

# LEAN Project Management Avoid Waste

Presented by

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Professional Development Week 2019

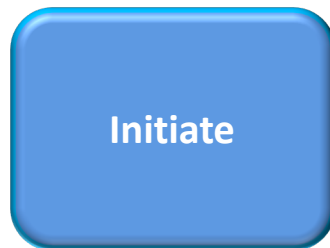
# Objectives

- Identify methodologies involved when planning a transformation project
- Identify the sources of waste during project management
- Integrate change management and project management

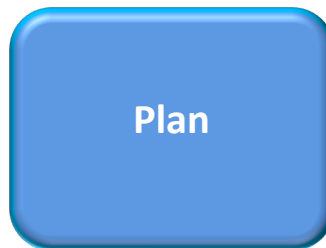
# Session Outline

- Principles of LEAN project management: 30 minutes
- Exercises on “waste”: 30 minutes
- Change management: 30 minutes

# Project Management Processes



What is the problem to solve?  
Business case



- What product (Scope, Quality)
- What tasks (Time)
- What resources (Cost)
- What are the risks?



- Transformation tasks
- Change Management
- Risk Management
- Procurement
- Project Performance Data



Lessons learned during Transformation project

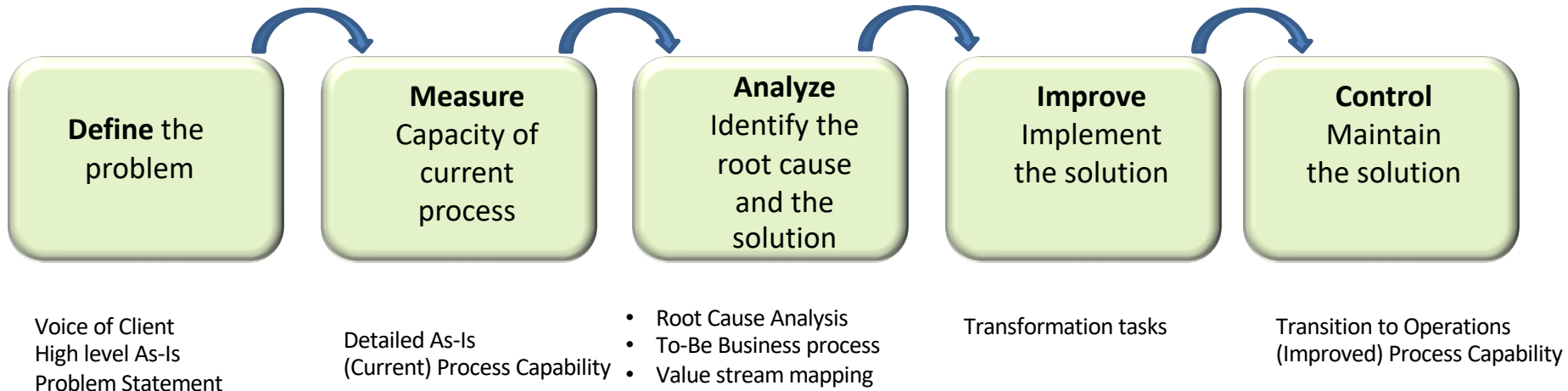
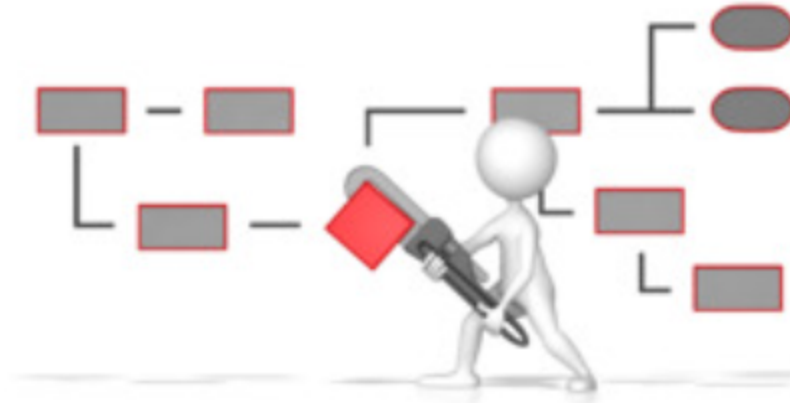
# Project Management Controls



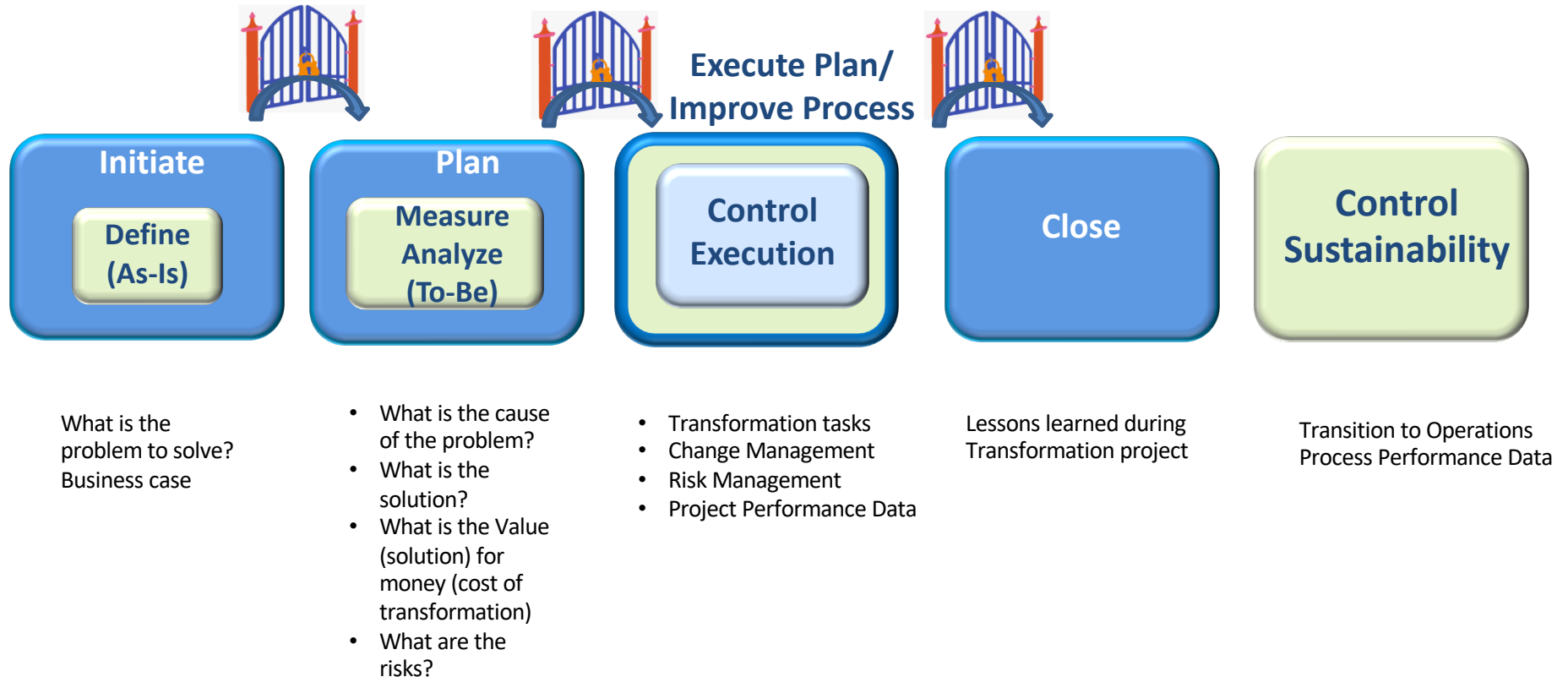
- 4.1.3 Embedding within the project and programme framework an approach to project gating\*

\* Directive on the Management of Projects and Programmes, TBS April 2019

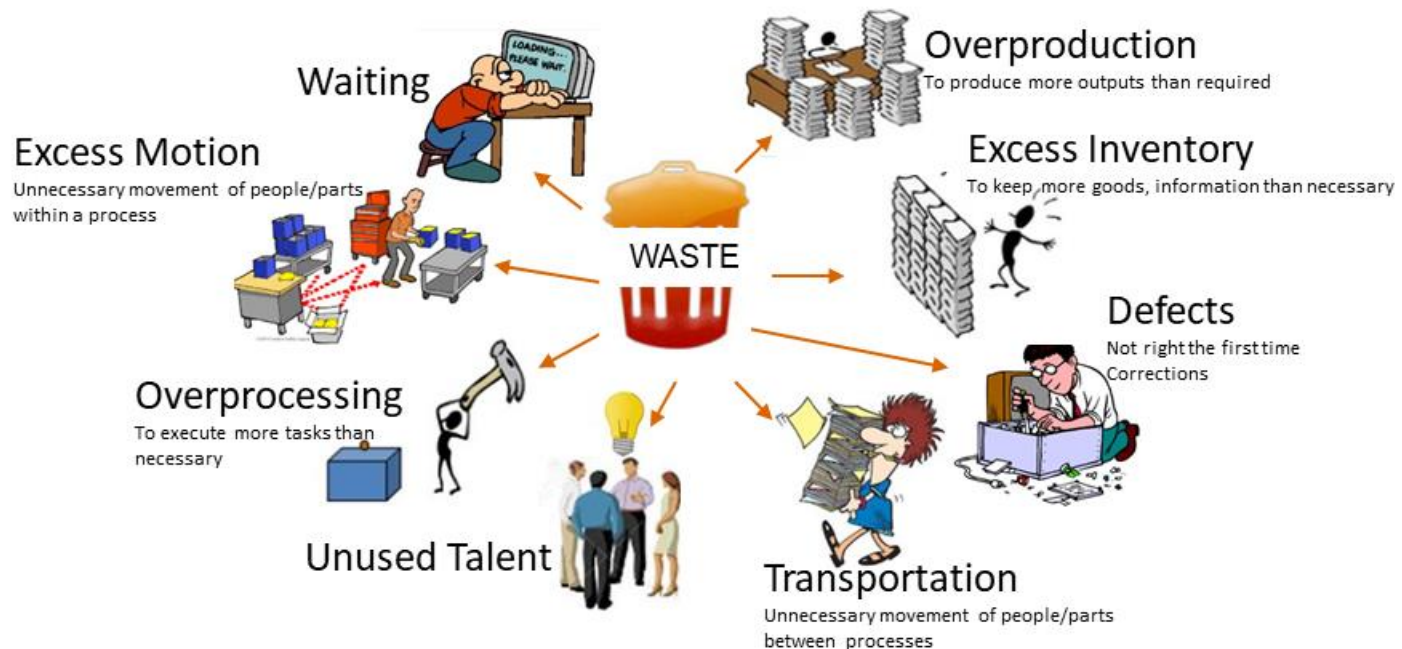
# LEAN Process Transformation: DMAIC



# LEAN Project Management - Transformation projects



# LEAN Obsession: eliminate waste



- **DOWNTIME**: **D**efects, **O**verproduction, **W**aiting, **N**ot used talent, **T**ransportation, **I**nventory excess, **M**otion waste, **E**xcess processing



# Eliminate Waste in Project Management Processes



- Both value and waste are created during the project lifecycle
- Scope
  - Value (quality) : what the client wants
  - Waste (scope creep): what the client would not agree to pay for
- Cost - resources
  - Identifying “only” required resources
- Time
  - Identifying “only” required activities





# Unused Talent



- Identify required/available competencies
- Expert carrying out administrative tasks
- Administrative/repetitive tasks that could be automated
- Meetings with many participants
- Strategy Push vs Pull
  - Officers assigned to only specific tasks (dispatching)



# Over production (Scope)



## Deliverables

- Verify required features with Client and communicate requirements to expert
- Integrate quality control activities

## Management documents

- Avoid complex templates to fill for “traversing” a gate
- Avoid complex templates to justify change requests
- Leverage project plan to produce progress reports



# Excess Motion (Time)

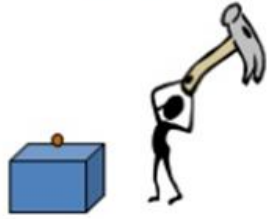


During execution, monitor task switching



Source: Gerald Weinberg, Quality Software Management: Vol. 1 System Thinking

Searching for, Information, People (contact list), Facilities (conference rooms), Equipment (computer, boards, stationary, etc)



# Over processing (Time)



## Excessive Tasks

- Avoid too many controls
  - system approval and manual approval;
  - going up the entire hierarchy,
  - committees
- Avoid reviewing documents excessively (format, terminology, phrasing, punctuation, etc). Produce to “good enough”
- Record same information in many places
- Reconcile information recorded in many places



# Transportation



- Needlessly moving people for meetings
- Moving digital documents around instead of sending links
- Printing hardcopy documents



# Waiting



During initial planning, reduce slack time  
During execution, manage risks. Mitigate to avoid waiting for:

- Approvals
- Contracts to be awarded
- Security
- Information, explanations to be available
- Equipment, facilities



# Excess Inventory (Cost)



Too many documents, emails, goods, data, etc.  
During project execution, organize all project documents as they become available, provide standards and guidelines:

- Classification and document versions:
- Software to use
- Data to capture in systems





# Defects (Cost)



## Deliverables

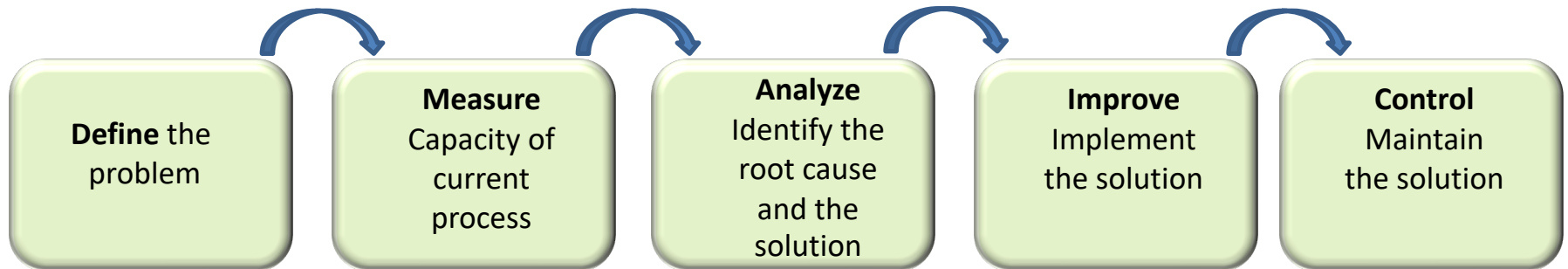
- Wrong resource assigned to the task
- Insufficient quality control tasks

## Management documents

- Overly optimistic project plan
- Wrong assumptions
- Capturing bad/wrong data during monitoring
- Producing inaccurate progress reports from optimistic/insufficient data









# Exercise

- Apply Lean principles to improve project management











- Identify the type of waste in each situation









# Situations 1-5

Situations								
	Wait	Excess Movement	Excess Inventory	Over process	Over produce	Defect	Transport	Unused Talent
1. The project charter does not specify any constraints or assumptions								
2. Meeting minutes relay all the discussions that took place during the meeting								
3. Clients must fill a change request form to request a change and they can't find the template. They ask their colleagues for help.								
4. Progress reports relate all events that happened since the last report								
5. Every email between the project authority and the project manager is kept in a file								








# Solutions 1-5

Situations								
	Wait	Excess Movement	Excess Inventory	Over process	Over produce	Defect	Transport	Unused Talent
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2. Meeting minutes relay all the discussions that took place during the meeting					✓			
3. Clients must fill a change request form to request a change and they can't find the template. They ask their colleagues for help.		✓						
4. Progress reports relate all events that happened since the last report					✓			
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# Situations 6-10

Situations								
	Wait	Excess Movement	Excess Inventory	Over process	Over produce	Defect	Transport	Unused Talent
6. Deck for senior management has 30 pages								
7. The invoices are recorded in the financial system and on the project log								
8. A contract is printed, signed, scanned and sent to the supplier for signature								
9. A resource has not obtained his/her security clearance to start work as planned								
10. Project manager searches for all the timesheets and invoices submitted so far								









# Solutions 6-10

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# Situations 11-15

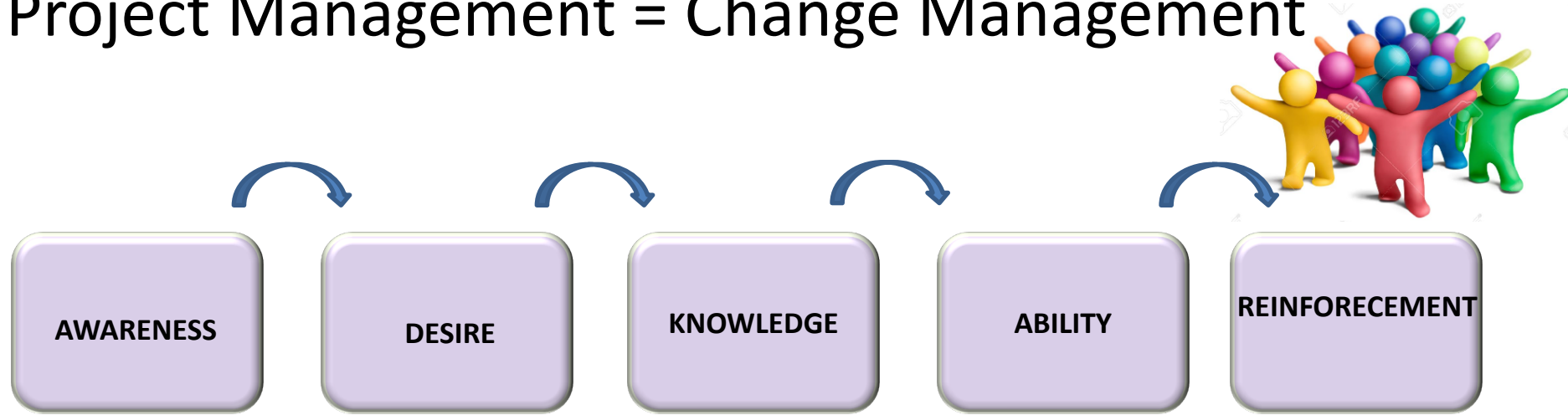
Situations								
	Wait	Excess Movement	Excess Inventory	Over process	Over produce	Defect	Transport	Unused Talent
11. A bilingual person is tasked to translate all communication material								
12. The project manager modifies the project plan when the timesheets are submitted								
13. All project deliverables are submitted to the Committee for approval								
14. There are many versions of the project plan								
15. Project Manager's schedule is mobilized by a series of meetings								

# Solutions 11-15

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14. There are many versions of the project plan			✓					
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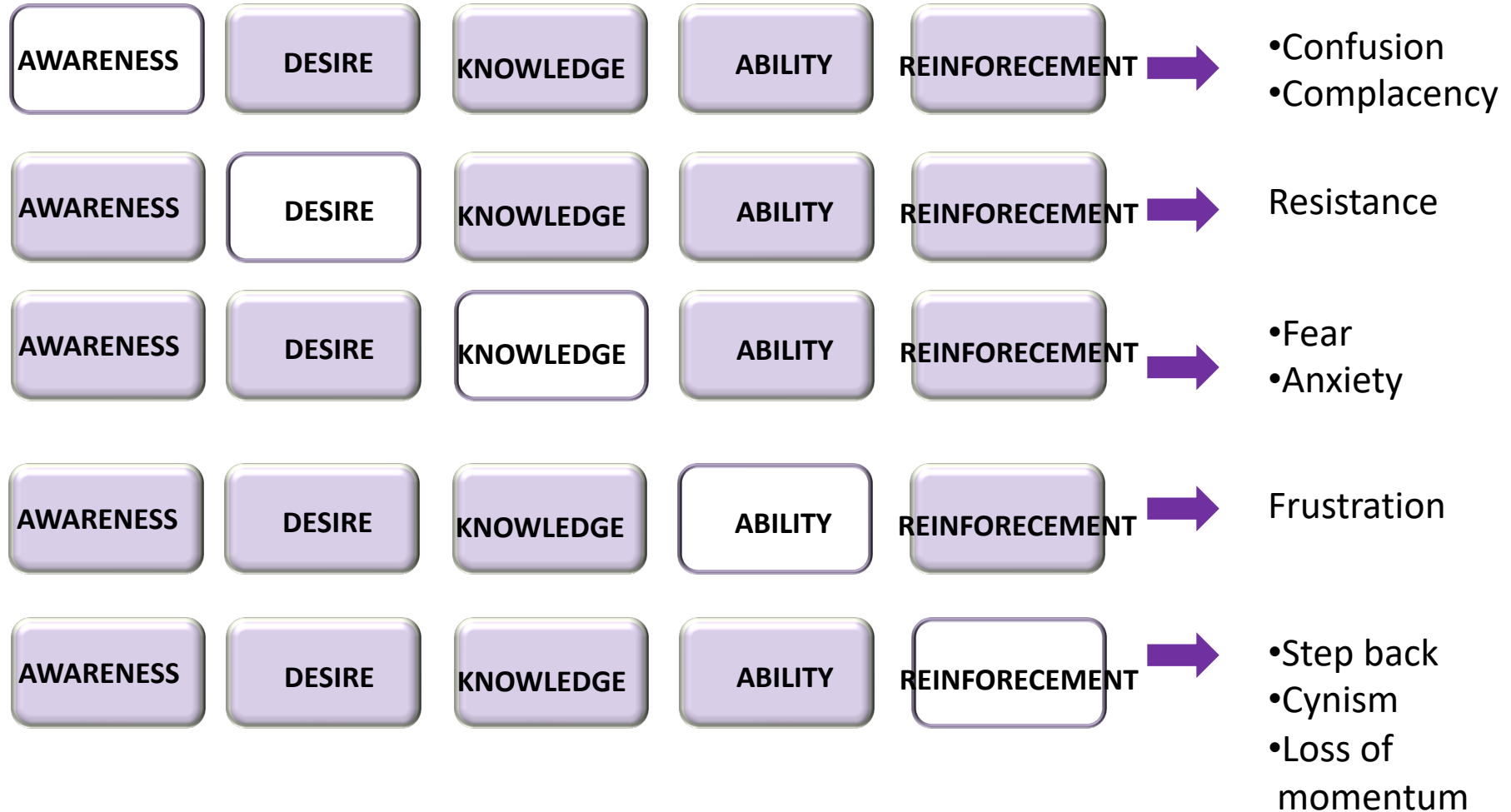
# Project Management = Change Management



## Change management focused on individual - ADKAR

- **Awareness:** all staff must be aware of waste situations
- **Desire:** What are the incentives to avoid waste and consequence to do/not do so
- **Knowledge:** Training, coaching, information
- **Ability:** capacity and authority to eliminate waste
- **Reinforcement:** sustainability of the initiative through KPIs

# A missing step in ADKAR = Failed change

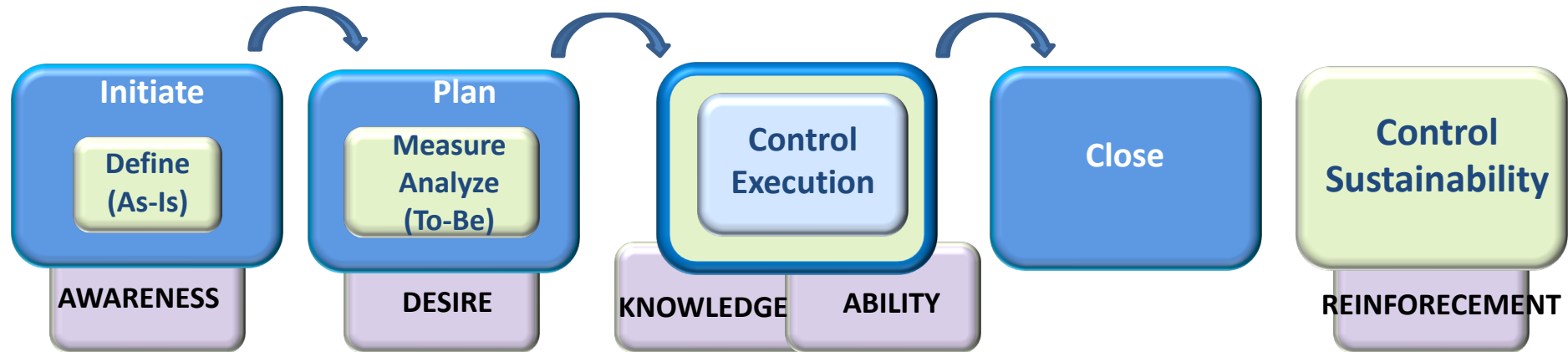




# Waste during Change Management

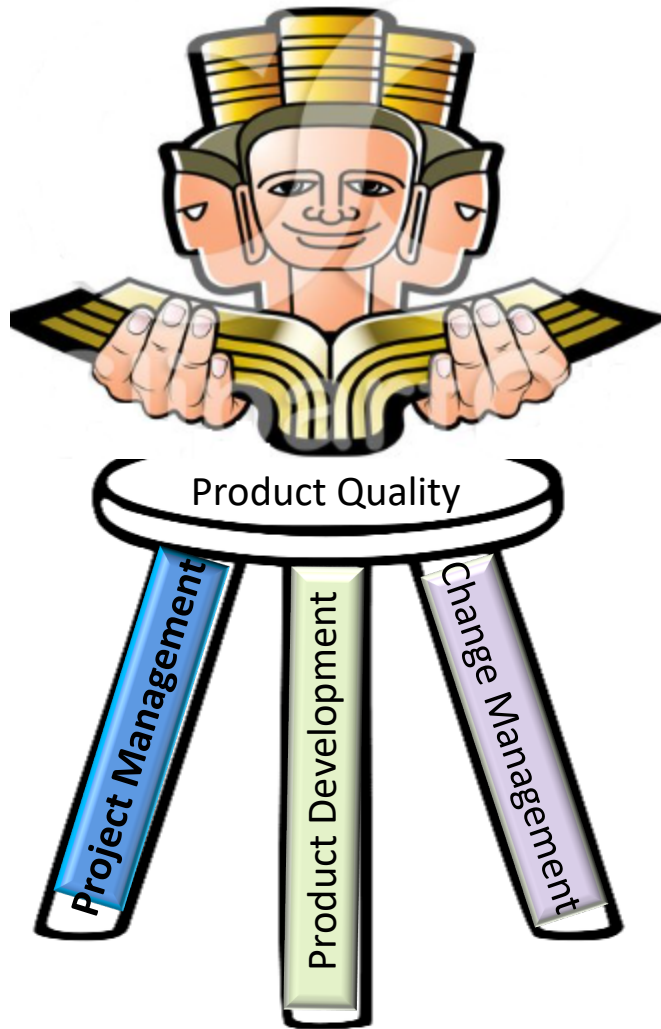
- **Awareness:** Stakeholder engagement
  - Unused Talent: stakeholders communicate to others
- **Desire:** Gap analysis
  - Defect: wrong criteria to analyze gaps
  - Overproduction: too much analysis - use a baseline
- **Knowledge:** SoPs, Training, coaching
  - Unused Talent: peer to peer training, coaching
  - Excess Motion: Just-in-time online training
  - Excess Inventory: theoretical, useless training material
- **Ability:** capacity and authority to eliminate waste
  - Unused talent: limit change initiation to management levels
- **Reinforcement:** sustainability of the initiative through KPIs
  - Waiting: Updating Job description, KPIs
  - Overprocessing: too many KPIs

# Integrated Methodologies



- Project Management
- Product Development
- Change Management

# Conclusion



Successful Project Management conditions

- Multidisciplinary endeavour
- Project Manager must have a good understanding of how all the pieces fit together
- Project Manager specialized in the Product Development Methodology
- Combined with LEAN will produce
  - Quality result
  - On time
  - On budget