# What does Continuous Improvement Involve? CI Master Class

**Definition**: CI is an ongoing effort to improve products, services, or processes. These efforts can seek "incremental" improvement over time or "breakthrough" improvement all at once. Delivery (customer valued) processes are constantly evaluated and improved in the light of their efficiency, effectiveness and flexibility. They are a prime method for driving change in business

### CLASSICAL PROVEN TECHNIQUES

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| 1 | PDCA - DEMING Cycle (Plan, Do, Check & Act), Six Sigma, DMAIC (Define, Measure, Analyse, Improve, Control), Route Cause/Fault Tree Analysis, Ishikawa/Fishbone (Cause & Effect) Diagrams, PARETO, Histograms |
| 2 | Total Quality Management (TQM), Lean Tools (Value Stream Mapping, Standard Work, Poke-Yoke, One Piece Flow, TPM, KANBAN Demand Pull, FMEA, SMED Quick Changeover) |
| 3 | Toyota's Kaizen, 5 Whys, 5S (Sifting, Sorting, Sweeping/Cleaning, Spick and Span, Sustain), Visual Management Techniques including daily stand-up meetings |

### ASSESSMENT

**Criteria to establish 'AS IS' State**

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| 4 | Brainstorming Events |
| 5 | Business Process Flow |
| 6 | Company Values |
| 7 | Control Charts, Measurement & Check sheets |
| 8 | DILO - Day in the Life of |
| 9 | Employee Skills Assessment |
| 10 | Gemba Walks |
| 11 | Human Resource Department |
| 12 | Interview & Leavers Process |
| 13 | Kanban Initiatives |
| 14 | Lean Initiatives |
| 15 | Mission Statement |
| 16 | Organisational Policies |
| 17 | Organisational Processes |
| 18 | Organisational Quality |
| 19 | Participation in Daily Stand-up Meetings |
| 20 | Six Sigma Initiatives |
| 21 | Staff Turnover and Feedback |
| 22 | Standardised colour schemes for symbols |
| 23 | Talent Management Initiatives |
| 24 | Value Stream Mapping |
| 25 | Visual Management Initiatives |
| 26 | WILO - Week in the Life of |

**Why CI Initiatives often fail**

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| 71 | Business Systems/Processes don't support CI |
| 72 | Failure to implement a CI Culture |
| 73 | Lack of Enduring Corporate Call Up Support |
| 74 | Lack of Management Support |
| 75 | Lack of Motivated Change Agents |
| 76 | Lack of Stakeholder Engagement |

### TOOLS & TECHNIQUES

**Methods of moving from the 'AS IS' State to the 'TO BE' State**

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| 27 | 5 Whys is a technique for finding the root cause of a problem |
| 28 | Business Process Model and Notation (BPMN) |
| 29 | Business Process Mapping & Re-engineering via Burning Platform Initiatives |
| 30 | Catchball - A rapid improvement project then throws out for feedback, support, action |
| 31 | Check effectiveness of communication channels (send and receive) |
| 32 | Check employee wellness records, absence, holidays being taken, fitness |
| 33 | Check if employees can move innovative ideas through the organisation |
| 34 | Check individual and collective responsibility for actions and results |
| 35 | Check levels of collaboration within teams, between teams, outside teams |
| 36 | Check levels of individual, team and collective support being provided |
| 37 | Check office environment for comfort, efficiency, flow, purpose, space |
| 38 | Check the performance and reward process to see what is being promoted |
| 39 | Conduct Interviews and observe behaviours, practices and the environment |
| 40 | Conduct surveys to determine employee agility, concerns and well being |
| 41 | Deming Cycle - Plan, Do, Study, Adjust |
| 42 | DMAIC Methodology - define, measure, analyze, improve, control |
| 43 | Hoshin Kanri (also called Policy Deployment) is a strategic planning method |
| 44 | Problem on a Page (A3) that documents the results from the PDCA cycle |
| 45 | Seiri (sort), seiton (set), seiso (shine), seiketsu (standardize), and shitsuke (sustain) |
| 46 | Skills Framework for the Information Age (SFIA) |
| 47 | Standard work is the documentation of the best practices for any process or task |
| 48 | The training and use of change agents within the organisation |
| 49 | Training Needs Analysis to help bring along the Train the Trainers |

**Continuous Improvement Principles**

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| 77 | Improvements are based on small changes, not major paradigm shifts or new inventions |
| 78 | Ideas come from employees and let things fail fast to stop you papering over the cracks |
| 79 | Incremental improvements are typically inexpensive to implement |
| 80 | Employees take ownership and are accountable for improvement |
| 81 | Improvement is reflective and requires constant feedback to move forward |
| 82 | Improvement is measurable and potentially repeatable |

### ATTRIBUTES & MATURITY

**Attributes to evaluate organisation culture**

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| 50 | Levels of Respect and Fairness |
| 51 | Levels of Change/Adaptability |
| 52 | Levels of Communication |
| 53 | Levels of Decision Making |
| 54 | Levels of Employee Engagement |
| 55 | Levels of Goals/Strategy flowed down |
| 56 | Levels of Learning Opportunities |
| 57 | Levels of Meaning and Purpose |
| 58 | Levels of Responsibility and Accountability |
| 59 | Levels of Results Orientation Behaviours |
| 60 | Levels of Teamwork and Collaboration |
| 61 | Levels of Trust and integrity |

**9 Steps of Organisational Maturity (Processes, Products & People)**

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| 62 | Process & Practice Maturity - bespoke vs standardised working |
| 63 | Professional Body Support - make it up vs latest standards/methodologies |
| 64 | Product Normalisation - new/divergent TRL/MRL vs mature evolving |
| 65 | Technical Flexibility - Static Standalone vs Modular Evergreen |
| 66 | Product Market Maturity - New customers vs existing customer base |
| 67 | Discipline - lack of any vs too strict to allow any initiatives to go ahead |
| 68 | Corporate Infrastructure - levels of supporting capabilities to help deliver |
| 69 | Talented People - Time to train resources and let them gain experience |
| 70 | Knowledge Economy - number of approved problem solving tools & models |

**Visual Management Principles**

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| 83 | Detect anomalies from baselines, preset values or other criteria |
| 84 | Helps reinforce standards, work ethics, standardised work, escalations |
| 85 | Ensure stability and safety in the workplace |
| 86 | Show what is expected from employees, individuals and teams |
| 87 | Keep people informed about production status and customer needs |
| 88 | Always visible - Show location, directions, aims, accountability, next steps |

### References

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