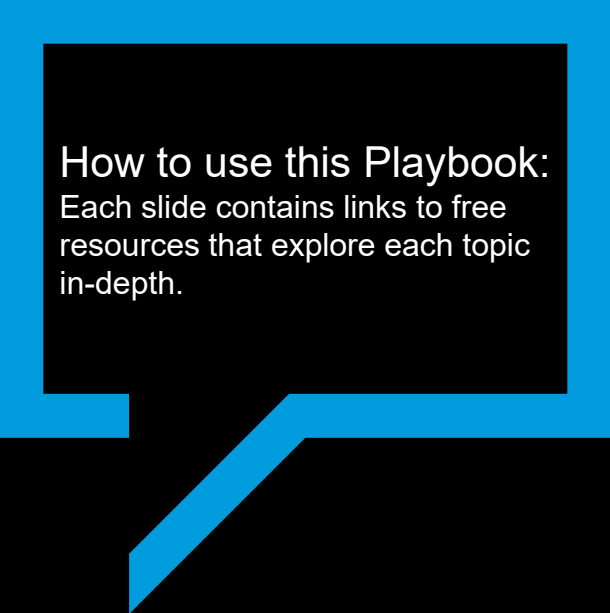


Free Training Resources:

[Lean](#), [Process Improvement](#) & [Change Management](#)

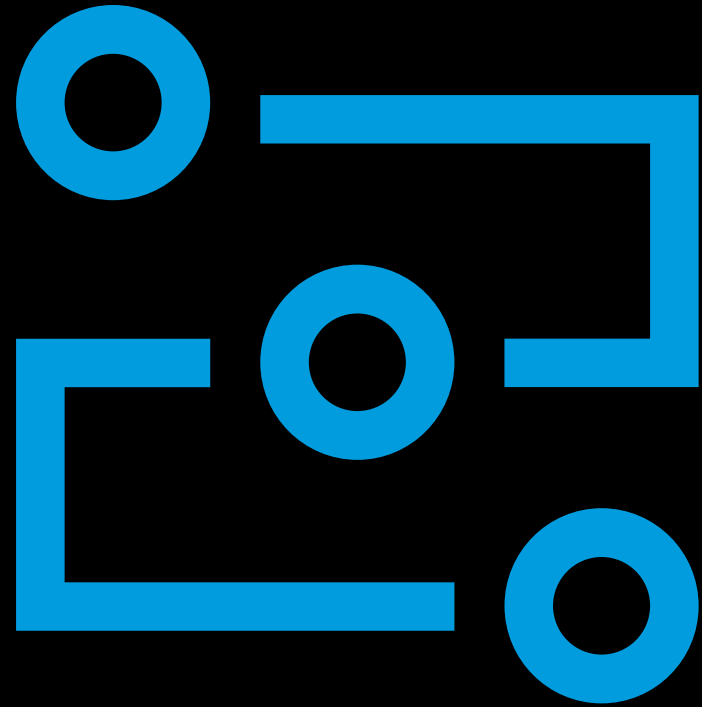


How to use this Playbook:
Each slide contains links to free
resources that explore each topic
in-depth.

1

LEAN

The right process
for the right results





LEAN

AN INTRODUCTION

The Lean philosophy is based on the premise that the right process will produce the right results.

1500's
Venetian Arsenal
flow production

1950's
Toyota Production
System
Just-In-Time

1908
Henry Ford & Model T
assembly lines,
fabricated parts, &
mass production



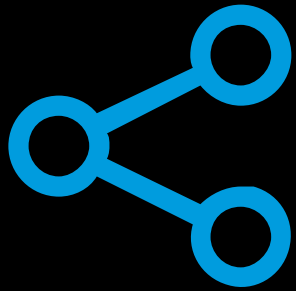
Exploring Lean:

[History of Lean.](#)¹

[What is Lean?](#)²

[Lean Thinking](#)³

Principles of Lean

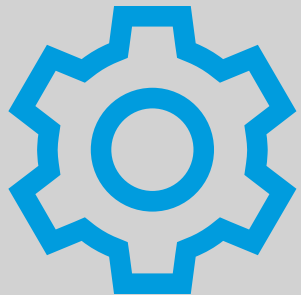


5 Lean Principles⁴

1. Identify Value⁵
2. Map the Value Stream⁶
3. Create Flow⁷
4. Establish Pull⁸
5. Seek Perfection⁹



Lean Tools & Templates

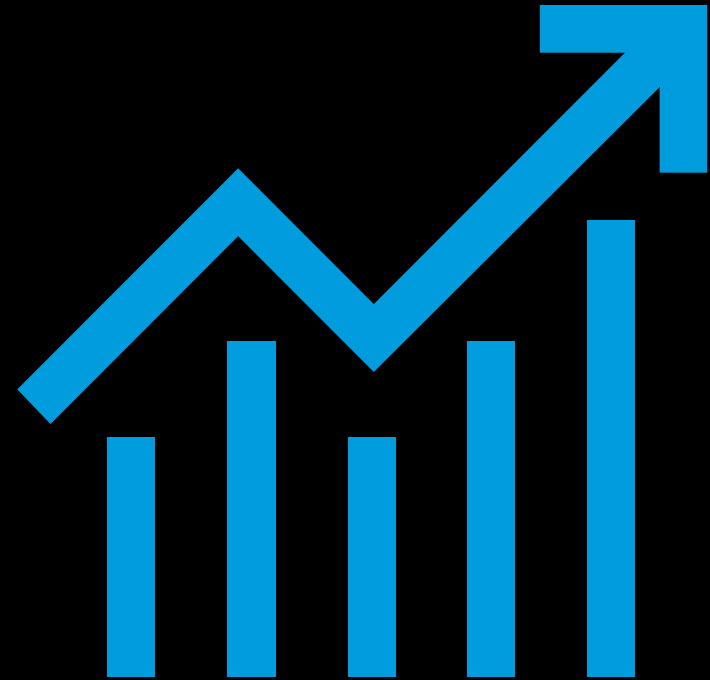


- [8 Wastes](#)¹⁰ (Muda) and template
- [Value Stream Mapping](#)¹¹ and [template](#)¹²
- [Spaghetti Map Diagram](#)¹³ and [template](#)¹⁴
- [5S](#)¹⁵
- [Error Proofing, Poka-Yoke](#)¹⁶
- [Kaizen Event](#)¹⁷
- [30+ Free Lean Tools, Templates & Examples](#)¹⁸
- [Value Analysis](#)¹⁹

2

Process Improvement

DMAIC – A data-driven quality strategy used to improve processes





DMAIC – A PROBLEM SOLVING APPROACH

TO IMPROVE PROCESSES USING SIX SIGMA METHODOLOGY

Exploring DMAIC:

[DMAIC – The 5 Phases of Lean Six Sigma](#)²⁰

[Six Sigma DMAIC Roadmap](#)²¹



DEFINE

What problem are we trying to solve?



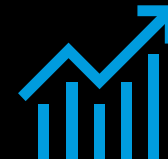
MEASURE

What is the impact to the business?



ANALYZE

What caused this and how do we know?



IMPROVE

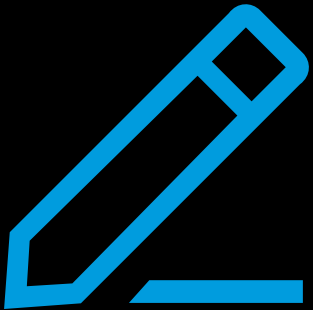
How can it be fixed?



CONTROL

How do we keep the solution in place?

Define Phase Tools & Templates



Exploring [Define Phase](#)²²

Basic Tools

- [Project Charter](#)²³ and template
- [SIPOC Diagram](#)²⁴ and template
- [Voice of Customer \(VOC\) Translation Matrix](#)²⁵ and template
- [Observations](#)²⁶ and templates

Advanced Tools

- [High-Level Flowchart](#)²⁷ and template
- [Stakeholder Analysis](#)²⁸ and template
- [Swimlane Map](#)²⁹ and template
- [Tree Diagram](#)³⁰ and [How Do I Create a Tree Diagram in Word](#)³¹
- [Critical To Quality \(CTQ\)](#)³² and template
- [A3](#)³³ and template

Measure Phase Tools & Templates



Exploring [Measure Phase](#)³⁴

Basic Tools

- [Goal Statement](#)³⁵
- [Building a Sound Data Collection Plan](#)³⁶
- [Measure System Analysis \(MSA\)](#)³⁷ and [Gage Repeatability and Reproducibility](#)³⁸
- Process [Observations](#)³⁹

Advanced Tools

- [Detailed Flowchart](#)⁴⁰
- [Benchmarking](#)⁴¹
- [Process Sigma Calculation](#)⁴²
- [Operational Definitions](#)⁴³
- Update [Project Charter](#)⁴⁴

Analyze Phase Tools & Templates



Exploring [Analyze Phase](#)⁴⁵

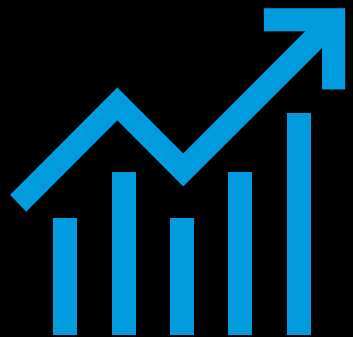
Basic Tools

- [Vital Few Variables](#)⁴⁶
- [Root Cause Analysis](#)⁴⁷ and template
- [Cause and Effect/Fishbone Diagram](#)⁴⁸ and template
- [5 Whys](#)⁴⁹ and template

Advanced Tools

- [Value-Added Flow Analysis](#)⁵⁰ and template
- [Histogram](#)⁵¹
- [Pareto Chart](#)⁵² and template
- [Box Plots](#)⁵³ and template
- [Time Series/Run Charts](#)⁵⁴ and template
- [Scatter Plot](#)⁵⁵
- [Regression Analysis](#)⁵⁶
- [Process Mapping](#)⁵⁷ Review and Analysis
- [Hypothesis Testing](#)⁵⁸
- [Root Cause Hypothesis](#)⁵⁹ and template
- [Non-Normal Data Analysis](#)⁶⁰ Update Project Charter

Improve Phase Tools & Templates



Exploring [Improve Phase](#)⁶¹

Basic Tools

- [Brainstorming](#)⁶²
- [Implementation Plan](#)⁶³ and template
- [Weighted Criteria Matrix](#)⁶⁴ and template
- [Impact Effort Matrix](#)⁶⁵ and template
- [Pugh Matrix](#)⁶⁶

Advanced Tools

- [Lean Tools, Templates & Example](#)⁶⁷
- [Mistake Proofing](#)⁶⁸
- [“To-Be Map”](#)⁶⁹ Value Stream Map
- [Swimlane Map](#)⁷⁰ and template
- [Design of Experiments](#)⁷¹
- [QFD/House of Quality](#)⁷²
- [Failure Modes & Effects Analysis \(FMEA\)](#)⁷³ and template
- [PDCA](#)⁷⁴/[PDSA](#)⁷⁵
- [Pilot Checklist](#)⁷⁶ and template

Control Phase Tools & Templates



Exploring [Control Phase](#)⁷⁷

Basic Tools

- [Process Owner](#)⁷⁸
- [Control Charts](#)⁷⁹
- [Control Plan](#)⁸⁰
- [Monitoring Plan Map](#)⁸¹ and template
- [Documentation](#)⁸²

Advanced Tools

- [Monitoring & Response Plan](#)⁸³ and template
- [Process Sigma Calculator](#)⁸⁴
- [Standard Work](#)⁸⁵ and template
- [Visual Management Checklist](#)⁸⁶ and template
- [Innovation Transfer Opportunities](#)⁸⁷ and template

3

Change Management

ADKAR – Implementing
successful change





ADKAR

A MODEL FOR CHANGE IN BUSINESS, GOVERNMENT AND OUR COMMUNITY

A

Awareness
of the need for
change

D

Desire
to support and
participate in the
change

K

Knowledge
of how to
change

A

Ability
to implement
required skills
and behaviors

R

Reinforcement
to sustain the change



Exploring ADKAR:

[The Prosci ADKAR Model](#)⁸⁸

[Applying the ADKAR Model to New Change Management Work](#)⁸⁹

[ADKAR Resource Center](#)⁹⁰

Book for Purchase – [ADKAR: A Model for Change](#)⁹¹

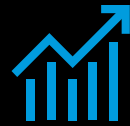
Resources

- <https://www.allaboutlean.com/about/>
- <https://www.asme.org/>
- <https://asq.org/>
- <https://goleansixsigma.com/>
- <https://www.isixsigma.com/>
- <https://www.lean.org/>
- <https://www.lean-news.com/>
- <https://www.prosci.com/adkar>



LEAN

The right process for the right results



PROCESS IMPROVEMENT

DMAIC – A data-driven quality strategy used to improve processes



CHANGE MANAGEMENT

ADKAR – Implementing successful change