

# GUIDE

## How to Implement a Continuous Improvement Strategy

# Introduction

**In today's economic environment, manufacturers that are not constantly improving their products, services, and processes and adopting more agile approaches risk falling behind their competitors.**

Implementing a continuous improvement strategy benefits large and small manufacturers across all manufacturing sub-sectors.

Continuous improvement is well rooted in manufacturing, with Kaizen, a Japanese business philosophy, being one of the most recognised methods of continuous improvement in manufacturing. But what is continuous improvement, and why is it such an important business practice?

*This article looks at what continuous improvement is, its benefits and how to implement a successful continuous improvement strategy.*



## What is Continuous Improvement?

**Continuous improvement is a philosophy that aims to constantly adapt processes, products, and services in order to benefit from incremental improvements. The belief is that making small changes over time will lead to massive improvements.**

Effective continuous improvement involves employees being actively involved in identifying areas for improvement, implementing changes, and monitoring the results to ensure that the changes have had the desired effect. The process is then replicated over and over, forming a cycle of continuous improvement.

Kaizen is a widely recognised approach for achieving continuous improvement. It translates to 'changes for the better' or 'continuous improvement', and originated in the Japanese manufacturing industry, most famously at Toyota, to eliminate waste and improve efficiency.

The model involves implementing small changes over time, where all employees, from front-line workers to senior management, participate in a structured process to identify areas for improvement, implement changes, and continuously monitor and evaluate results.

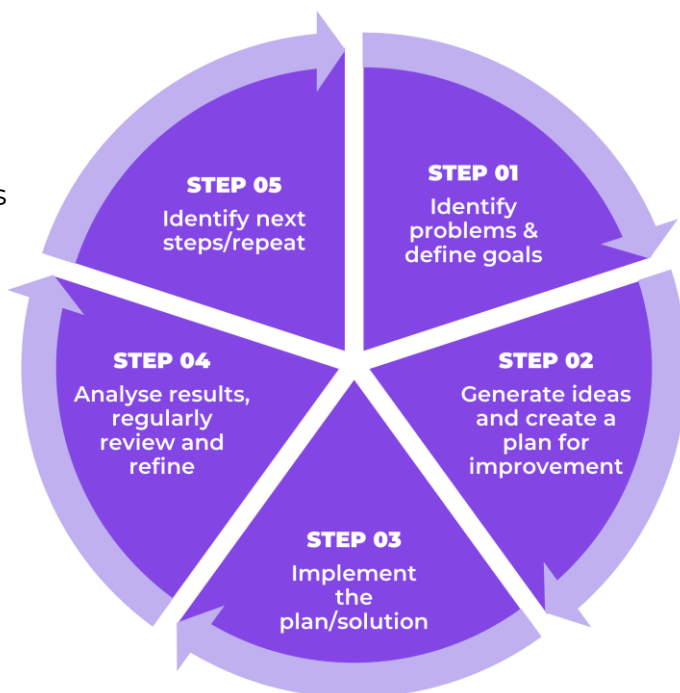


Image shows a typical Kaizen process

## What are the core principles of Continuous Improvement?

Continuous improvement is a fundamental principle of business, particularly in manufacturing, that seeks to enhance and optimise company performance and output. There are several core principles that are crucial for achieving success in a continuous improvement program. These include:

### **Employee Ideas Are Valuable**

The first principle of continuous improvement is the recognition that ideas from employees are valuable. In a bottom-up improvement model, employees are closer to the problem and therefore better equipped to solve it. Encouraging and empowering employees to implement and share their ideas with the organisation can lead to significant benefits over time.

To engage employees in the continuous improvement process, companies should create an environment that fosters idea-sharing. Instead of asking employees to come up with extensive ideas, companies can ask them to identify small improvements that can save time or reduce effort.



## Encourage Responsibility Through Empowerment

Employees can be resistant to change, particularly when it impacts their work routines. However, companies can mitigate this resistance by involving employees in the continuous improvement process. Empowering employees to contribute to the improvement process can lead to greater buy-in and increased engagement.

Keeping employees involved in the process allows them to take ownership of their work and become leaders within their roles. This allows them to identify potential solutions, implement them, and see the positive results of their efforts. As a result, managers can spend more time coaching employees and removing obstacles that may hinder the implementation of changes.



## The Continuous Improvement Model

The continuous improvement model is a systematic approach to improving processes, products, and services. **It consists of four key steps:**

### 01 Plan

Identify the business area that needs improvement and develop a plan for implementing the change, for example, increased staff training or utilising new technologies. It is useful in this step to form well-defined goals.

### 02 Do

Implement the change on a small scale. Be sure to record and track the impact of the changes.

### 03 Check

Measure the results to see if the change has had the desired effect. Ask yourself why or why not. If the changes didn't have the desired outcome, ensure you have collected enough relevant data from employees and stakeholders and go back to the beginning. If they did, continue to the next step.

### 04 Act

If the change has had the desired effect, implement it on a larger scale. This will now become the baseline from which you will continue your continuous improvement projects.

This model is widely used in quality control/management and process improvement.



# An Outline Of The Continual Improvement Process

As the name suggests, continuous improvement is not a one-time project but a continual process that involves everyone in the organisation. It requires a culture of continuous learning and improvement. The process involves the following steps:

## **Identify Areas For Improvement**

The first step is to identify your key areas for improvement. This can be done through various methods, including customer feedback, employee suggestions, and process analysis.

## **Analyse The Current Process**

Once you have identified the areas for improvement, the next step is to analyse the current process. This involves gaining a deep understanding of how the process works, identifying bottlenecks and inefficiencies, and determining the root cause of the problem.

## **Develop A Plan For Improvement**

Based on the findings from the analysis, a plan for improvement should be developed. The plan should include specific goals, actions, timelines, and measures of success.

## Implement The Plan

The next step is to implement the plan on a small scale. This allows for testing and adjustment before rolling out the changes on a larger scale.

## Monitor The Results

After implementing changes, it is important to track their impact to assess the outcomes. Manufacturers can assess the effect of changes by reviewing analytics, comparing delivery times and speaking to employees.

## Evaluate The Results

Review your results and evaluate the effectiveness of the change. If the effect of the changes matches your goals, i.e., have the desired outcome, they should be implemented on a larger scale.

If not, the process should be repeated, and additional improvements should be identified.





## Benefits Of Continuous Improvement



### Employee Engagement

Continuous improvement involves everyone in the organisation and encourages employee participation. This leads to greater engagement, job satisfaction, and morale. Employees tend to have more exposure to business shortcomings and issues, making their ideas highly valuable and useful for process improvement.



### Lower Staff Turnover

When employees feel engaged and valued, they are more likely to stay with the company. This reduces staff turnover and the associated costs of recruitment and training.



### Better Customer Satisfaction

Continuous improvement leads to higher-quality products and services, improving customer satisfaction and loyalty.



### Improved Learning Culture

The culture of continuous learning and improvement created through continuous improvement leads to a more proactive and innovative culture.

## Benefits Of Continuous Improvement



### Higher-Quality Products And Services

Identifying product and service issues helps to create a clear strategy for change, improving the quality of products and services to drive loyalty and profits.



### Productivity

Adapting agile practices and correcting errors in manufacturing operations leads to increased productivity through the identification and elimination of inefficiencies and bottlenecks, machine monitoring software is a technology that manufacturers can use to improve productivity and support a continuous improvement culture.



### More Efficient Delivery

Continuous improvement leads to higher-quality products and services, improving customer satisfaction and loyalty.



### Fewer Errors

Continuous improvement can lead to a lower error ratio through the identification and elimination of errors and defects. This is of particular use for manufacturers using OEE to measure productivity, namely quality.

## Benefits Of Continuous Improvement



### **Safer Workplace**

The identification and elimination of hazards and the implementation of best practices can lead to an overall safer workplace.



### **More Accurate Insights**

A successful improvement strategy requires a deep understanding of the organisation's objectives and strategies. This leads to more informed decision-making and strategic planning. Manufacturers using machine data monitoring can see data in real time and make proactive corrective actions to production issues before they cause bottlenecks.



### **Innovation**

Continuous improvement promotes research-backed and stakeholder-supported innovation and creativity, leading to the development of new products, services, and processes.



### **Increased Competitiveness**

Constant iterations, feedback, and improvements lead to higher-quality products and services, which makes the organisation more competitive in the marketplace.

## Benefits Of Continuous Improvement



### Reduced Waste

Identifying inefficiencies helps to reduce waste, which leads to cost savings, improved sustainability and increased profitability.



### Increased Profits

As well as the elimination of waste, improvement of processes, and the development of new products and services can increase profits.

## Continuous Improvement And Lean Manufacturing

Continuous improvement is a central concept in lean manufacturing, a methodology focused on maximising value while minimising waste. Lean relies on the constant identification and elimination of waste, and continuous improvement is the means by which this is accomplished.

## Continuous Improvement And Six Sigma

Six Sigma is a quality management methodology that focuses on reducing variability and improving predictability within organisations. By utilising data-driven and disciplined approaches, Six Sigma aims to produce consistent and stable process results. Statistical analysis is used to identify areas for improvement and track progress towards goals. The system emphasises continuous quality improvement and is an effective tool for organisations seeking to achieve greater levels of efficiency and quality.

## How Technology Supports Continuous Improvement

Technology such as manufacturing software and analytics have revolutionised the way manufacturers can approach continuous improvement.

With the right tools, teams can analyse data and identify trends to more easily identify areas for improvement. Using data to identify the root cause of problems enables teams to develop more targeted solutions to improve their processes.

Real-time machine analytics are particularly useful for manufacturers seeking continuous improvement. Software like FourJaw enables manufacturers to identify bottlenecks, downtime, production issues, production time, OEE and much more. Using both historic and real-time data makes it easier for teams to track progress and measure success.

Continuously collecting and analysing data means manufacturers can see the impact of their continuous improvement efforts over time, helping them to make informed decisions about what changes to make next.

FourJaw's machine monitoring capabilities allow teams to collect and analyse data on various metrics such as productivity, cycle time, and quality. Tracking these metrics over time allows teams to identify key areas for improvement and track their progress towards their goals. Additionally, FourJaw's advanced reporting features provide a visual representation of data, making it easier for teams to interpret and communicate their findings to stakeholders.

The use of machine monitoring software and analytics is essential for manufacturers to implement continuous improvement, giving them the power to make data-driven decisions, track progress and measure success.





# Discover more about FourJaw

**FourJaw Manufacturing Analytics is a SaaS technology company made up of a diverse team of talented individuals, who individually and collectively share a passion to harness the power of technology to drive efficiency, productivity and profitability for manufacturers throughout the world.**

## Customer Success Stories

We're big advocates of promoting best practices, so we have a number of customer success stories that show how manufacturers just like you have installed and used FourJaw to enable them to overcome challenges on their shop floor.

[Learn from your industry peers](#)

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