EMBRACING EXCELLENCE

LEAN

CONFERENCE CANADA

WINNIPEG | JUNE 6-9, 2022

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PRESENTED BY

CANADIAN
MANUFACTURERS
& EXPORTERS

CANADA'S LARGEST LEAN
EVENT IN 2022

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LEVERAGING LEAN
IN AGILE SOFTWARE DEPLOYMENT

CARLA DOUGLAS, CPA CMA CITP CLC

Lean Blackbelt – Lean Agile Greenbelt – Money belt

Principal
DTC LIMITED

VP Technology & Lean Champion (Retired)
RED RIVER MUTUAL INSURANCE

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PRESENTATION DISCUSSION

LEAN TOOLS & STRATEGIES TO BRIDGE & RESOLVE SYSTEM/PROCESS GAPS

A LEAN MINDED APPROACH TO SERVICE

AGILE IS NOT JUST FOR BIG COMPANIES... AGILE IS SCALABLE

LEAN TOOLS & STRATEGIES TO BRIDGE & RESOLVE SYSTEM/PROCESS GAPS

Systems have inherent DESIGN… Referred to as "Out Of The Box" performance
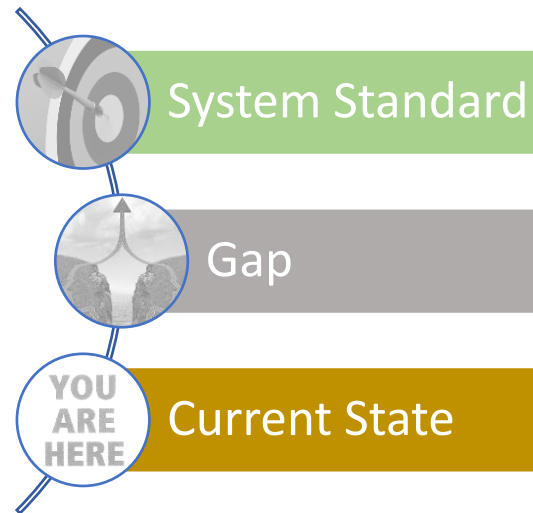
Manage gaps that emerge or hinder software updates, upgrades, transitions and enhanced feature deployments.

System Standard

Gap

YOU ARE HERE

Current State

Why the Gap?
Why do we do it as we do?

ASK THE 5 WHYS

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LEAN TOOLS & STRATEGIES TO BRIDGE & RESOLVE SYSTEM/PROCESS GAPS

Manage gaps that emerge or hinder software updates, upgrades, transitions and enhanced feature deployments.

FOCUS POINT:

- In a **SERVICE** Industry scenario the **ERP PRODUCES** the output/product.

- In a **MANUFACTURING** scenario the **ERP SUPPORTS** the production.

   ❖ *Effective system use, alignment & design management applies to both!!*

LEAN TOOLS & STRATEGIES TO BRIDGE & RESOLVE SYSTEM/PROCESS GAPS

Manage gaps that emerge or hinder software updates, upgrades, transitions and enhanced feature deployments.

MANUFACTURING / SHOP FLOOR

SERVICE / SYSTEM

Production	=	Processing
Materials & Shop Labour	=	Data & User Labour
Finished Goods	=	Service / Data
Information Collection	=	Information Collection

LEAN TOOLS & STRATEGIES TO BRIDGE & RESOLVE SYSTEM/PROCESS GAPS

Manage gaps that emerge or hinder software updates, upgrades, transitions and enhanced feature deployments.

CONSIDER THIS:
- Would you remove safety equipment?
- Would your engineers let you customize machinery?
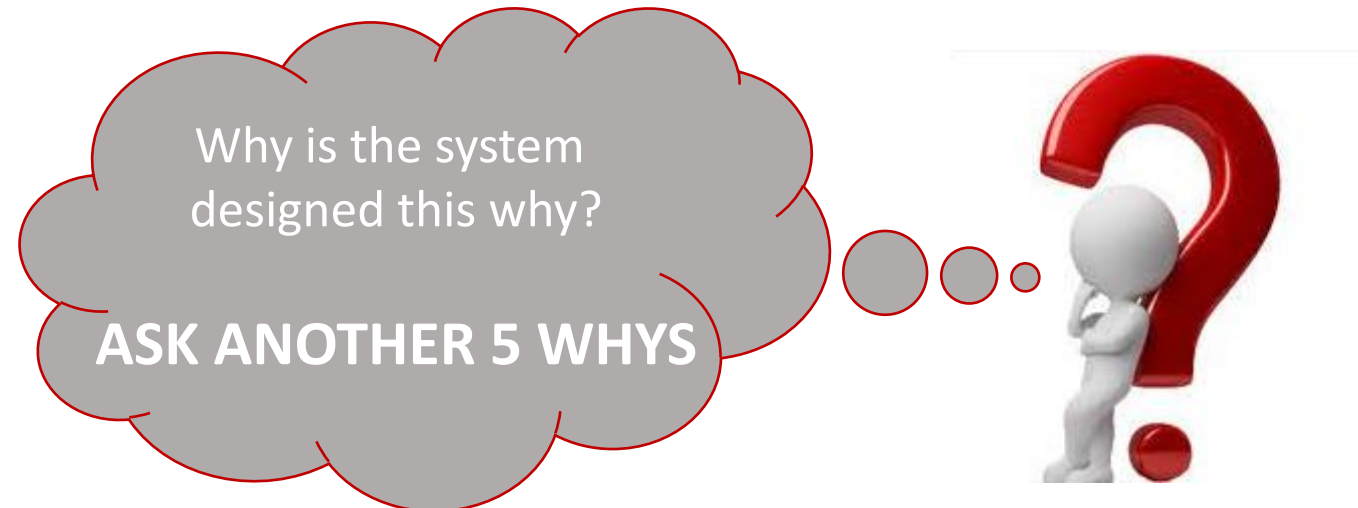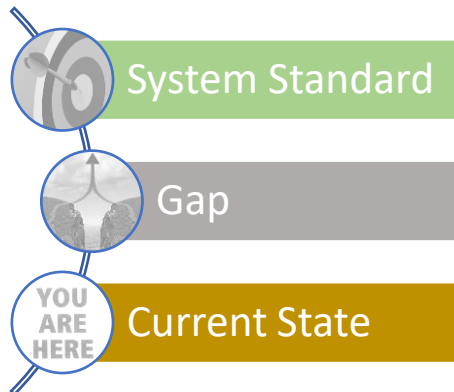
System Standard

Gap

Current State

YOU ARE HERE

Why is the system designed this why?

ASK ANOTHER 5 WHYS

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LEAN TOOLS & STRATEGIES TO BRIDGE & RESOLVE SYSTEM/PROCESS GAPS

Manage gaps that emerge or hinder software updates, upgrades, transitions and enhanced feature deployments.

A GAP is a GAP:

Use your Toolkit... **YOUR SYSTEM** is like a **SHOP FLOOR**

GO TO THE GEMBA... your walk is just *VIRTUAL*....

- **MAP** it
- **IDENTIFY & MEASURE** inputs, outputs, issues
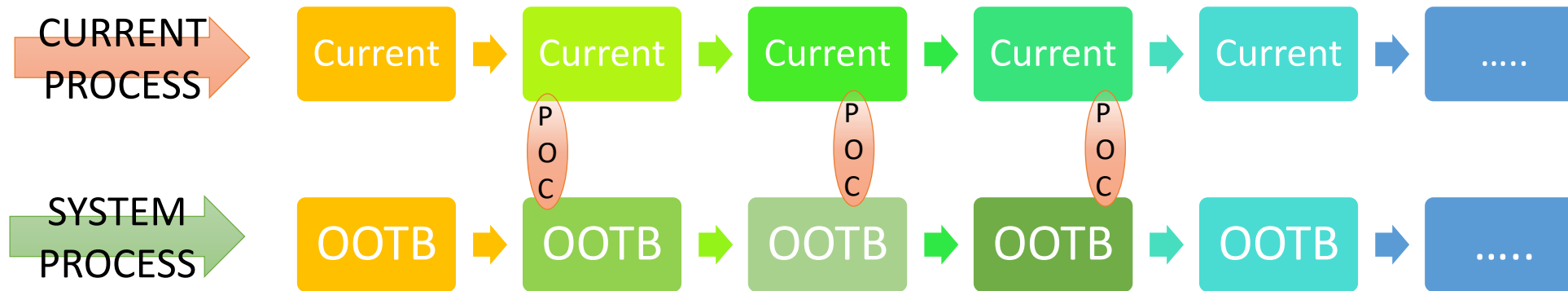- **ASSESS** the **WASTE**
- **IDENTIFY** the **POCs**

LEAN TOOLS & STRATEGIES TO BRIDGE & RESOLVE SYSTEM/PROCESS GAPS

A GAP is a GAP:

Use your Toolkit … **VSM EXERCISE WITH A TWIST**

Manage gaps that emerge or hinder software updates, upgrades, transitions and enhanced feature deployments.

CURRENT PROCESS →
Current → Current → Current → Current → Current → .....

SYSTEM PROCESS →
OOTB → OOTB → OOTB → OOTB → OOTB → .....

POC   POC   POC

LEAN TOOLS & STRATEGIES TO BRIDGE & RESOLVE SYSTEM/PROCESS GAPS

Manage gaps that emerge or hinder software updates, upgrades, transitions and enhanced feature deployments.

UNDERSTAND WHY the GAP exists from **BOTH SIDES**: Process & System Design

FOCUS POINT: Customer Value = Customer will Pay for it

➢ **DETERMINE IF** the GAP is a competitive value

➢ **DETERMINE WHY** the system performs as it does

LEAN TOOLS & STRATEGIES TO BRIDGE & RESOLVE SYSTEM/PROCESS GAPS

Manage gaps that emerge or hinder software updates, upgrades, transitions and enhanced feature deployments.

BRIDGING THE GAP

VALUE GRAPH the solutions and actions that can close the gap... **BUT...**

FOCUS POINT: **DEVIATION FROM OOTB MUST BE CATEGORIZED AS STRATEGIC OR PROJECT (PARKED)**

❖ *KAIZENS TEAMS SHOULD NOT CREATE ACTION ITEMS THEY CANNOT AUTHORIZE AND CARRYOUT*

LEAN TOOLS & STRATEGIES TO BRIDGE & RESOLVE SYSTEM/PROCESS GAPS

Manage gaps that emerge or hinder software updates, upgrades, transitions and enhanced feature deployments.
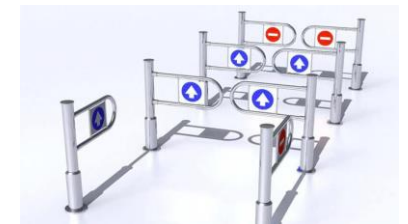
DESIGN ESCALATION

Use a DESIGN ESCALATION PROCESS

Designs that perpetuate a GAP must drive a significant VALUE

WHY DESIGN ESCALATION WORKS

✓ A **STAGE-GATE APPROACH**

✓ Supports **FLOW**

✓ **ACCOUNTABILITY** & Clarity

✓ Transparent & **CONSISTENT** assessment

✓ Upholds **BEST PRACTICES**

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LEAN TOOLS & STRATEGIES TO BRIDGE & RESOLVE SYSTEM/PROCESS GAPS

WHY DESIGN ESCALATION WORKS

- ✓ A **STAGE-GATE APPROACH**
- ✓ Supports **FLOW**
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- ✓ Transparent & **CONSISTENT**
- ✓ Upholds **BEST PRACTICES**

A STANDARDIZED PROCESS to:

- ✓ **REVIEW** "Gap" Solutions
- ✓ Support Release/Sprint **FLOW**
- ✓ **MANAGE** TCO
- ✓ Determine **VALIDITY**
- ✓ Align to **GUIDING PRINCIPLES**

Manage gaps that emerge or hinder software updates, upgrades, transitions and enhanced feature deployments.

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LEAN TOOLS & STRATEGIES TO BRIDGE & RESOLVE SYSTEM/PROCESS GAPS

Manage gaps that emerge or hinder software updates, upgrades, transitions and enhanced feature deployments.

✓ System = Shop Floor

✓ Systems are designed with best practices

✓ Systems have safeguards

✓ Understand the GAP from BOTH sides

✓ KAIZEN & tools still apply and drive problem solving

✓ Design Processes to reflect Value Drivers but align to the System Design

✓ Use a Design Escalation Process to manage VALUE DRIVEN deviations

System Standard

Gap

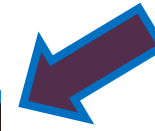YOU ARE HERE
Current State
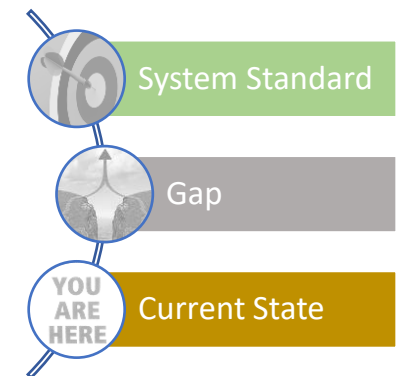
PRESENTATION DISCUSSION

LEAN TOOLS & STRATEGIES TO BRIDGE & RESOLVE SYSTEM/PROCESS GAPS

A LEAN MINDED APPROACH TO SERVICE

AGILE IS NOT JUST FOR BIG COMPANIES … AGILE IS SCALABLE

A LEAN MINDED APPROACH TO SERVICE SOLUTIONS

SO WE HAVE A WAY TO ASSESS & BRIDGE THE GAP …

… WHAT ABOUT ONGOING SYSTEM ENHANCEMENT

To support and ensure your processes and system solutions are driving the right value for the right customers.

- An **IMPLEMENTATION** is never one and done

- Implementation transitions to **IN USE**

- Systems, like any machinery, need to be serviced and **MAINTAINED**

A LEAN MINDED APPROACH TO SERVICE SOLUTIONS

SYSTEM CI in a NUTSHELL

> USE of a system is continually improved when it is adapting and aligned with its intended design.

> A system is ENHANCED if adapted to provide a competitive differentiation driven by VALUE
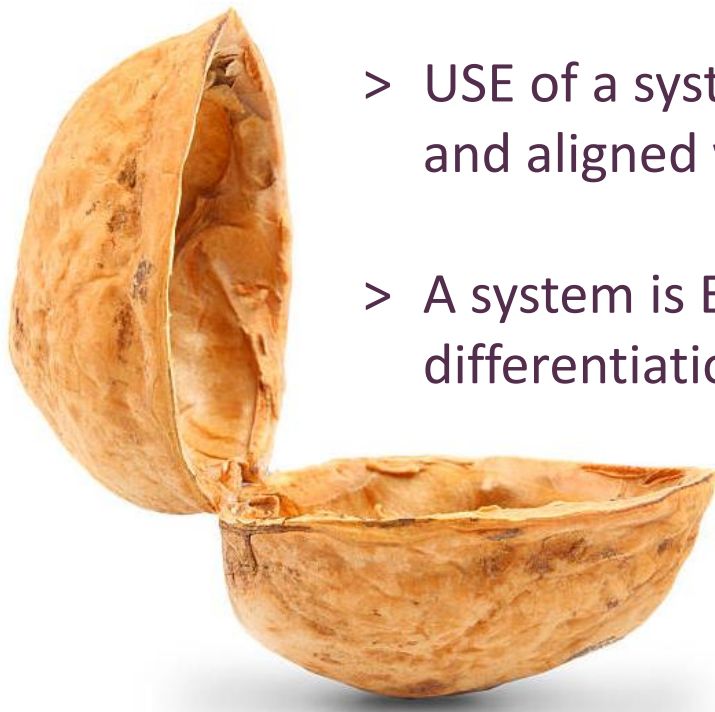
To support and ensure your processes and system solutions are driving the right value for the right customers.

A LEAN MINDED APPROACH TO SERVICE SOLUTIONS

ONGOING SYSTEM SUSTAINMENT

System DESIGN INTEGRITY needs to be MAINTAINED

SYSTEM MAINTENANCE comes in two key forms:
> Upgrades
> Updates

❖ *ROUTINE use of KAIZEN and a CI Mindset need to be at the FOUNDATION and CORE of system MAINTENANCE*

To support and ensure your processes and system solutions are driving the right value for the right customers.

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A LEAN MINDED APPROACH TO SERVICE SOLUTIONS

ESCALATION IS NOT A FOUR LETTER WORD

The DESIGN ESCALATION concept is an AGILE concept
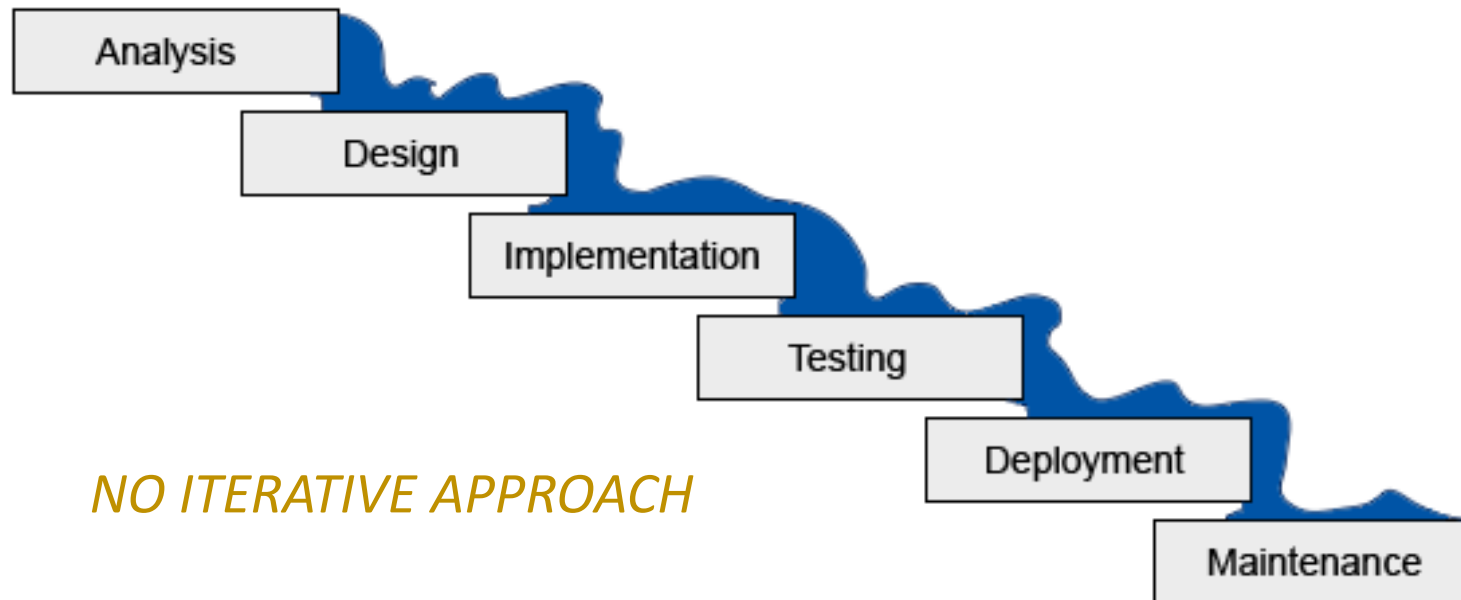
It is also INTEGRAL to the SYSTEM CI process

To support and ensure your processes and system solutions are driving the right value for the right customers.

A Lean Agile approach can take Agile software development, deployment and sustainment from technical to transformative.

A LEAN MINDED APPROACH TO SERVICE SOLUTIONS

FOCUS POINT:

- **AGILE** is a **LEAN ORIENTED METHODOLOGY** for **SYSTEMS & TECHNOLOGY DEVELOPMENT**

- It is a **LEAN** approach to **TECHNOLOGY MANAGEMENT**

To support and ensure your processes and system solutions are driving the right value for the right customers.

❖ *AGILE ELIMINATES WASTE found in the WATERFALL methodology*

NEW MINDSET
↓
NEW RESULTS

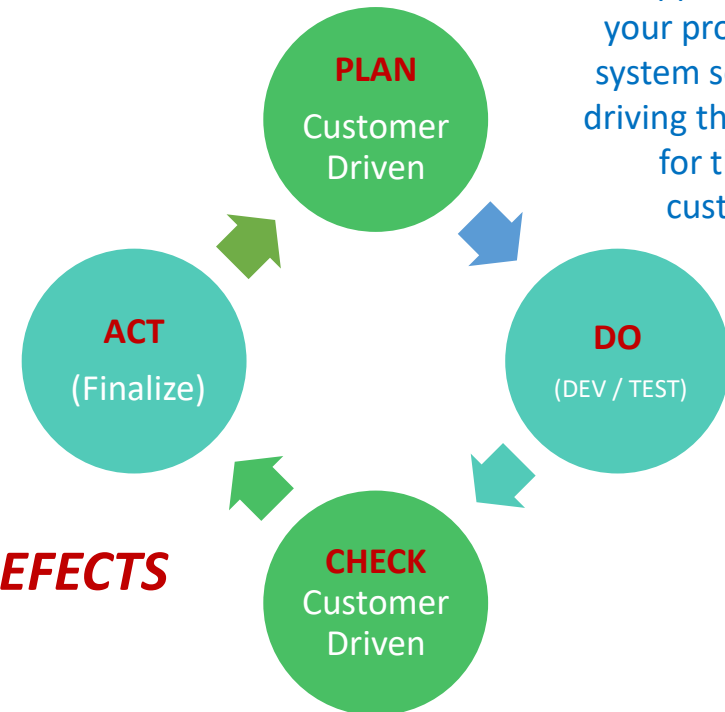# A LEAN MINDED APPROACH TO SERVICE SOLUTIONS

A-HA MOMENT:

- **ITERATION** is **CONTINUOUS CONSULTATION**

- Each SPRINT is BUILDING toward the end PRODUCT

- USERS are engaged THROUGHOUT

- WATERFALL is a "ONE SPRINT" approach…

  … USERS are NOT engaged THROUGHOUT

❖ *Waterfall will build WASTE and PASS ALONG DEFECTS*

To support and ensure your processes and system solutions are driving the right value for the right customers.

PLAN
Customer Driven

DO
(DEV / TEST)

CHECK
Customer Driven

ACT
(Finalize)

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A LEAN MINDED APPROACH TO SERVICE SOLUTIONS

ESCALATION FRAMEWORK REVISITED

At the **CORE** is still the concept of **VALUE**

RECALL / REFLECT ..... VALUES METHODOLOGY

To support and ensure your processes and system solutions are driving the right value for the right customers.

❖ *ESCALATION methodically ASSESSES THE VALUE of a custom design solution AGAINST GUIDING PRINCIPLES*

GUIDING PRINCIPLES must align to the CORPORATE VALUES

A LEAN MINDED APPROACH TO SERVICE SOLUTIONS

Will our customers pay for our system customizations?

What value do they actually drive?

What are our corporate guidelines and principles for managing TCO and Technical Debt?

V A L U E S Methodology

Vision · Align · Lead · Unite · Execute · Sustain

To support and ensure your processes and system solutions are driving the right value for the right customers.
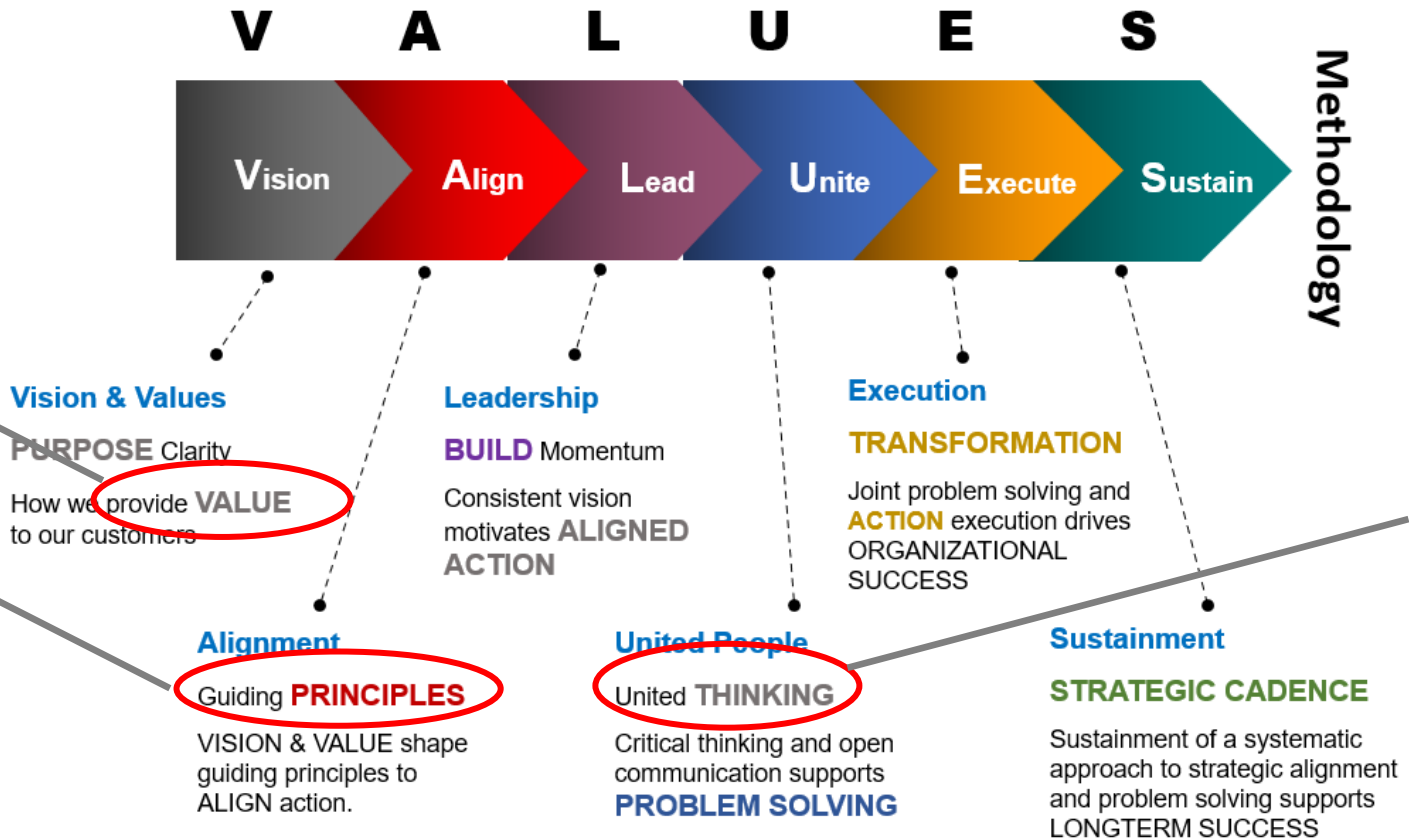
Are we applying consistent tools to align our critical thinking around attacking and resolving problems?

Vision & Values
PURPOSE Clarity
How we provide VALUE to our customers

Alignment
Guiding PRINCIPLES
VISION & VALUE shape guiding principles to ALIGN action.

Leadership
BUILD Momentum
Consistent vision motivates ALIGNED ACTION

United People
United THINKING
Critical thinking and open communication supports PROBLEM SOLVING

Execution
TRANSFORMATION
Joint problem solving and ACTION execution drives ORGANIZATIONAL SUCCESS

Sustainment
STRATEGIC CADENCE
Sustainment of a systematic approach to strategic alignment and problem solving supports LONGTERM SUCCESS

A LEAN MINDED APPROACH TO SERVICE SOLUTIONS

AGILE ESCALATION
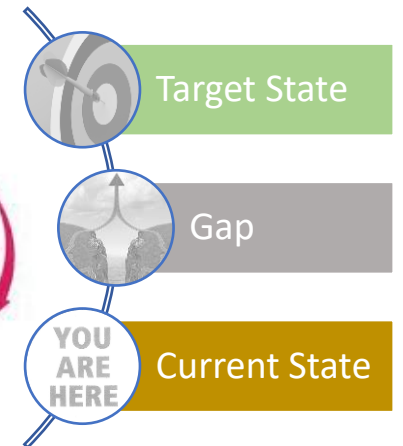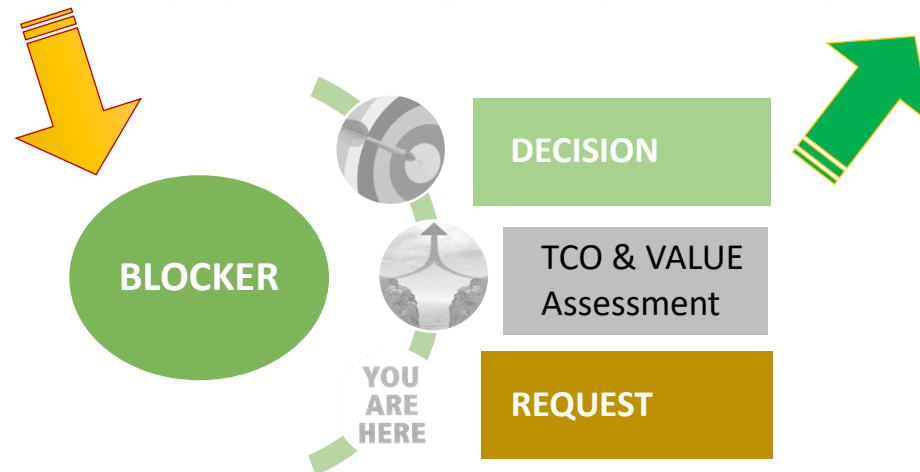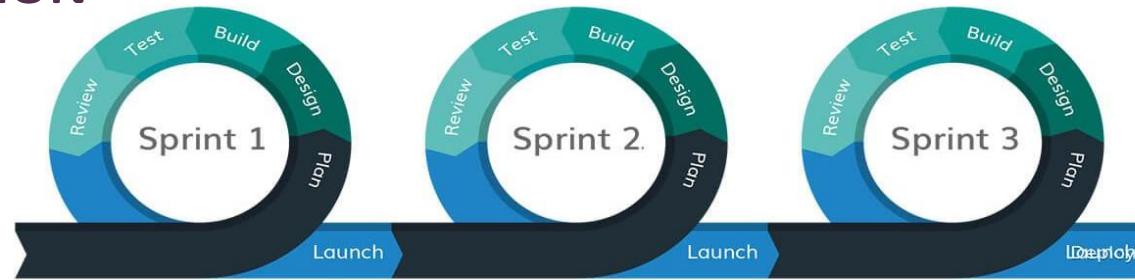
To support and ensure your processes and system solutions are driving the right value for the right customers.

BLOCKER

DECISION

TCO & VALUE Assessment

REQUEST

YOU ARE HERE

PLAN
DO
CHECK
ACT

Target State

Gap

Current State

YOU ARE HERE

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A LEAN MINDED APPROACH TO SERVICE SOLUTIONS

To support and ensure your processes and system solutions are driving the right value for the right customers.

- ✓ System = Shop Floor
- ✓ Redesign Processes to align Value Drivers and System Design
- ✓ Design Escalation manages VALUE DRIVEN deviations
- ✓ SYSTEM CI moves toward SYSTEM OOTB Design
- ✓ AGILE replaces waterfall with PDCA iteration & CUSTOMER FOCUS
- ✓ AGILE leverages STANDARDIZED DESIGN ESCALATION to resolve BLOCKERS
- ✓ Standardized Design Escalation creates TRANSPARENCY
- ✓ DESIGN DECISIONS are FOUNDED in VALUES that reflect the GUIDING PRINCIPLES
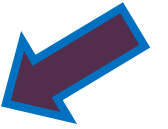
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PRESENTATION DISCUSSION

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AGILE IS NOT JUST FOR BIG COMPANIES ... AGILE IS SCALABLE

AGILE IS NOT JUST FOR BIG COMPANIES

AGILE PURPOSE

To eliminate waste by breaking the entire scope into shortened scope deliverables that build upon each other toward the end result.
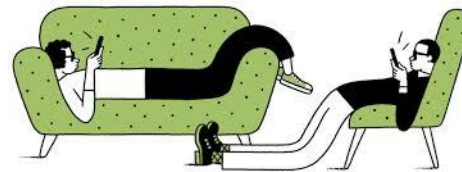
Shorter scope cycles catch and resolve issues and move the total effort forward with more efficiency by managing waste like:
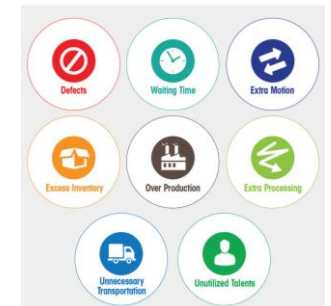
DEFECTS

Underutilized capacity

REWORK

Lean and Agile solutions can help small business leverage system functionality to support nimble adaptation.

The **8 Wastes** of Lean
Identify these non-value-adding activities. Reduce or eliminate them to become more efficient.
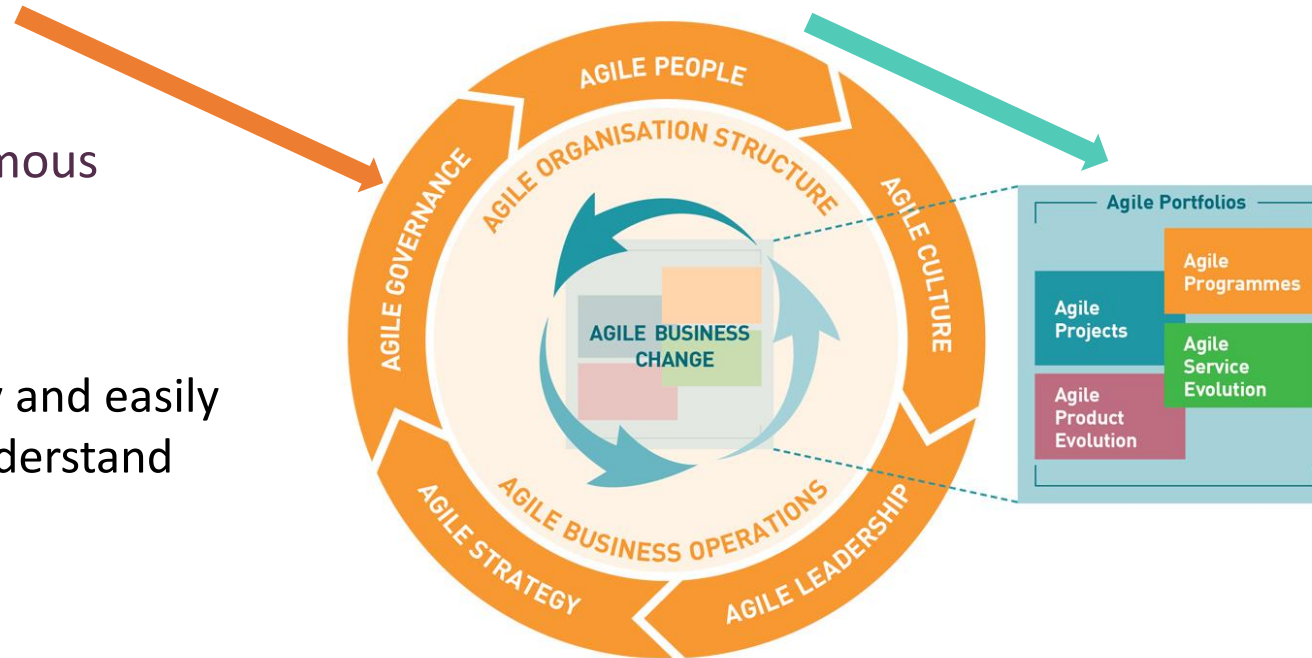
AGILE IS NOT JUST FOR BIG COMPANIES

AGILE ADOPTION

There are AGILE COMPANIES and there is AGILE Methodology

The two are not Synonymous

a·gil·i·ty *[noun]*
- ability to move quickly and easily
- ability to think and understand quickly

Lean and Agile solutions can help small business leverage system functionality to support nimble adaptation.

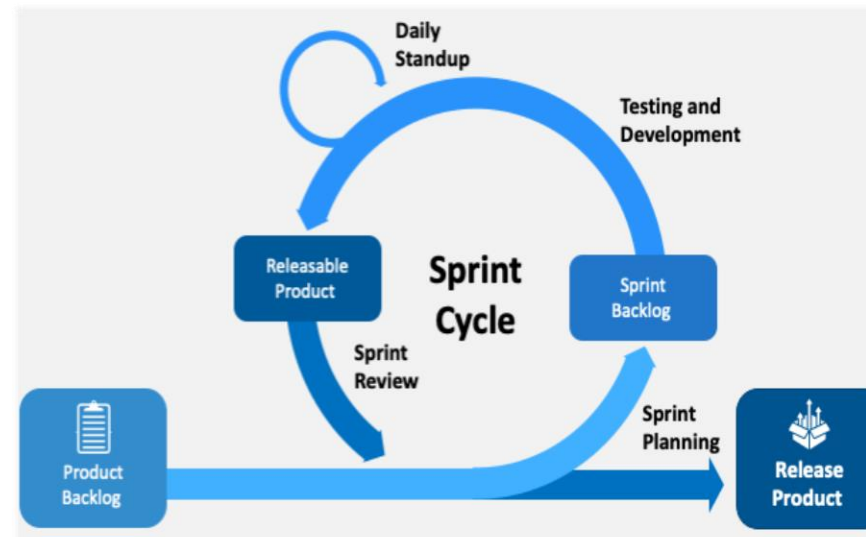# AGILE IS NOT JUST FOR BIG COMPANIES

AGILE ADOPTION

AGILE Companies are NIMBLE & ADAPTABLE, founded in Agility and the deployment of Agile Mindset and Methodology in all projects and work cycles.

AGILE Methodology is a nimble APPROACH to managing systems

AGILE Methodology is scalable

Lean and Agile solutions can help small business leverage system functionality to support nimble adaptation.

AGILE IS NOT JUST FOR BIG COMPANIES

AGILE ADOPTION

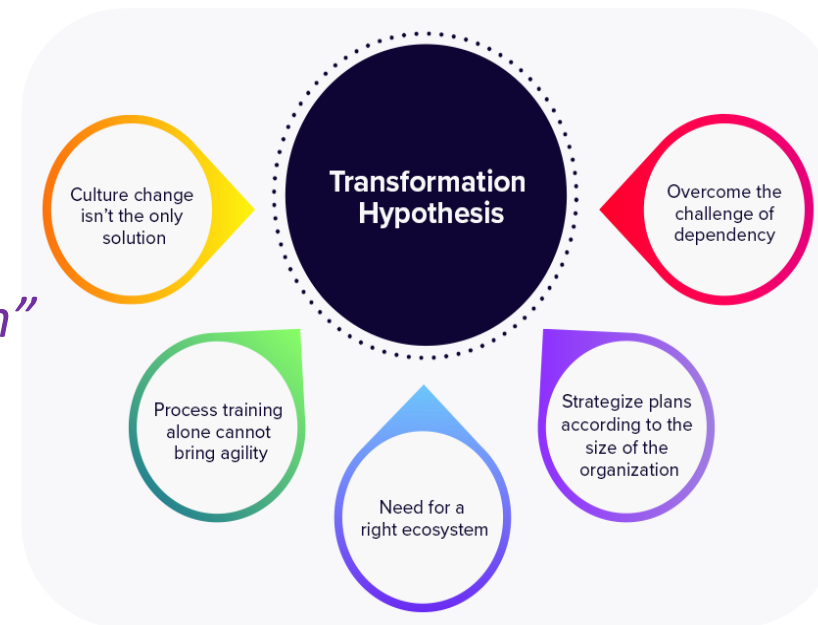AGILE INTENT is attainable to the degree ACHEIVABLE by the ORGANIZATION

    … "Something is better than Nothing"

Transformation Hypothesis….
"plan according to the size of the organization"

    … Embrace what you can achieve

    … Be purposeful and iterative

Lean and Agile solutions can help small business leverage system functionality to support nimble adaptation.

Transformation Hypothesis

- Culture change isn't the only solution
- Overcome the challenge of dependency
- Process training alone cannot bring agility
- Need for a right ecosystem
- Strategize plans according to the size of the organization

AGILE IS NOT JUST FOR BIG COMPANIES

AGILE INTENT – a Starting Point

Lean and Agile solutions can help small business leverage system functionality to support nimble adaptation.

Gain UNDERSTANDING   =   Agile TRAINING & EXPLORATION

TARGET what is manageable   =   "Bite off what you can Chew"

Be INTENTIONAL   =   PRACTICE the methodology

Don't be fearful of SHORTFALLS   =   SHORTFALLS provides opportunity to ADAPT

SHORTFALL drive ADAPTATION   =   MOVEMENT toward the GOAL

AGILE IS NOT JUST FOR BIG COMPANIES

LEAN + AGILE vs SAFe

LEAN & AGILE - the coexistence and use of kaizen with the Agile methodology to support alignment between business practices and system design. *This has been the focus of this discussion*.

Lean and Agile solutions can help small business leverage system functionality to support nimble adaptation.

SCALED AGILE FRAMEWORK (SAFe) - Agile framework for enterprise scaling of lean and agile practices.

AGILE IS NOT JUST FOR BIG COMPANIES

LEAN AGILE & AGILE COMPANIES

LEAN AGILE - the evolution of applying Agile to Lean and creating an Agile Kaizen framework

AGILE COMPANIES – Corporate wide adoption & practice of Agile methodology across all disciplines

Lean and Agile solutions can help small business leverage system functionality to support nimble adaptation.
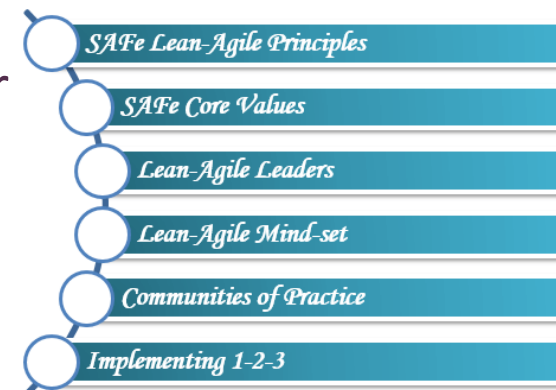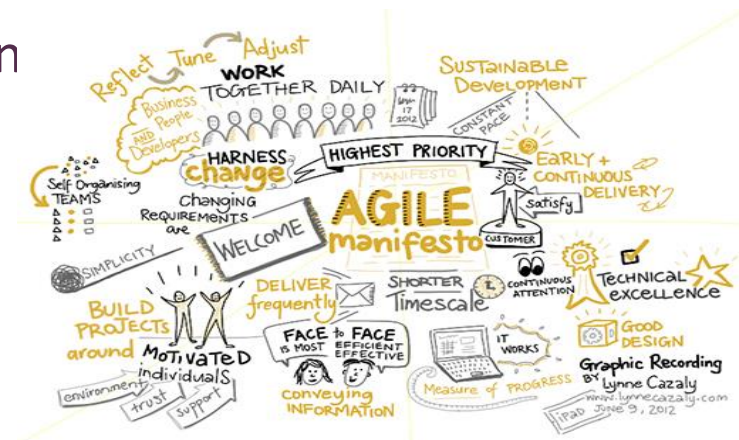
AGILE IS NOT JUST FOR BIG COMPANIES

✓ System = Shop Floor

✓ System CI Aligns Processes to System Design

✓ Guiding Principles & Corporate Values govern Design Decisions

✓ Agile = iterative PDCA, Design Escalation, Collaboration & Customer Focus

✓ Augment Lean knowledge with Agile knowledge or vice versa

✓ Agile is scalable

✓ Lean + Agile is not Lean Agile

Lean and Agile solutions can help small business leverage system functionality to support nimble adaptation.

AGILE IS NOT JUST FOR BIG COMPANIES

LESSONS LEARNED

Project Management, Lean & Agile Methodologies Intersect

- Align delivery under knowledgeable leadership

- Depth of knowledge in each facet is ideal

- Identify who has the skill set & **depth of practical experience**

- Ensure executive support for delivery

Lean and Agile solutions can help small business leverage system functionality to support nimble adaptation.

❖ *If you need that skill set, hire it*
    …. build talent from within that is led and molded through that skill set

AGILE IS NOT JUST FOR BIG COMPANIES

LESSONS LEARNED

ALIGN UNDERSTANDING through "base-level" training in both lean and agile

- "experts" deploy, govern and sustain

- "lead-hands" support, guide and uphold

- "steering committee" shares vision & provides guidance

❖ *This is a corporate responsibility…*

… it both drives & encourages the CI culture

Lean and Agile solutions can help small business leverage system functionality to support nimble adaptation.

AGILE IS NOT JUST FOR BIG COMPANIES

LESSONS LEARNED

Don't run before you can walk
- TRAINING builds knowledge BUT…

  … DOING builds experience & enhances knowledge

- Something is better than nothing….

  … Be okay with LEARNING   … Be deliberate

❖ **BUILDING is better than stagnant… WORD of ADVICE…**

        … apply a steady consistent delivery VS a dramatic charge

Lean and Agile solutions can help small business leverage system functionality to support nimble adaptation.

PRESENTATION WRAP UP

Enhance Agile
by managing
gaps through Kaizen

Ensure customization
is driven by true
customer value

An Agile approach
is achievable, start with
a consistent and steady
approach forward

THANK YOU!

Leveraging Lean in Agile Software Deployment

Carla Douglas, CPA CMA CITP CLC
Lean Blackbelt – Lean Agile Greenbelt – Money belt

Principal
DTC LIMITED

VP Technology & Lean Champion (Retired)
Red River Mutual Insurance