

Popularity and benefits of using a jit system marketing essay



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Introduction

Just in time was developed by the Japanese in the nineteen seventies as a philosophy for problem solving. One of the reasons the Japanese created the JIT system was related to “ the lack of space in their country” (Aghazadeh). Just in time has evolved from a specific manufacturing and production method to a comprehensive management philosophy. The first major corporation to adopt and implement a Just In Time system was Toyota. At that time Toyota was under the control of Taiichi Ohno who has become known as the father of JIT(Aghazadeh).

Evolution

The popularity and benefits of using a JIT system significantly increased by the mid 1980's and is still being introduced for the first time in companies today. Although JIT was originally established as a method to be used by Japanese manufacturers, today corporations around the world such as Ford, General Electric, Best Buy, Wal-Mart and Toyota are realizing the benefits of this system. The JIT philosophy was built on the belief that “ waste can be eliminated by cutting unnecessary inventory and removing non-value added activities in operations. A JIT system is the organization of resources, information flows, and decision rules that enable an organization to realize the benefits of a JIT philosophy” (Aghazadeh). In essence, operating under a true JIT system a means that a corporation should have just the right amount of inventory or raw materials to satisfy production and customer demands. Once the company has successful adopted and implemented a JIT system their operations will become more efficient, cost effective and customer responsive. The bottom line is once a JIT system is successfully implemented <https://assignbuster.com/popularity-and-benefits-of-using-a-jit-system-marketing-essay/>

the corporation will realize both time and monetary savings. JIT facilitates a more effective and efficient use of funds. These savings are derived from a reduction in the amount of capital tied up in raw materials, inventories, storage and carrying costs and additional costs related to writing off obsolete goods.

Key Elements

There are three key elements essential to the successful implementation of a JIT inventory system. These elements include people, plants and systems.

The people component relates to the need for all employees and suppliers to be fully committed to JIT. In order for a JIT system to be implemented properly there must be support for this system from all levels in the corporation. Acquiring the commitment of all employees will minimize the chance of implementation problems and conflict with management, and result in a smooth and timely transition to a JIT system. In a factory, plant or any other production environment the structural layout plays an important role in the efficiency of the corporation. The layout must be conducive to employee and production flexibility. The production facility must also be able to react in a timely manner and produce orders when received. In addition management must keep accurate records of orders and inventory levels in an accessible database to ensure that the appropriate quantity of goods is being produced and supply levels reflect the orders on hand. Another key component to maximizing production efficiency is regular maintenance and inspections of machinery by employees. These inspections will assist in identifying opportunities for improvement, calibration issues, and reasons for product defects. One of the fundamentals elements of a successful JIT

system is continuous improvement. Once a factory or plant is built management and employees alike should continuously be looking for incremental opportunities to improve production efficiency. When we talk about systems in a JIT setting we are talking about “ the technology and process that links all levels of the production and corporate function” (Davis). There are two major types of systems, material planning requirements and manufacturing planning requirements. Material planning requirements involves the development of a production plan and related schedules. The production plan is the management and planning of resources. The outcome of a production plan is the master production schedule. This schedule identifies which products to produce and when they will be produced. By combining the efforts and efficiencies of these three key elements a corporation is able to realize the primary goals of a JIT system. These goals include reducing operating costs, achieved by minimizing inventory levels, and reducing lead times. By successfully implementing stringent quality control procedures, corporations can improve product quality as a result of reducing the number of defective goods. In turn, by reducing the number of defective goods a company can minimize unnecessary waste and the related costs associated with write-offs.

Five Steps to JIT Implementation

In order to successfully implement a JIT system the company must have the commitment of all participants. Furthermore precise planning, constant monitoring and coordination and cooperation from the various levels in supply chain channels are essential (Milligan). It is important to recognize the significant role the transportation industry plays in successfully

implementing a JIT system. This would include cooperation from the transportation companies selected. The various transportation sources include trucks, air cargo and rail. Additionally a corporation must be capable of making quick and accurate decisions with regard to ordering supplies and inventory. The following five steps must be followed to successfully implement a JIT system (Aghazadeh).

Step One: Awareness Revolution

This step includes redesigning old management techniques and implementing new techniques and styles. Furthermore, management should review all new concepts with all interacting employees to build confidence and a belief that the new method will work. It is important that employees are fully engaged in the implementation process and assist in identifying and correcting all noticeable mistakes immediately. Employees should also be informed about new developments and changes within the system and an emphasis should be made on continuous improvements. Continuous improvements can also be defined as improvements with no limits.

Step Two: Concepts for Workplace Improvement

This step requires an evaluation and prioritization of corporate requirements and a disregard for corporate needs that do not promote efficiency.

Employees must maintain a clean and orderly work environment by placing inventory or raw materials, supplies and tools in a logical, orderly manner.

For example, items that are used most frequently should be located in a convenient location. Employees can further ensure production efficiency by maintaining all equipment on an ongoing basis. Additionally, rules and

employee codes of conduct should be established, practiced and monitored
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to ensure compliance. Employee compliance can be monitored through one on one meeting, observation of employees while at work and check-listed inspections.

Step Three: Flow Manufacturing

Step three is the production of a single piece of product at a given time. This can be achieved by hiring and training multi skilled workers. In addition the production manager should follow a strict cycle time to ensure production deadlines are achieved. Furthermore compact machinery should be used in the production facilities to ensure the facilities space is being used most efficiently.

Step Four: Standard Operations

Step four of the implementation phase includes following efficiency rules to ensure that quality products are produced as economically as possible.

These efficiency rules may suggest arranging people, products and machines in a way that maximizes production efficiency. Furthermore operations charts, work sequence, and maintaining a standard stock of high volume production components have been identified as tools and methods that can be used to improve efficiency.

Step Five: Multiprocessor Handling

Step five suggests that one worker is responsible for several processes in a work cell. This can be facilitated by hiring multi skilled workers. These employees should be properly trained so that they are able to perform on several different machines and be capable of handling various production processes.

JIT Strengths and Weaknesses

While JIT works for some businesses, for others it can be detrimental. If an auto manufacturer is using JIT production methods, someone somewhere down the line has to hold some amount of inventory as a contingency. Not every supplier in the manufacturing chain has the luxury of only ordering exactly the materials they need. If inclement weather, strikes or supply shortages were to cause a supplier to not be able to provide an item needed in the manufacturing process, more than likely the supplier would be penalized fairly severely. So, we can see that the burden of inventory control is passed down the line to other suppliers from the JIT manufacturer. (BBC). JIT can lead to some environmental problems and additional costs as well. While less space and materials for storage facilities are needed, in some cases there is a greater cost, both monetarily and environmentally, in moving parts quickly from supplier to manufacturer. (BBC). As mentioned previously, shocks further down the supply chain can roll “ uphill” to the manufacturer. If a supplier that provides seating for a vehicle were to have a catastrophe requiring the shut down of the plant, then the JIT manufacturer at the top of the chain would be without seats until the supplier either came back on-line, or another supplier could be found. This would more than likely result in a slowdown or even stoppage of production at the JIT manufacturer. (Wikipedia). In some instances there can be quality control issues. Since the quality of each part isn't usually inspected at assembly time, defects may not be noticed right away in the streamlined JIT environment. (BBC). While I have been pointing out the negatives, there are positives for the JIT manufacturer. A decrease in storage space and the costs associated with it would be a sizable benefit to a company. Another benefit would be an <https://assignbuster.com/popularity-and-benefits-of-using-a-jit-system-marketing-essay/>

increase in capital due to the fact that it's not tied up in physical inventory costs.

Basic Elements of JIT

Small lot production.

JIT vs EOQ

Set-up time reduction and SMED.

Batch Process vs. Continuous Flow.

Value streams

Work force agility.

Pull Production, Kanban.

Kaizen, Jidoka.

Focused Factories and Group Technology.

Workcell design and Cellular Manufacturing

Takt-time, Leveling.

Combination of MRP and Kanban systems

Traditional vs. JIT View of Manufacturing

Fully utilize capacity so that more products were produced with fewer workers and machines.

Leads to large queues of in-process inventory waiting

Large queues mean resources never wait for product to work on, so capacity utilization high and production costs low.

Products spend most of their time in just waiting, unacceptable in today's time-based competition.

The main objective of JIT manufacturing is to reduce manufacturing lead times.

This is primarily achieved by drastic reductions in work-in-process (WIP).

100% capacity utilization is not the predominant objective.

The result is a smooth, uninterrupted flow of small lots of products throughout production.

Operational Benefits of JIT

Reduced space requirements

Reduced inventory investment

Reduced manufacturing lead times

Increased productivity

Increased equipment utilization

Reduced paperwork

Simplified planning systems

Better production scheduling

Work force participation

Increased product quality

Just in time @ McDonald's

Statement of McDonald's Operations Strategy

“ To provide unmatched consistency in operations in support of high product quality. This must be accomplished with adequate speed, low cost, and process innovation to accommodate changes in consumer tastes.”

McDonald's Operations Strategy

Company Background

McDonald's Corporation grew from a single drive-in restaurant in San Bernardino, California, in 1948, to the largest food-service organization in the world. In 1991, McDonald's owned \$13 billion of the \$93 billion fast-food industry, operating 12, 400 restaurants in 59 countries including company-owned restaurants, franchisees, and joint ventures. In the U. S. alone, more than 18 million people visit a McDonald's daily. McDonald's management intends to continue growing by: 1) maximizing sales and profits in existing restaurants, 2) adding new restaurants, and 3) improving international profitability. Ray Kroc based his empire on the fundamental principles of Quality, Service, Cleanliness, and Value (Q. S. C. &V.) and developed tangible goals and specific operating practices to carry out his vision. An extensive team of field auditors monitor these practices, which are communicated to employees through continuing education that includes videotaped messages

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from Kroc himself. These values were integrated into McDonald's three strategic priorities for 1991, stated in the Annual Report as follows:

- To enhance the message that McDonald's is value driven on behalf of its customers by emphasizing their profitable value-meal combinations; to provide exceptional customer care by exceeding customer expectations, including finding ways to add personal touches that go beyond convenient locations, quick service, clean restaurants, and quality products;
- To remain an efficient producer while maintaining quality by looking to innovations in food processing, construction, and design operations that will increase global profits.

Approximately 80 percent of McDonald's restaurants are franchises, paying a percentage of their monthly revenue for centralized marketing research and R&D. Franchise fees cover roughly the costs of corporate services; thus, if the franchises are not making money, neither is the corporation. This mutual dependence is considered by management to be a corporate strength.

McDonald's Corporation revenues are derived from franchise fees plus company restaurant sales. The Corporation operates approximately 16 percent of U. S. McDonald's restaurants, and a higher percentage of international restaurants since they usually enter new countries with company restaurants and then franchise them after they are well established. McDonald's typically receives over 20, 000 franchise inquiries per year. Twenty-year franchises are awarded to applicants after extensive screening, and additional restaurants are allocated to franchisees with proven records of success. McDonald's management style may be described <https://assignbuster.com/popularity-and-benefits-of-using-a-jit-system-marketing-essay/>

as “tight-loose” – the corporation sets overall quality standards, but the franchisees are given the freedom to make localized decisions. That’s our niche.” McDonald’s is the second-best-known global brand and intends to maintain this level of consumer awareness with a \$1 billion marketing budget. 2 McDonald’s launched a major new ad campaign in 1991, “Great Food at a Great Value,” which was successful in promoting profitable value-meal combinations. High brand recognition is particularly important as many customers are impulse purchasers, often selecting McDonald’s over competitors by the convenience of the location. Glasgow, discussing how McDonald’s customers distinguish it from the competition, stated, “We are the easiest. The place that satisfies customers best, and gives them the best value.” The emphasis McDonald’s place on customer convenience is manifested in McDonald’s self-description as a leader in the quick-service industry, rather than the fast-food industry. A typical McDonald’s may serve as many as 2,000 people per day, 60-70 percent of whom take their food outside the restaurant. McDonald’s depends on the ability of their crew to be able to prepare hot, fresh food and to serve it to their customers within two minutes of the time they enter the restaurant. To do this, McDonald’s engineering department has carefully designed the layout and equipment for its restaurants. All of McDonald’s 600-plus suppliers are independent companies with whom long-term relationships have been developed. This strategy is intended to improve

McDonald’s ability to focus its efforts on its core business – restaurant operations. Most suppliers operate on a cost-plus basis. McDonald’s often holds seminars and conferences for suppliers to discuss their needs.

International Expansion

While McDonald's was astounding the experts with the rapid growth of its hamburger chain in the United States, our company had another big surprise brewing - international expansion. We opened our first restaurant outside the U. S. in Canada on June 1, 1967 in Richmond B. C., and the race was on. Canada today has more than 1, 300 restaurants. One of the most dramatic examples came in Japan, where Den Fujita, who owned an import company specializing in handbags, shoes, and apparel, became McDonald's joint venture partner in 1971. Fujita opened his first restaurant on July 20, 1971 in a tiny 500-square-foot restaurant in a prime location in Tokyo's Ginza shopping district - a site that only allowed 39 hours for construction that normally took three months. On its first day, the restaurant rang up \$3, 000 in sales, and Fujita has never looked back. At the end of 1993, McDonald's was Japan's most successful restaurant chain, with some 1, 400 restaurants - and nearly double the annual sales of the next competitor. We also opened our first restaurants in Germany and Australia in 1971. Today, Germany has more than 1, 200 restaurants and Australia has some 700 McDonald's locations. And after entering France and England in the early 1970s, McDonald's today runs some 980 restaurants in France and more than 1, 200 restaurants in the United Kingdom. These six countries - Canada, Japan, Germany, Australia, France and England - are known as McDonald's " Big Six" because combined, they provide about 80 percent of international operating income. McDonald's international operations are playing an increasingly important role in our company's results. In 1995, for example, 7, 030 restaurants in 89 countries produced sales of \$14 billion. Other former Iron Curtain countries where McDonald's has proven tremendously popular

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include the Czech Republic, East Germany, Hungary, and Slovenia. We also broke ground in another new part of the world when we entered the Middle East with a new restaurant, which opened in Tel Aviv, Israel in October of 1993. New restaurants were added in Saudi Arabia, Oman, Kuwait, Egypt, Bahrain, United Arab Emirates, and Qatar, reflecting our extensive and long-term commitment to the region. The growth of McDonald's to date – domestically and internationally – has proven the validity of the first thought through Ray Kroc's mind when he initially saw McDonald's in operation: “This will go anyplace.”

McDonald's Mission

Be the best quick service restaurant experience. By providing quality, service, cleanliness and value that make every customer in every restaurant smile.

3 World wide strategies

Best employer

Operational Excellence

Continue to grow and be profitable

Innovations at McDonald's

Indoor seating (1950s)

Drive-through window (1970s)

Adding breakfast to the menu (1980s)

Adding play areas (1990s)

McDonald's New Kitchen Layout

Fifth major innovation

Sandwiches assembled to order

Elimination of some steps, shortening of others

No food prepared ahead except patty

New bun toasting machine and new bun formulation

Repositioning condiment containers

Savings of \$100, 000, 000 per year in food costs

The McDonald's Supply Chain

Purchasing

“ The 3 legged stool”: Corporation - Franchisees - Suppliers

Exclusive, certified facilities

Handshake agreements, Trust

Long term win-win partnership, risk sharing

Rigorous product and service specifications

Strong focus on quality, product specification and environmental audits

Decentralized supplier structure, zone consolidation for multinational suppliers

Distributor is wholesaler for Restaurants

Logistics

~100 sales items in the restaurant

~400 SKUs in the warehouse (Hubs: up to 1, 500)

~200 restaurants per DC (~180 DCs globally)

Delivery frequency: ~3/wk, higher in urban areas

2-3 stops per route

Exclusive distributors (3PL)

Freight consolidation (via freight forwarders)

Long term partnerships with service providers, risk sharing

Strong quality focus (Cold Chain, HACCP, QIP)

McDonald's Supply Chain Challenges

Even stronger focus on freshness and quality

On-going product innovations

Strong customer demand fluctuations based on promotions

Order- and inventory management restaurant - DC - supplier -

raw material supplier

Bull Whip effect

Cannibalization

Vision of Supply Chain Integration

Two future orientated strategies

McDonald's Logistics Network

Delivering a wide range of benefits to our restaurants

Common business models and tools

Borderless knowledge transfer

Optimization of services

Economies of scale

Centralized competence

Financial strength

Easy customer communications

McDonald's Logistics Standards

DQMP (Distributor Quality Management Process)

Operations and Customer Relations (Operations Manual)

Quality Control (HACCP / QIP)

Cold Chain standards

Hygiene regulations

Product handling standards

Emergency and contingency plans

Risk & Crisis management

Continuous unannounced internal and 3rd party audits for DCs result in superior quality scores regularly.

**“ One-Stop-Shopping” – Lean Logistics Solution
Supply Chain Services for McDonald’s restaurants**
