

What's in your thinking?

A summary of thinking frameworks for
problem solving and value creation

Aimee D. Bechtle

Director of Network Delivery

Capital One

Design Thinking – Why?

Are you experiencing high abandon rates, frustrated users contacting support, or high transaction error rates?



Approach where the user is understood and empathized with so that a product is designed for a
POSITIVE USER EXPERIENCE

Design Thinking – Who & What?

UX Designer

Personas

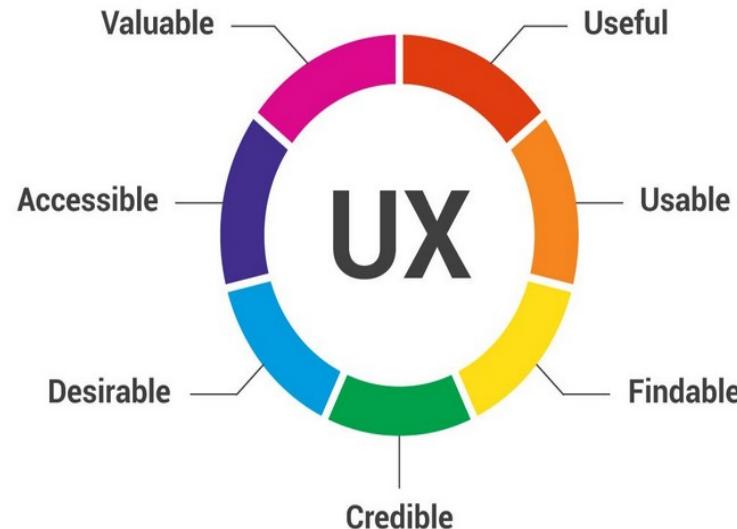
Empathy Interviews

Journey Map

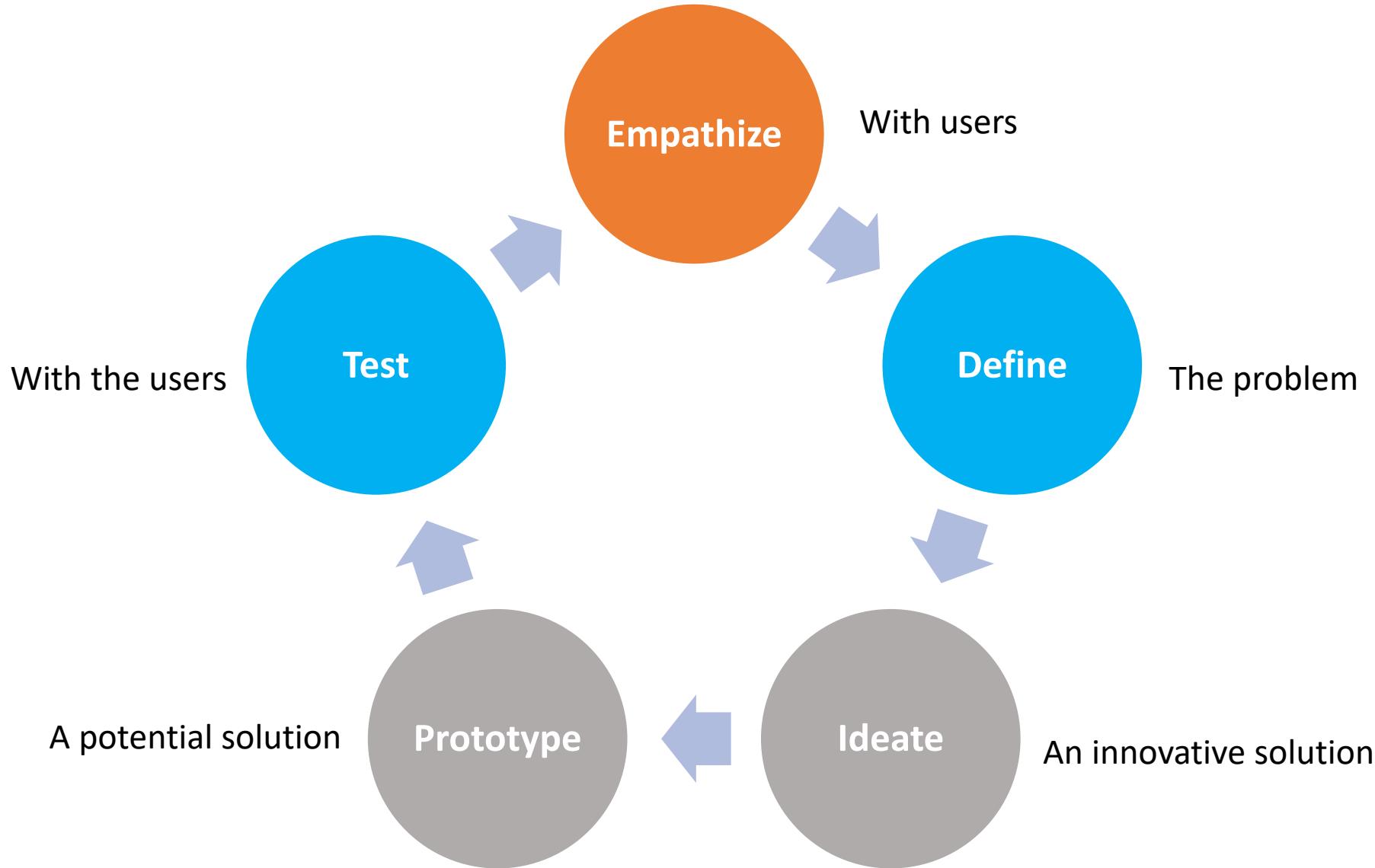
Mind Maps

Story Board

Wireframes, UX Mocks

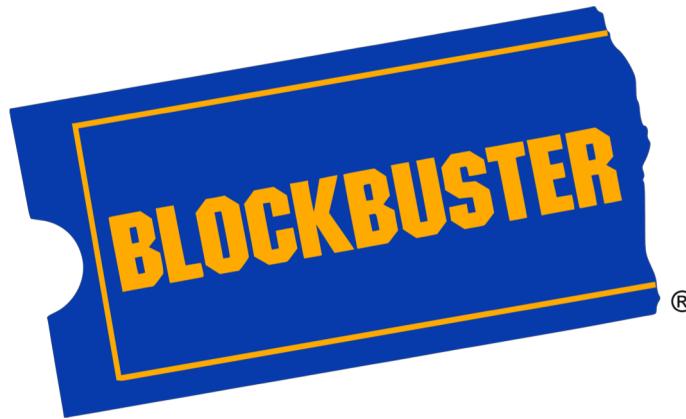


Design Thinking – How?



Product Thinking – Why?

You make or build stuff that nobody wants or uses, despite your good ideas and intentions, you are losing market share to new competitors, new technologies



An approach to uncover why people use a product and design so that it
DO A JOB AND CREATE VALUE TO THE CUSTOMER

Product Thinking – Who & What?

Product Managers

Lean Canvas

Value Prop Canvas

Test Card

Learning Card

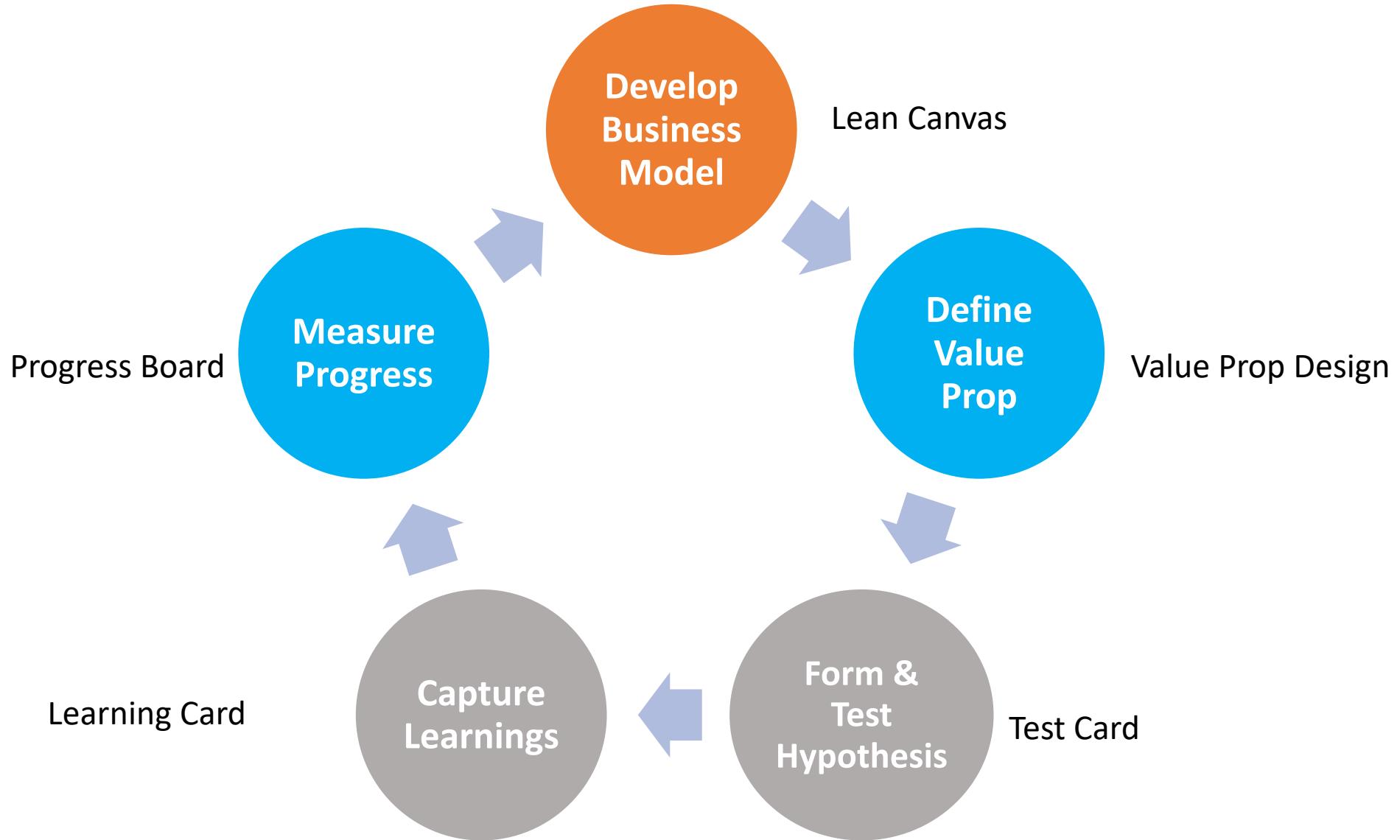
Progress Board

LEAN CANVAS

| PROBLEM | SOLUTION | UNIQUE VALUE PROPOSITION | UNFAIR ADVANTAGE | CUSTOMERS |
|----------------|-------------|--------------------------|------------------|-----------|
| | | | | |
| | KEY METRICS | | CHANNELS | |
| COST STRUCTURE | | REVENUE STREAMS | | |
| | | | | |

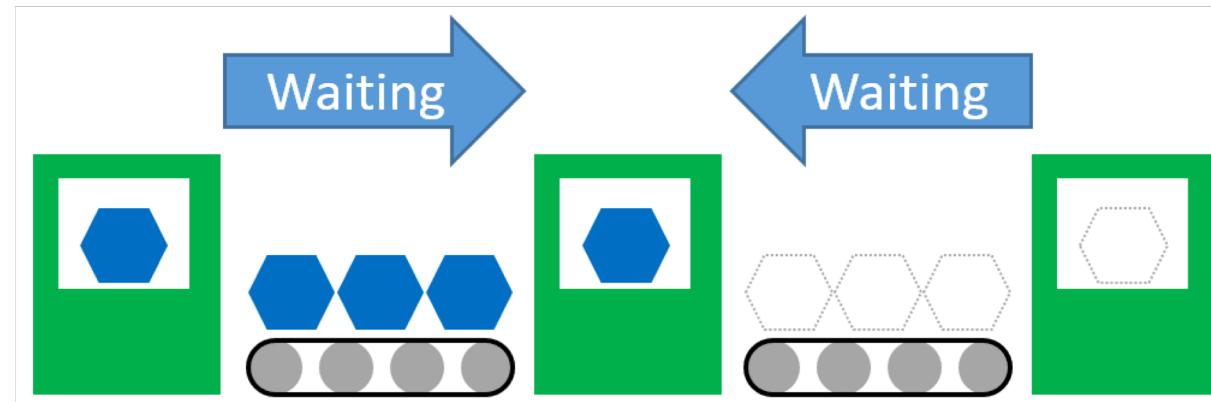
“We make products people didn’t know they wanted and now can’t live without” -- Tim Cook

Design Thinking – How?



Lean Thinking – Why?

Have a costly and lengthy process to assemble and deliver the product with a lot of waste and dependencies. Shipping delays, supplier delays, handoffs to other orgs or people slow down delivery rate. Keep repeating the same problems with no improvement.



Organizing activities and tasks in a product's value stream so that you can
CREATE VALUE BY ELIMINATING WASTE AND TIME DELAYS

Lean Thinking – Who & What?

Delivery Leads

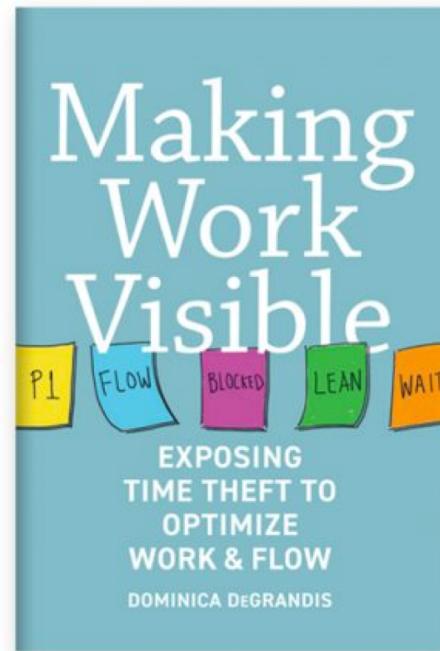
Value Stream Map

5S

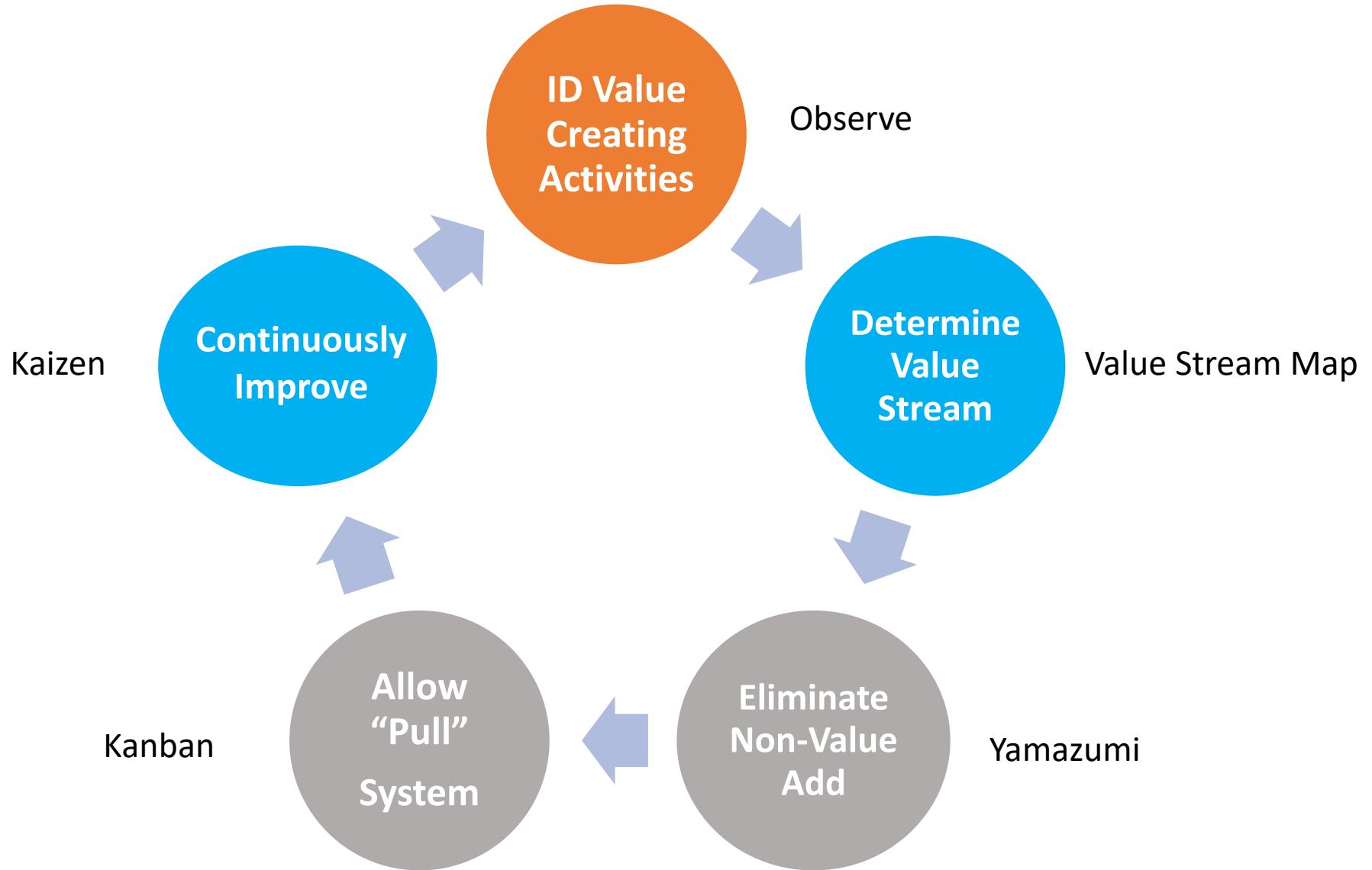
Kanban

Yamazumi

Kaizen



Lean Thinking – How?



Systems Thinking – Why?

Experiencing frequent unintended consequences, workarounds created to resolve gaps, lots of unplanned work, seeing lots of rework due to unknowns and missed requirements



Examining the whole rather than focusing on isolated problems or components, taking into account the interactions and relationships of a system within its containing environment

Systems Thinking – Who & What?

Engineers, Architects

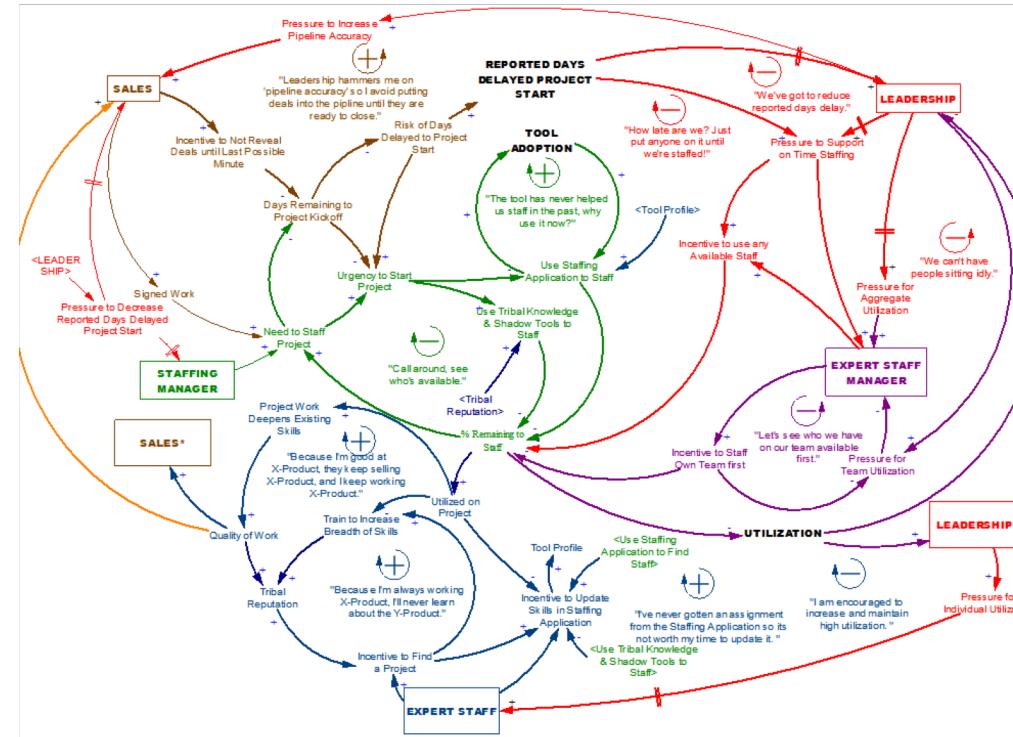
Context Diagram

Causal Loop →

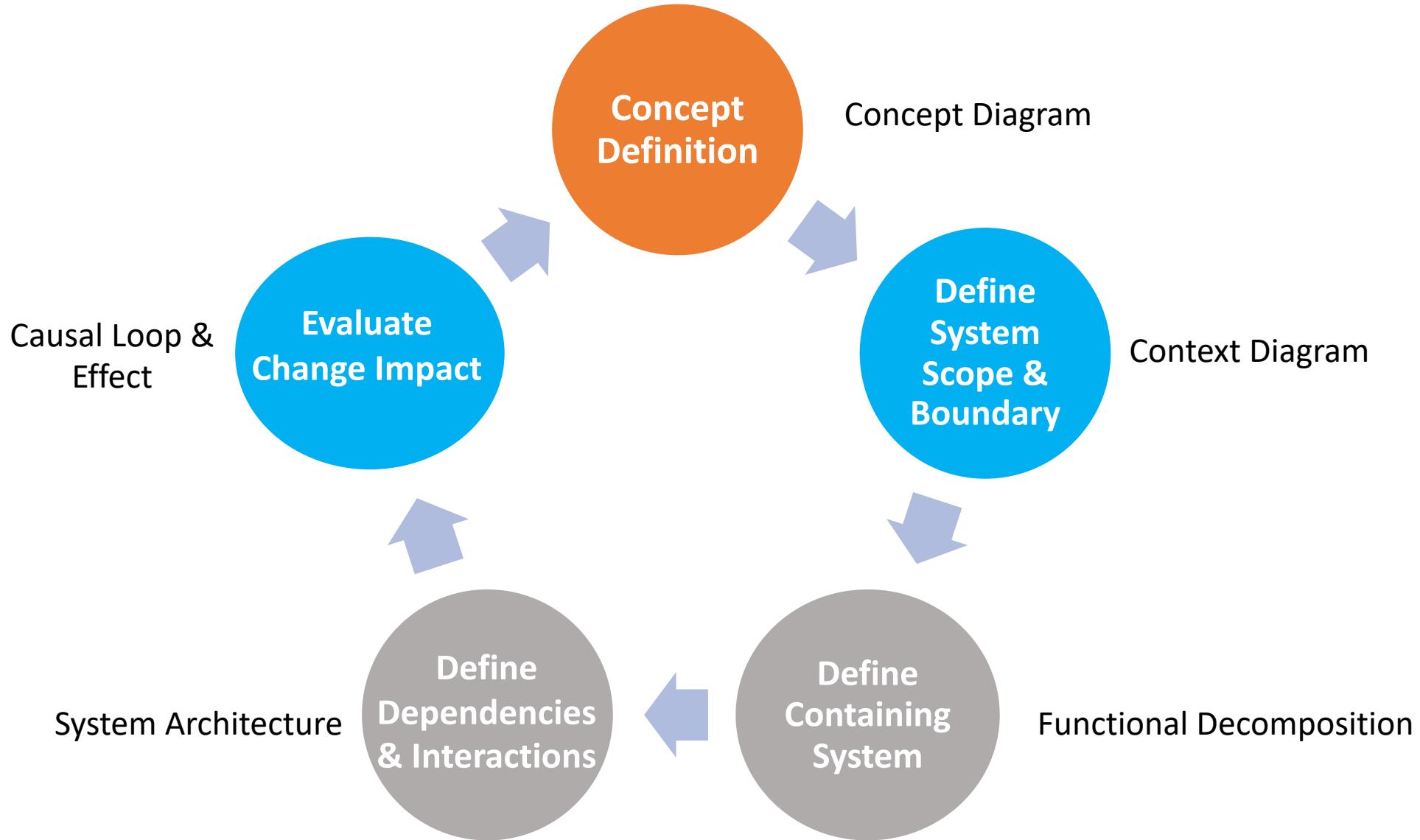
Functional Flow

System Architecture

Sequence Diagram



Systems Thinking – How?



Stinking Thinking – Why?

Teams continue to repeat patterns, anti-patterns persist, won't take the time to upskill, change behavior and move to a more modern culture or technologies...resist or quit DevOps efforts! Sign of a non-learning environment



An irrational thought pattern employed to deny, defend or deflect from the real problem and avoid making uncomfortable changes and accountability

Stinking Thinking – Who & What?

Change Avoiders

All-or-nothing

Black-and-white

Blame

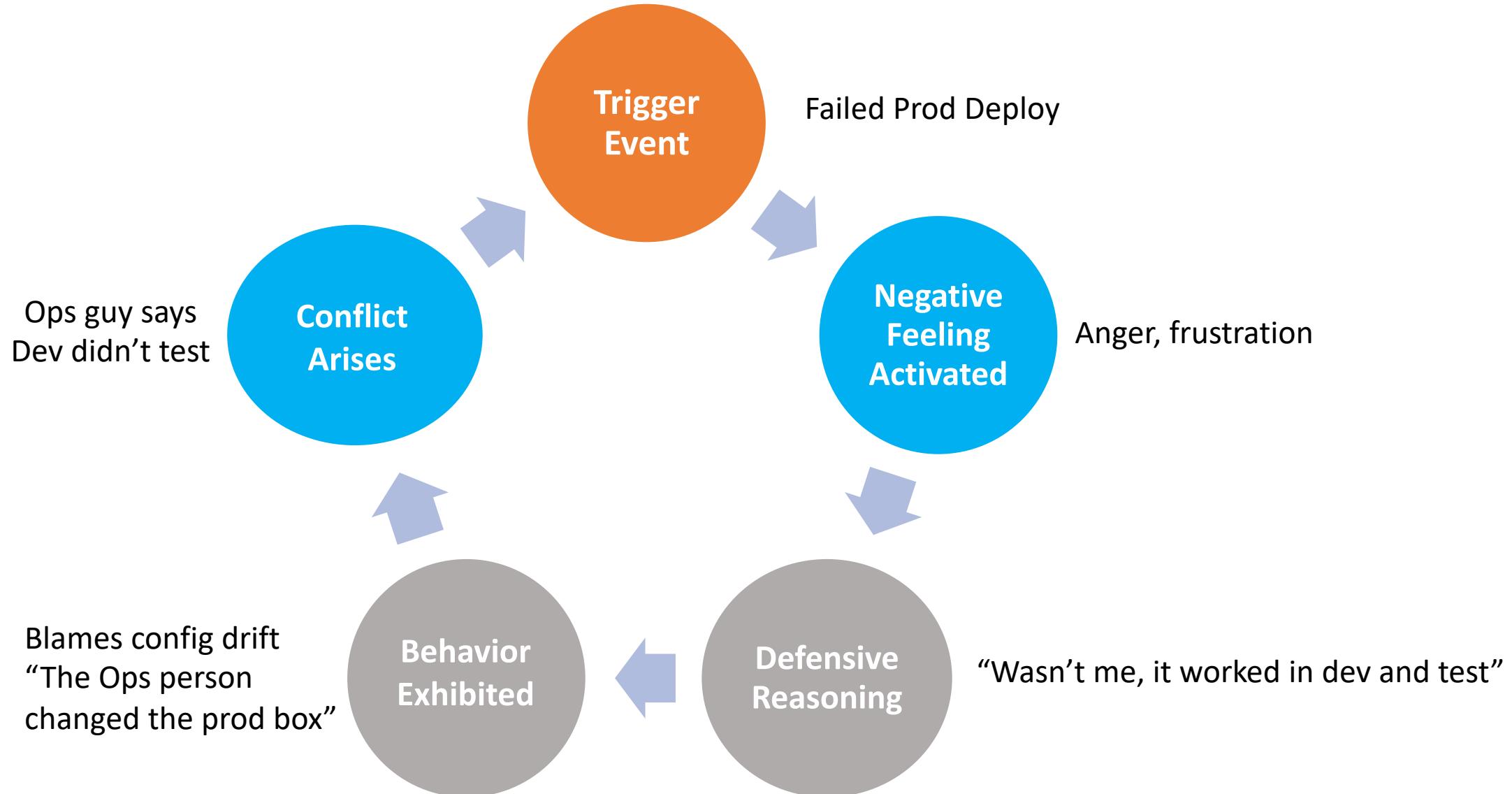
Catastrophizing

Polarizing

Shoulding



Stinking Thinking – How?



Critical Thinking – Why?

Continue to repeat same problems, heros rescue you from incidents, fear of making mistakes, employee turnover, low morale and high conflict teams, people afraid and anxious about delivery



A process of logical reasoning to be able to distinguish fact from opinion and expose a bias that can impede progress or understanding. Antidote to Stinking Thinking

Critical Thinking – Who & What?

Learners & Leaders

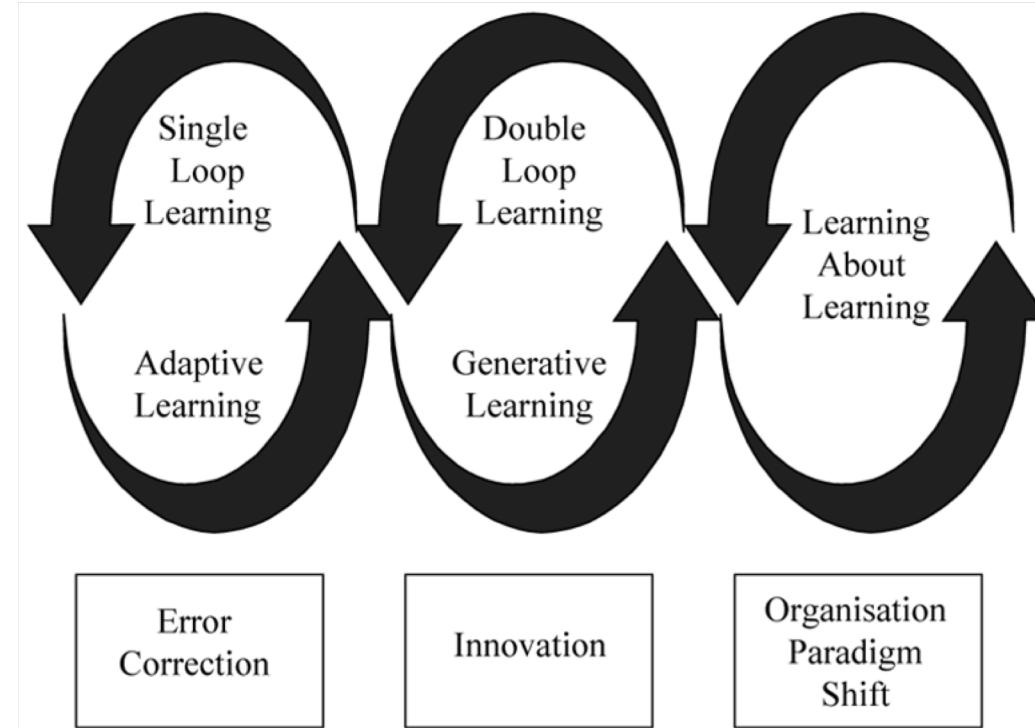
Psychological Safety

Active Listening

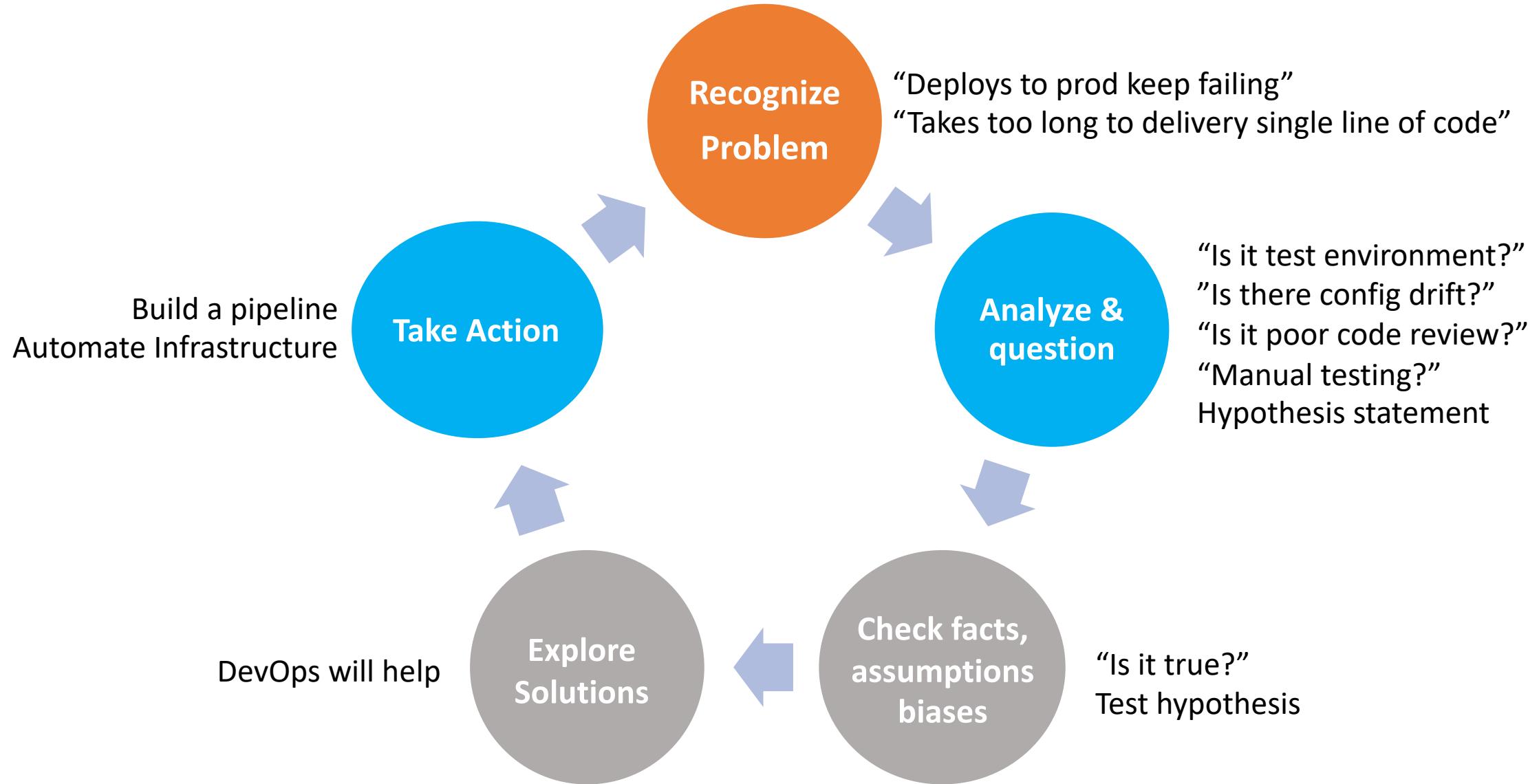
Retrospectives

Failure is Learning

Double-Loop Learning



Critical Thinking – How?



Conclusion

- We are in a time where speed of delivery and rapid technology changes has us in a race to build and deploy quickly so we can beat the competition
- We might be tempted to just build it and take shortcuts, just get to coding and get something out there
- Don't shortcut your thinking

THINK BEFORE YOU TECH!