

Introduction reducing  
lead-time (jaffe et al,  
2007). lead-time



## **Introduction**

Just- in- time (JIT) as a form of inventory processing focus on reducing futile time, costs, and improving the quality of a product during the manufacturing process. The sequence of activities during this process includes; delivery, gathering of orders and shipment to the final consumer. JIT idea was first developed by Henry Ford. But later, it was adopted by Toyoda family. The JIT approach is essential for companies as it minimizes storage costs by eliminating stock levels and aid in utilizing warehouse space. The JIT philosophy “ inventory is waste and minimizing of inventory releases tied up capital”, ensures a company manufactures what is needed and at the right time hence saving on production costs. JIT inventory system stresses on the amount of time required to produce the correct order; at the right place and the right time. JIT system helps in reducing lead-time (Jaffe et al, 2007).

Lead-time is the time taken for a manufactured product to reach the final consumer. JIT reduces product cycle hastening faster delivery to intended consumer. Besides, JIT system minimizes inventory redundancy and obsolescence. This is achieved by JIT facilitating direct disposal of the finished product to the customer.

Further, JIT technique enhances product quality(Jaffe et al, 2007). This process is achieved through a total lean performance and quality circles which ensures a product passes the quality standard required.

## **JIT System at Dell**

Dell is one of the pioneer companies which have embraced JIT approach in its manufacturing and production activities.

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The Value added activities such as; a direct model is a business strategy has been possible by JIT. Dell uses the technique in customizing its production process, inventory management besides being a direct relationship with its customers and emphasized by Dell computer(Jaffe et al, 2007). Dell has encompassed the use of JIT in computer hardware and software to provide consumers with hi-tech services, updated technology, hi-tech products, customized computer systems and affordable products. JIT is a fundamental method used by Dell. It helps the company to reduce wastes by manufacturing only what is needed, delivering at the right place and in the right time.

## **Summary**

Companies which have instituted JIT system in their production and inventory management systems have gained significant benefits which the system brings. Such benefits are direct thus helping the company save cost thus increasing profit margin. Besides, efficiency and reliability is created in the company.

## **Main Section**

### **Dell and Its Products**

Dell is a worldwide computer company founded in 1984 by Michael S. Dell. It has strategic distributions outlets across the world. Dell is one of the leading companies embracing business strategies, innovation, and research in their business line of operation(Jaffe et al, 2007).

Dell deals with a wide range of computer hardware which includes digital cameras, home theaters, servers, desktop computers, laptops, printers,

monitors and CPUs. Besides, they provide customers with tailor-made Dell PC varying in prices depending on the model requested by the customer(Jaffe et al, 2007).

### **Outsourcing services**

Dell has outsourced its computer support services to other countries such as India. Besides support services, Dell has also outsourced manufacture of computers to various countries such as; Brazil, South Africa among other countries to reduce the costs thus boosting the profit margin. Also, Dell has formed a strong relationship with its competitors such as; HP (Hewlett & Packard) and Acer in outsourcing computer parts.

### **Customization**

With the ever fluctuating customer's need, dell has found it necessary to customize its products to cope with varying market trends. Dell has continuously embraced customization to create customer loyalty by brand dependability. Some of the products dell has customized includes; laptops and desktop(Song & Zhao, 2009). Dell has come up with different laptop models to counter the fluctuating customer wants.

For instance, dell is currently offering new generation laptops which are customized to accomplish specific consumer requirement. This strategy has helped Dell bind the consumers more tightly to their products. Dell has also customized its services such as on site engineering services and online system support which facilitates efficient and faster product usage and availability. Dell has also customized its supply chain operations and information technology tools to ensure that deliveries are convenient which

facilitates JIT. Customization has helped Dell eliminate obsolete thus concentrating in satisfying customers' needs(Jaffe et al, 2007).

## **Dell's JIT inventory control system and how it affects Customers**

JIT reveals diverse challenges in the management and help to provide solutions for improvement. This has helped Dell to significantly reduce its inventories. This has been important to Dell (Dooley et al, 2009). The operations of JIT at Dell is unique, this is in the sense that, the company need not to have custody of raw materials to service an order until the order is confirmed by the customer thus accomplishing in servicing the order in the shortest time possible. JIT approach has reduced the bulky of inventory management thus eliminating storage costs and obsolete product hence ensuring timely supply to the customer(Dooley et al, 2009).

### **Dell Suppliers**

Dell has continually strengthened its supplier base by formalizing the supply of materials to ensure that they are environmental friendly to enhance quality of a manufactured product. The suppliers have to ensure that the materials supplied are in compliant with Dell Restricted Material policy(Dooley et al, 2009). Implementing suppliers policy ensures that Dell maintain less direct inventory in its manufacturing plants.

### **Dell Assets**

Dell has many assets, though most have been spread across the world.

Specifically, Dell has a huge chain of computer products ranging from laptops, desktops, home theaters among others (Song& Zhao, 2009). JIT has

encompassed order processing facilities, supplier requirements, customization and supply chain. JIT has simplified work roles thus creating specialization. However, Dell has to come up with good strategies to ensure that when more orders emanate from customers, they are able to service without much delay. This will enhance quality and improve customer's trust(Song & Zhao, 2009).

### **Advantage of JIT to Dell**

The advantages of JIT as related to Dell Computer business model includes reducing lead time. This means that the time taken to fulfill a customer's order has been greatly reduced and facilitated smooth flow of inventories. Also, JIT system has resulted in a major reduction in manpower by eliminating the warehousing phase which leads to a further reduction in cost and manufacturing of goods only when demand arises(Song & Zhao, 2009). In addition, JIT in dell computer has facilitated direct market strategies which facilitate the use of the internet and real- time business transactions which have aid to improve supplier relationships. Finally, the use of JIT technique has freed up tied capital by eliminating redundant and obsolete inventories

### **Disadvantage of JIT as Related to Dell's Business Model**

A JIT system has resulted in invariance's in regard to the flow of inventories. This means that at various instances, the supply chain has not been able to meet the demand expected.

Also, JIT requires an extensive amount of cash to implement and regain control thus this has been a problem to Dell.

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