



# **SNS COLLEGE OF ENGINEERING**

**Kurumbapalayam (Po), Coimbatore - 641 107**

**An Autonomous Institution**

**Accredited by NBA - AICTE and Accredited by NAAC - UGC with 'A' Grade  
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai**

**DEPARTMENT OF MANAGEMENT STUDIES**

**COURSE NAME : 19BA204 OPERATIONS MANAGEMENT**

**I YEAR / II SEMESTER**

**UNIT 4 - MATERIALS MANAGEMENT**

## Work in process

- ❖ Work in process, work in progress, goods in process, or in-process inventory are a company's partially finished goods waiting for completion and eventual sale or the value of these items.
- ❖ These items are either just being fabricated or waiting for further processing in a queue or a buffer storage.



## What is Lean Manufacturing?

- Lean manufacturing is a production process based on an ideology of maximising productivity while simultaneously minimising waste within a manufacturing operation.
- The lean principle sees waste is anything that doesn't add value that the customers are willing to pay for.
- The benefits of lean manufacturing include reduced lead times and operating costs and improved product quality.



## How Does Lean Manufacturing Work?

- ❖ The core principle in implementing lean manufacturing is to eliminate waste to continually improve a process.
- ❖ By reducing waste to deliver process improvements, lean manufacturing sustainably delivers value to the customer.

## Why is Lean Manufacturing Important

- ✓ Eliminate Waste
- ✓ Improve Quality
- ✓ Reducing Costs
- ✓ Reducing Time

## What is the Meaning of Lean Manufacturing?

- ❖ Lean manufacturing entails streamlining processes and procedures to eliminate waste and thereby maximise productivity.

## Wastes of Lean Manufacturing

- ✓ Unnecessary transportation
- ✓ Excess inventory
- ✓ Unnecessary movement of people, equipment or machinery
- ✓ Waiting – either people or idle equipment
- ✓ Over-production of a product
- ✓ Over processing or adding unnecessary features to a product
- ✓ Defects that require costly correction

## Finished goods

- Finished goods inventory is the total stock available for customers to purchase that can be fulfilled.
- Using the finished goods inventory formula, sellers can calculate the value of their goods for sale.
- 'Finished goods' is a relative term, as a seller's finished goods may become a buyer's raw materials.



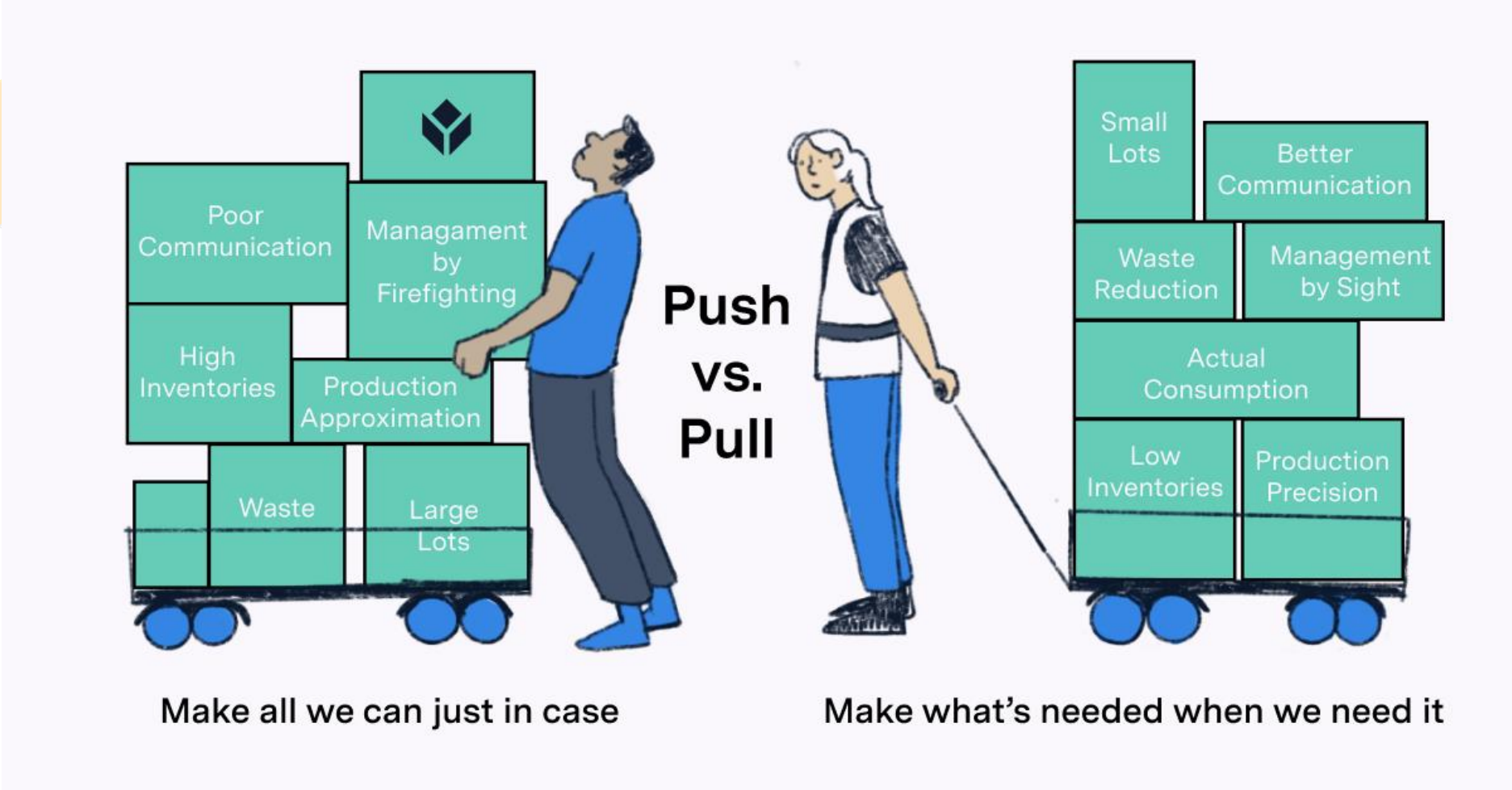
## What is a Push System vs a Pull System?

In a **push**-based supply chain, products are pushed through the channel from production up to the retailers.

This means that production happens based on demand forecast.

In a **pull**-based supply chain, procurement, production, and distribution are demand-driven rather than based on predictions.

Goods are produced in the amount and time needed.





## **What is a Pull System?**

A pull system is a Lean technique for reducing the waste of any production process. Applying a pull system allows you to start new work only when there is customer demand for it. This allows you to reduce overhead and optimize storage costs.

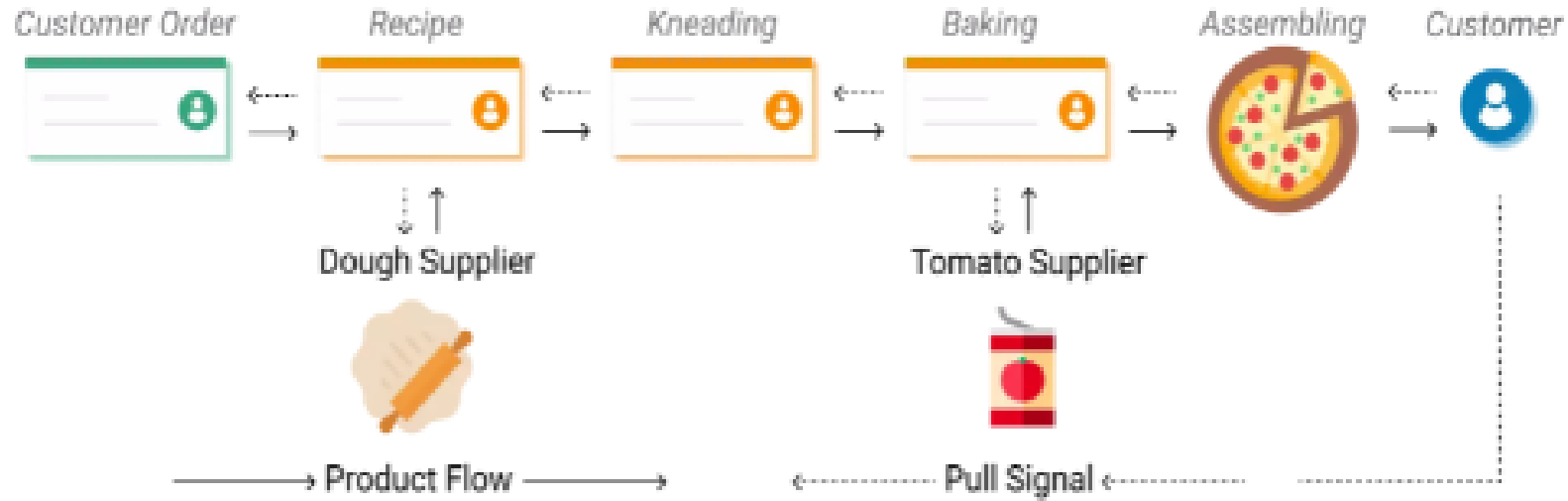
## **Why Is Pull Better Than Push?**

The purpose of implementing a pull system is to build products based on actual demand and not on forecasts. By doing so, your company can focus on eliminating waste activities in the production process. As a result, you'll be able to optimize your resources and reduce the possibility of overstocking.

External Loops

Internal Loops

External Loops



REQUESTED	IN PROGRESS	DONE
<p>1772 John </p> <p>Task 4 </p> <p>New subtask...</p>	<p>1771 david </p> <p>Task 3 </p> <p>New subtask...</p>	<p>1769 david </p> <p>Task 1 </p> <p>New subtask...</p>
<p>1773 None </p> <p>Task 5 </p> <p>New subtask...</p>		<p>1770 John </p> <p>Task 2 </p> <p>New subtask...</p>

## Advantages of Using a Pull System

- ✓ Quickly adapt to changes that may occur in the work process
- ✓ Scale the optimal capacity of your team
- ✓ Deliver work items much faster
- ✓ Reduce waste of resources
- ✓ Increase productivity
- ✓ Improve flow efficiency



**THANK YOU**