JIT – Just In Time (Production). Producing only what is required only how much is required and only when it is required. This is one of the three components of Total Quality Management (TQM). As the process tries to copy what is seen from outside – controlled inventory and producing at the required time – many times it resulted in reduced inventories without appropriate support systems; companies run with systems like 'two-bin kanban' or Vendor Managed Inventories for years without improvement.

What is so Great About JIT?

Why people talk so much about JIT? "It will reduce the amount of inventory we are holding; so, we will reduce the inventory carrying cost. What else?" I heard people so frustratingly ask this question. When we compare the actual saving from Flow Production System, the reduction in inventory carrying cost is negligible. JIT multiplies the earning capacity of your assets.

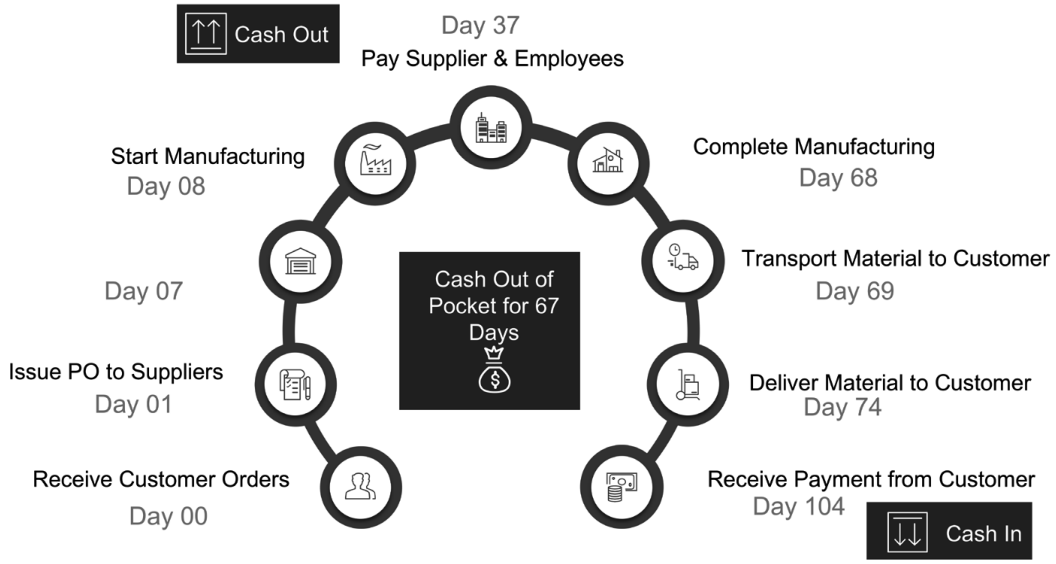

Image 41: The Velocity and Cash to Cash Cycle

Do you agree that when a customer is giving you an order, he is ready to pay you? Imagine he is holding money in his hands waiting for you to deliver the product or service and receive his money. The money he is holding against your order is literally your money. You take so much time to deliver goods or services to receive your money from the customer.

Business Cycle & Cash to Cash Cycle

Consider a manufacturing case. Suppose you received a customer order on day 0 and you deliver the requirement on day 74. You receive your payment for the supply on day 104 (with 30 days credit period).

But you need to pay to your supplier on day 37 (same 30 days credit period), pay salary to your employees and other overheads on day 37 (actually overheads to be paid by day 30; but here we considered day 37 for ease of calculation). On that day you are still 67 days away from receiving your money from the customer. Hence, you need to pay all your expense at least twice from your pocket. This is called Working Capital of an organisation.

The cycle of cash out (payments) and cash in (receivables) of working capital is called cash to cash cycle. And this is what TPS tries to reduce. By reducing this the working capital – actual burden on business is getting reduced.

What is Velocity of a Process?

So, what has to flow in a production? Conventionally, people – meaning, they have to work non-stop. Then the machines to run non-stop. Even today, we can see some Plant in-charges, driving the people and machines crazy to maximise output. That's ok, right?

But in Flow Production System, the material or information has to flow non-stop from Raw Material to Finished Product as quickly as possible. This is what we call as velocity (speed and direction). Higher the velocity better will be the profitability of the company.

If the velocity is increased, the cash-to-cash cycle time gets reduced. Consider our previous example, where we pay our dues on day 37 and customer makes payment to us on day 104. Here, the cash to cash cycle is 67 days. If we talk in money terms, the working capital earns a profit after 67 days.

Say your working capital is Rs. 1 lac and your profit margin is 10%, then your Rs.1 lac earns Rs. 10,000 as profit every 67 days. Hence, in a year, your Rs.1 lac rupees will earn approximately Rs. 60,000 as profit.

Imagine that we have reduced your cash to cash cycle time by 50% to 30 days. Now, wear an investor's spectacle! Your same Rs. 1 lac investment is going to earn Rs. 10,000 profit every 30 days; it goes around 12 times a year bringing you Rs. 1,20,000 as profit.