Omm case study essay

It had caused the production line down and affects the delivery time to customers.

The customer will feel unhappy and find our competitors and will lose the share market. In addition, inventory in the stocks are always not tally with the physical stocks this is because there is no proper recording after the parts take out. Production line kept own inventory for the critical parts without sharing with others production lines which is needed. The main issues here are a lack of communication.

The entire department must have a meeting to understand the company goal.

Quarterly market survey on customer demand will be consolidated from the sales person. Based on the feedback, sales persons will provide a monthly sales forecast to all the departments. By setting up the sales target, a weekly sales meeting with sales person, customer service, procurement, logistics, production to discuss on the market demand. To create demand schedules to oversee each quarter and month in the coming year and also estimates demand for each part.

This is to avoid overstocking and reduce the inventory. By reducing inventory, purchasing could negotiate with suppliers by implementing Just-in-Time delivery of the critical parts.

Purchasing department use the inventory tracking system tools for forecasting sales and preventing missing parts stolen by staffs or customers. There are a lot of inventory options to suite for the business.

Besides, different type of business is using a different type Of the inventory tracking system. It must be given the flexibility to work with and suited to the nature of business as well within company budget. Create a store inventory policy to limit the number access of employee to access inventory; transaction of withdrawal parts from the inventory will be recorded.

Installing security cameras and issue limitation of key access card points in inventory storage areas.

Bar code scanning is an inventory tracking option to be suggested to Rosa. By manually scanning every bar code on the parts with a hand held unit. This scanner comes with a software program which allows regenerating inventory reports. Every time the replenish part come in, a scanning will held by respective staff.

Every time the parts withdraw out, it must be scanned before release to the production line. This method is the fastest way compare with manually counting to the physical inventory.

With instantly, inventory reports can be generated easily. But there is a constraint where every single part needs to be scanned. Radio frequency identification tracks inventory through a radio wave system. All the information about the products is stored in the tag.

By using the sound waves, the reader could identify the parts instantly. This sound wave reader has a great function which can scan multiple parts at one time and it can allow us to keep the parts on the shelves without moving

each other compare with a bar code. We do not have to scan the part physically once by one and speeds up the inventory processes.

With RIFF, it can read the parts completely from inventory history as well total asset visibility. RIFF help to reduce shelf space and reduce the errors indirectly reduced the operation costs.

But RIFF Technology is very costly, yet it is an easier and faster way for inventory control. Set up a community to have meeting to discuss on the issues occurring in each department to identify the problems and find out the solutions to solve the issues. Daily meeting with the production line is to control waste parts. Besides, systematic parts withdrawal and replenish to be implemented in production line.

A notification system is created to alert employees when an inventory item has reached the maximum stock level or re-order point. The system will trigger a signal by taking the item's current demand and lead time as the consideration. To implement BBC inventory analysis to control inventory, it categories into three groups based on total annual revenue. Focus on " A" items account for 80% of dollar value and " C" items account for 5% of dollar value. " B" items account for 15% of dollar value in between " A" and " C". References ECONOMIC ORDER QUANTITY (EGO) MODEL: Inventory Management Models n.

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HTML (Accessed seep 6, 2013) Implementing Effective Inventory management n. D. Http:// www. Effectiveness's. M/inventory-management/ (Accessed Seep 6, 2013) Group B case study: Milieu Products Base in the process mapping (figure 1), the measurement of the time involved is in minutes.

Let say everything is going smoothly at the first time, the time taken is 611 0 minutes to complete the order according to the process flow. If the order fails to work, the technician will repeat the process, starting with diagnostics and disassembly and test the device before the order able proceed as per normal to the end. To ensure the device repaired successfully from work order till end, the time taken is 12145 minutes.

Value stream aping is a lean manufacturing technique used to analyze and design the flow of materials and information required to deliver goods and services to customers. 1 . Value added is an activity to improve the time consumes to repair a product in the shortest time, in the same time able to meet customer's expectation and satisfaction.

2. Non value added is an activity that not beneficial include time taken transferring material between two nonadjacent workstations, overproducing, waiting for service or work to do, not doing work correctly at the first time, requiring multiple approvals for a low cost electronic transaction.

Referring to the figure 1, we have calculated the percentage of value-adds and non-value-adds time for each scenario as following. Scenario A: Assuming everything works at the first time. Scenario B: The device has to be repaired at the second time. Figure 1: Current process mapping (value-adds v.

S. Non-value-adds) Analysis Value stream mapping as the fundamental tool to identify waste, reduce process cycle time and implement process improvement. The time taken in activities non value added has been wasted a lot of the time to repairing a device.

We have to reduce the waiting time to produce good quality of reduce in the time limit, satisfy customer, trust from the customer with the quality of product and reduce the percentage of number repair product send to service center. Value stream mapping can be the very important tool to record the process and eliminate waste.

Every process improvement able to act in clear understanding of current performance and come out with the best idea on time waste minimization. Recommendation Increase revenue by improving process efficiency in producing good quality and services to deliver to the customer base on the customer benefit package.

Increasing agility by responding promptly and intelligently to the hangers in demand and customer expectation. Increasing product and service quality by reducing defects, mistake, failures or service unexpected result. Decreasing cost through better technology or elimination of Nan-value- added activities. Decreasing process flow time by reducing waiting time or speeding up the process movement.

Continuous flow The idea of continuous flow is central to lean thinking. This is where the goods is moving in the process flow from the first to the next step without delay.

It is the efficient way to coordinate any process and it also reduce the waste to minimum level. In the future map should show the previous process box that is tied together as in one single process box.

Merely need a separate box if each box has its own separate flow which stops before another starts. Continuous flow may not apply to all situations, because separate steps in the process or some of the process is taking very long lead time and hard to combine with the goods to the following stage. Just-in-time system Just-in-time was introduced at Toyota a half century ago.

Traditional factory is using push system, which produce finished good inventory in advance of customer demand using a forecast of sales.

Components and sub-assemblies are pushed through the operating system based on a predefined schedule that is independent of actual customer demand. Push system typically has a long setup times and large batch sizes, resulting in high WIPE inventories. In a pull system, employee at a given

operation go to the source of the required components, such as machining or sub-assembly and withdraw the units as they need the parts.

By pulling parts from each preceding station, the entire manufacturing process is synchronized to the final assemble schedule. Finished goods are produced to coincide with the real rate of customer emend, resulting in minimal inventories and maximum responsiveness.

First come first out First come first out is another type of the current management process (FIFO). We can apply this system to process different activities where continuous flow flow being used, this is the best estimate of the variance in the cycle time.

When break down happen, it is the best to organize the flow according to the FIFO which maximize the downstream flow, especially facing the bottleneck effect. Need to implement some sort of queuing to operate FIFO, but this system should able to ensure efficiency along the process. Leveling the flow beveled scheduling is the operation of a process in the lowest possible common.

This process is flexible and reduces the waste between stages but it will only if other aspects of lean thinking are in the office. Figure 2: After implementation process mapping (value-adds v. . Non-value; adds) Referring to the figure 2, after the implementation we have decided to decrease the non-value-adds time and re-calculate the share of value-adds and non-value-adds time for each scenario as following. Scenario A after implementation: Assuming everything works at the first time. Scenario B after implementation: The device has to be repaired at the second time.

Conclusion Set up more coo enter to serve customer once they send goods to a service center to repair and allocate the service center in the main plant.

Waiting time for technician time reduce to from 1440 minutes to 240 minutes and there will be reduction time from 4320 minutes to 720 minutes for parts received, at the same time the technician able to begin the work immediately once part received. This will minimize the waste time and speed up the process time in re-assemble testing. There is the improvement of 17.

75%, the value-adds increase to 22. 14% and the total saving time is 4800 minutes (80 hours). Value Added n. D http://www.

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D. Http://en. Wisped. Org/wick/just_in_time_(business) (Accessed 10 Septet, 201 3) Group C case study: Hank Kola Hank Kola a new hired director of quality assurance, currently he is encountering management in general and senior management lacking of the policies and visible support Of a quality matters in particular in the production plant.

This product line named Greaser line which is producing a specialized decreasing solvent packed in a spray can for the high-technology sector. New recruits or transferred operator from another department to production line to handle the filling process, the operator is not suitable for the work because lack of knowledge of the equipment and without the proper on job-training. There is no any operator at the place when Mac tests the high-pressure can, thus operators only learned how to reject the materials or defect cans from then machine during the shift when lead by Wayne.

Those operators are taught by an inexperienced or unskilled operator to perform the process and no safety training provides to operators when they are operating the high pressure machine. The equipment to run Greaser products is not the specific designed machine and it had been purchased two years ago for other production lines.

The machine had switched to run Greaser line six months go, only 1 2 work orders completed after the machine that were sent to repair. Due to no scheduled preventive maintenance for filling equipment, there is the downtime as 15 percent of the actual production running time.

It also ties to no scheduled preventative maintenance of the equipment, lack of product tractability and lower viscosity. The plastic nozzles are a new product and also a rush order for the vendor, they found burrs inside the rim and occurring the trouble on fitting the top of the can.

To solve the burr application issues, they are increasing the application of pressure at the filling dead to force the nozzle head to fit on the burrs. The

purchasing department is the lack of purchasing and poor communication between production and vendor on the parts needed.

Marketing research is incitement against the competitor on the design for Greaser that had been shaped and easier handle by the user. There is no test on the effects of the shape can on the speed of filling or filling hydrodynamics from the high-pressure filling head. Kola found that the new design parts does not fulfill the requirement in design and packaging entire the Greaser line.

Poor quality and lack of design f the parts will affect the production line to produce the goods.

The manufacturing manager was under pressure to think out the solution how making improvements to increase productivity, decrease the delivery time and operational cost in the plant. At the same time he considers of Simmons is a good candidate to promote as shift supervisor. A statement like " even if it is a little off spec was tolerable, we need market share now' shows a poor quality attitude and the schedule is more important.

Marketing was rushing to launch the Greaser to the market through the rumination advertising event to attract customer.

Poor forecasting from the market and the planning schedule it's not planed with the huge amount of back orders as the production line unable to fulfill the high demand of the marketplace. Kola collected all the information from each department; he defined the Greaser line quality control issue in the Fishbone diagram as below. Fishbone diagram: Greaser line quality control

issue A contain souse improvement programs TO set-up a continuous improvement program, Kola has to identify the issues and analyze the quality control in human attitude and skill.

To improve human attitude, Kola implements the awareness campaign to all employees regarding the value of the good quality process and the cost of poor quality process in the company's business. He wants all employees have a good attitude and skill to find out the best solution and help company achieve the goal. Kola also involve all employees in the process of solving the issues by providing them with the suggestion box, seminar, training to brainstorm what they should be done at the workplace. Kola should use Six Sigma as one of the continuous improvement program tools in the plant.

Six sigma is a tools and techniques for process improvement in a business.

To improve the quality of process output by identify and eliminate the errors and minimize the variability in manufacturing and business process. Six Sigma projects are followed two project methodologies as below: 1) DYNAMIC – Define, Measure, Analyze, Improve, Control A tool is referring to a data-driven improvement cycle for improving, optimizing and stabilizing business processes and design. 2) ADMAN – Define, Measure, Analyze, Design, Verify This is a tool to use for projects to focus on developing a new product or recess design.