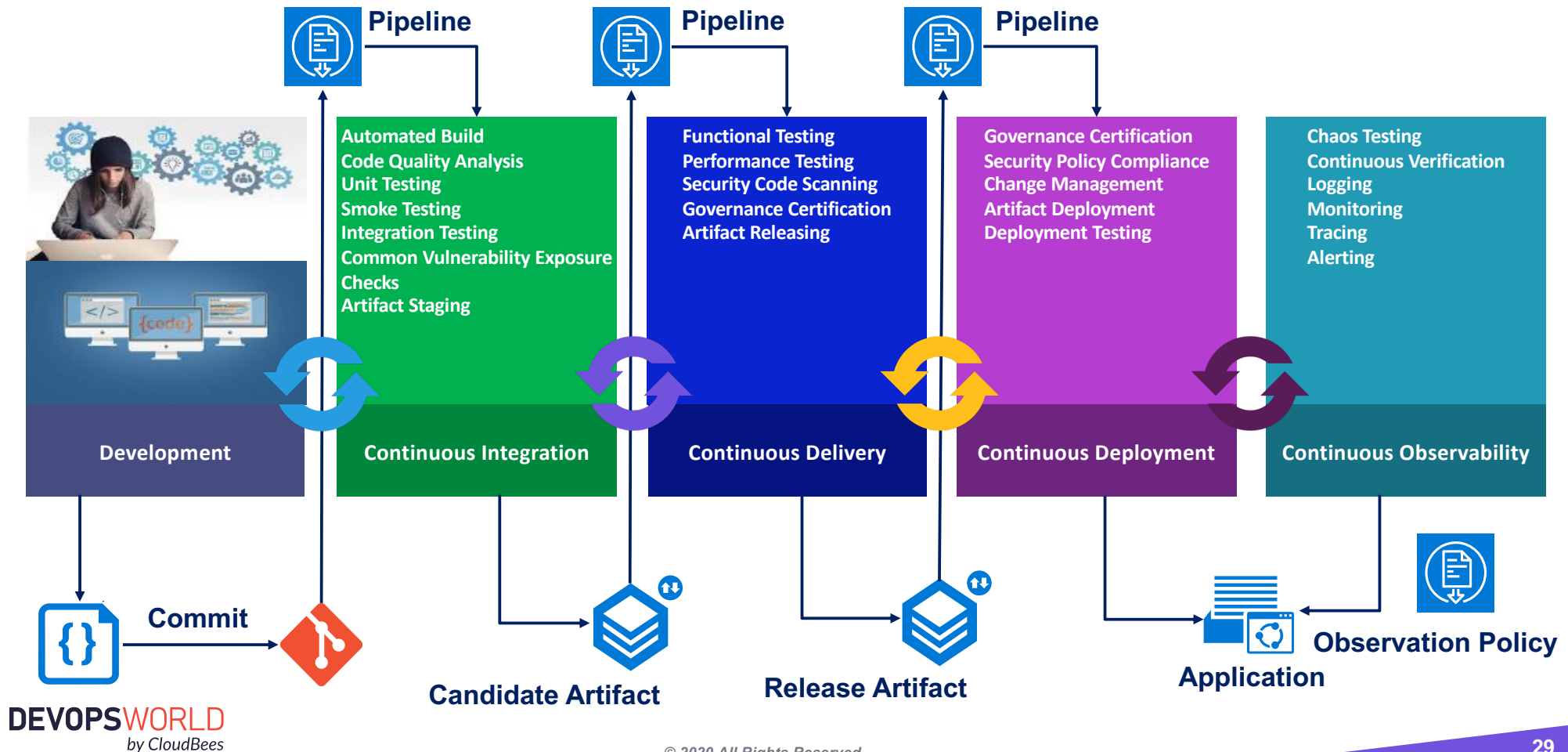
Accelerators v Inhibitors for Scaling Up Excellence





Push Button to Production

Scaling Up Software Delivery



It's Not a Technology Problem



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Cultural Transformation

- Grasping the importance of speed and agility
- Creating a culture of ownership
- Innovating for increasing value
- Embracing change for improvement
- Being open, inclusive and receptive
- Grow, Learn and Explore



Scaling up Excellence

Knowledge Sharing



Knowledge
Shared =
Knowledge²

Thank you

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