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Just-in-Time management (JIT) is an operational strategic model based upon the JIT inventory management systems used by many manufacturing organisations and popularised by the Toyota Production System now commonly referred to as Lean Manufacturing.

The JIT concept focuses on the elimination of excess holdings of stock and materials which are instead created to meet demand, not stored in surplus or in advance of need. The idea was described by Henry Ford in his 1923 book, *My Life and Work*:

“We have found in buying materials that it is not worthwhile to buy for other than immediate needs. We buy only enough to fit into the plan of production, taking into consideration the state of transportation at the time. If transportation were perfect and an even flow of materials could be assured, it would not be necessary to carry any stock whatsoever. The carloads of raw materials would arrive on schedule and in the planned order and amounts, and go from the railway cars into production. That would save a great deal of money, for it would give a very rapid turnover and thus decrease the amount of money tied up in materials.”

A “Just in Case” buffer of stock or materials may be comforting to a production manager but is costly for the facility manager and for the organisation. Holding a lot of items in inventory means locking away a huge amount of cash unnecessarily. These items can be lost, stolen, or damaged, or they can deteriorate. They occupy space, which could otherwise be devoted to operations and they can become obsolete, particularly when products are improved or changed often. All of this represents financial loss to the business

Successful JIT depends on strong ties with the supply chain to ensure that supplies are available when required. With a secure source of supplies, improvements can be made to production and inventory systems thus increasing responsiveness to customer demand. If production demands vary the flow of supplies can be adjusted accordingly.

A key drawback of JIT is that it only works if suppliers can be relied on to deliver when they promise to which makes supply chain management a critical task. Another risk is if material costs suddenly increase, then storing them at a lower rate might have been a more economic option. Such risks must be carefully monitored but given the cost of real estate JIT can be a highly effective strategy for manufacturing and other organisations where any kind of materials or supplies need to be stored on site.

The MAS (Manufacturing Advisory Service) is one of the Government's Solutions for Business suite of offerings, partly funded by BIS (Department for Business, Innovation and Skills) and provides advice on a wide range of inventory and waste reduction strategies for business www.mas.bis.gov.uk