

Lean Management



DIGITAL
OPERATIONS

Lean in Manufacturing



Agenda

- 👁 Background
- 👁 Boeing's Lean Journey: Case Study
- 👁 Summary



Background

- Production philosophy
- Product manufacturing innovations
- Embracing Lean
- Goals of Lean manufacturing
- Paradigm shift
- Elimination of waste



Boeing's Lean Journey

History and Background

- Commercial airplanes division (1996)
- Deliver more value to customer



Lean Principles Embraced

- Identify the value stream
- Make value flow
- Pull value through from the customer
- Remove waste
- Pursue perfection



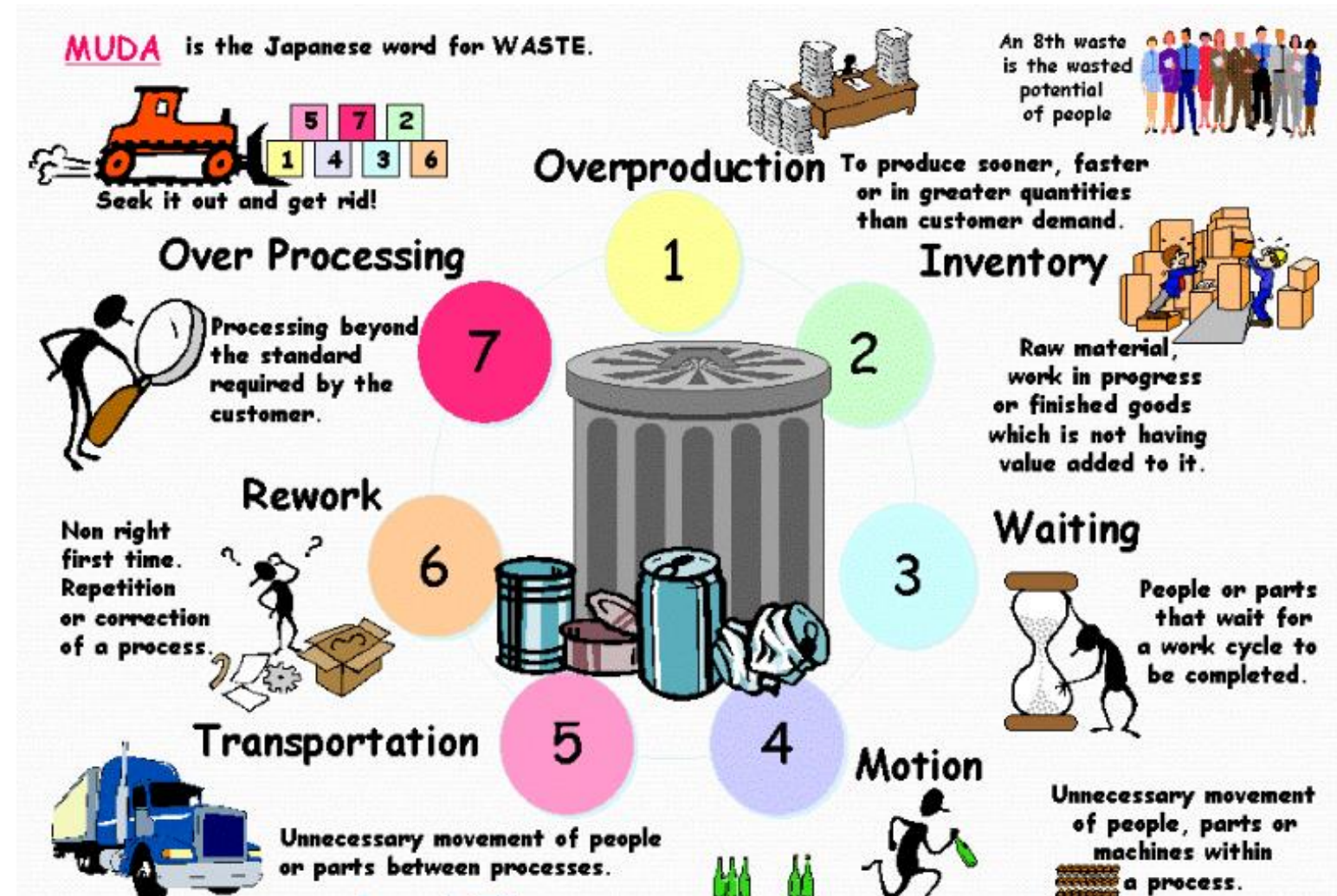
Lean Principles Embraced

- Lean manufacturing assessment
- Employee participation
- Accelerated Improvement Workshops (AIWs)
 - Individual work areas improvements



Waste Elimination Focus Areas

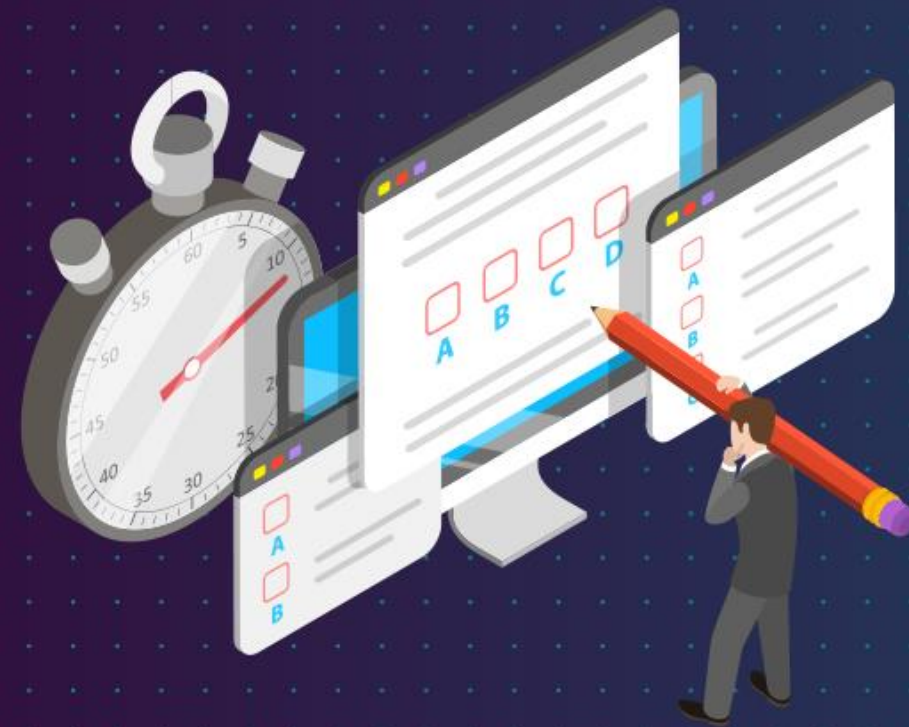
- Complexity
- Labor
- Overproduction
- Space
- Energy
- Defects
- Materials
- Idle materials
- Time
- Transportation
- Unsafe acts



Summary

- Lean in manufacturing
- Background
- Boeing's Lean implementation journey





Knowledge Check

Knowledge Check

1

Which department of Boeing started Lean implementation?

- A. Factory shopfloor
- B. Engines department
- C. Commercial airplanes division
- D. Waste and recycle department



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The correct answer is **C**

Boeing started Lean implementation in the commercial airplanes division in the year 1996.