

Inventory Management

You would use this approach to understand the true cost of inventory to your business and make better decisions on how much inventory to hold.

Projected performance gains



Reduced

- Costs



Increased

- Inventory accuracy



Improved

- Communications with customers regarding availability

What investment is needed to understand the concept?

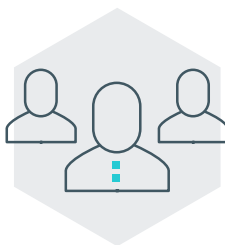
DIFFICULTY



Medium

Requires some reading around the subject and a structured approach.

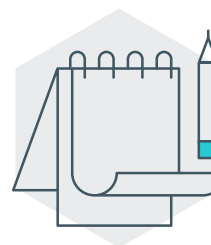
ACTIVITY



Team

Best results come from a team of employees.

EQUIPMENT



None

No equipment is needed

Explanation of the concept

Inventory is made up of raw materials, work in progress, finished goods and bought in stock/factored items.

In the early 2000's, the Chartered Institute of Procurement and Supply (CIPS) undertook research to try to understand the true cost of Inventory to a manufacturing company. Their findings were quite startling, as they calculated that it costs on average 25-40% of the buy price of an item to keep it as inventory for one year.

The CIPS cost build up came from a combination of:

- Borrowing money to finance the inventory
- Cost of storing, moving and managing the inventory
- Obsolescence costs
- Insurance costs
- Taxes
- Deterioration/pilferage

Inventory is cash tied up that could be used more productively elsewhere. It is also true that the more you have, the harder it becomes to know what you have and where it is.

The focus should be to understand at all times how much inventory the business is holding, and why it is holding it.

Given the true inventory holding costs, any price reduction from buying in bulk should be considered carefully, along with the typical time the stock will take to move, be used or be sold.

As well as considering the costs identified by CIPS, its worth considering the Opportunity Cost - a term which is often used by economists. In layman's terms the "Opportunity Cost" of a resource is the value of the next-highest-valued alternative use of that resource. So, if storage space is tied up by slow moving or obsolete inventory, you may be short of funds to buy and space to store fast-turn-rate products that could make the company more money during the period of time that slow moving inventory has been stored.

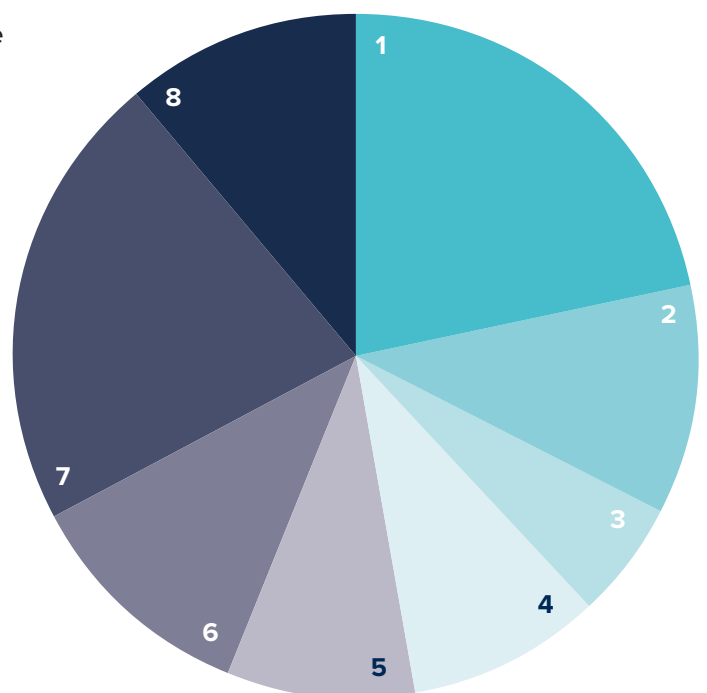
Use the principles of 5S to Sweep and eliminate obsolete stock, and consider minimising Transportation (one of the 8 wastes) by storing fast Moving inventory in the optimum location.

The True Cost of Inventory

Annual Inventory Costs = Total 25% – 40% of Inventory Value

Key:

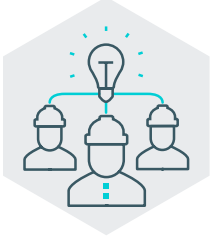
1. **Cost of Money:** 6 – 12%
2. **Taxes:** 2 – 6%
3. **Insurance:** 1 – 3%
4. **Warehouse Expenses:** 2 – 5%
5. **Physical Handling:** 2 – 5%
6. **Clerical & Inventory Handling:** 3 – 6%
7. **Obsolescence:** 6 – 12%
8. **Deterioration & Pilferage:** 3 – 6%



*Source CIPS 2004

What action should I take?

1.



Form a team of employees who buy or manage inventory items

2.



Talk them through the true cost of inventory

3.



Carry out a “wall to wall” stock check – count, item, length of time held in stock

4.



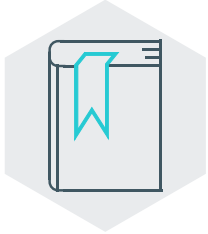
Calculate the true inventory holding cost using the CIPS guideline percentages

5.

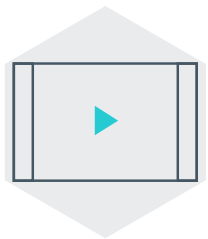


Use the results to make better decisions on what to hold in inventory and where to store the stock, based on frequency of use.

Recommended resources



Piasecki. D. (2009) Inventory Management Explained, Ops Publishing.
ISBN 978-0972763110



How to Calculate Inventory Carrying Costs:
<https://www.youtube.com/watch?v=B4vJIA6Wu84>

CIPS website:
<https://www.cips.org/>



[GC Business Growth Hub Factsheet 02: Lean Manufacturing Concepts](#)

[GC Business Growth Hub Factsheet 06: 5S Workplace Organisation](#)

Glossary

Inventory: raw materials, work in progress, finished goods and bought in stock/factored items.

CIPS: Chartered Institute of Purchasing and Supply, the professional body for procurement and supply in the UK

For more advice, case studies and additional factsheets visit: www.businessgrowthhub.com/manufacturing