

# Decision analysis study essay sample



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## Introduction

This paper will be providing a memo that includes many tasks related to project planning and operations management. All memos are present accordingly to the separated tasks discussed. We will be using the case study of “Shuzworld”. As the operations consultant for Shuzworld, we will be following all the tasks and then will provide recommendations by analyzing the problems given in the task prompts. We will also apply the appropriate decision analysis tool to make reliable and valid recommendations.

## Part A

In this task we will be providing whether Shuzworld should build the proposed stand-alone store, the strip mall store, or not proceed with construction, by utilizing the appropriate decision analysis tool. The decision tool we are using for this task is Decision technique analysis.

This technique is used because of its importance. There are two very basic models used for decision analysis – decision tables and decision trees. This module contains a model for a general decision table; a model for entering a decision tree in tabular form; an exciting, new model with a graphical user interface for decision trees; and a model for creating a decision table for demand/supply or one period inventory situations. The decision tree model presented is important it shows the validity of the project. It is easy to understand the reliability and validity of the project.

Other techniques such as short-term scheduling techniques, linear programming, PERT diagrams are important but for this task particularly the

decision tree model is more reliable because other techniques are used for determining and evaluating the inventory for the company or the short term projects. As this task involves Shuzworld new project's projection which is for long term. For this reason we are using Decision tree modeling for this Task 1.

### The Decision Table Model

The decision table can be used to find the expected Value, the maximin (minimax) and/or the maximax (minimin) when several decision options are available and there are several scenarios that might occur. Also, the expected Value under certainty, the expected Value of perfect information, and the regret (opportunity Cost can be computed. The general framework for decision tables is given by the number of options (or alternatives) that are available to the decision maker and the number of scenarios (or states of nature) that might occur. In addition, we must choose whether the objective is to maximize profits or to minimize costs.

For each scenario it is possible (but not required) to enter a probability. The expected Value Measures (expected monetary Value, expected Value under certainty, and expected Value of perfect information) require probabilities, while the maximin (minimax) and maximax (minimin) do not.

These results show according to the probabilities set for the projects ' A' and ' B'. This table states that if the project A is implemented then the Shuzworld can make profit of 260, 000. This is the gross profit we will subtract \$20, 000 From this ...

## Memo Providing Recommendations For Shuzworld Business Essay

In order to find out the most cost-effectively decision, Shuzworld is considering the possibility of opening a new store on route 20, just outside of Auburn, referred to as the stand-alone option. The second option is opening a store in the Auburn Mall, and the third is not opening a store at all. To do nothing now, and wait for a better time to move in to the market. Shuzworld is also considering purchasing market research. I recommend that Shuzworld should use the decision tree graphical method, because of the nature of the issue (a graphic manner was asked to be used). A very important reason to why I am recommending this tool, is because the decision tree method is most commonly used for this kind of cases, as the Shuzworld presented case.

The profitability problem is one of the most important problems of future profitability when opening a new store process and is the important content of the course of operation management. By recommending the use of this crucial tool, we need to understand, that this will give Shuzworld a direction, to which one of the three options is the best (the stand-alone option, opening of a brand new store or to do nothing now) for the most cost-effectively and profitability option. Also I am recommending this tool, because the decision tree analysis process, which are of great importance in the industrial production of high quantity standardized products (Shoes, sandals, etc) and lately has gained importance in the low volume production of customized products. Due to the high capital requirements when looking for the opening of a new store, decision tree analysis is of great relevance for the manufacturing business.

Because of it, this attracted the attention of the manufacturing industry, who tried to support practical cost-effectively analysis by using the proper profitability models. Now, we will analyzed, which one of the three options is the most cost effective and profitable, than the other two. To finally be able to make the proper recommendation. We need to find out, which one of the exact EMV, in which process (option), will become more cost-effective and profitable than another. To do this, we will use the decision tree graphic tool. This is a decision tree based on the probabilities given in the Shuzworld case study. The decision tree was designed based on the figures showed about whether or not to build a stand-alone store, a mall store, or whether the company should do nothing in the present market based on the projected figures. With a 50% probability of an unfavorable and favorable markets, we should use the decision tree tool, to help analyze whether or not to proceed with a anyone of the proposed projects.

Shuzworld, is considering purchasing market research, which could have a positive impact or a negative impact on the market. They could also decide to not purchase market research, which would have no impact on the market. Purchasing market research would cost \$20, 000, and it has a 60% chance of showing a favorable market and a 40% chance of showing an unfavorable one. If the survey is positive, the chances of having a favorable market go up to 70%, and if it is negative, the chances of having an unfavorable market increase to 80%.

Once we know the numbers from the states of natures, we can determine the expected monetary value, or EMV for the state of nature. This is determined by multiplying the probability by one state of nature, plus the

product of the probability by the other state of nature. For the Auburn Stand Alone project, the probability is 50% and the favorable market is \$700, 000. The unfavorable market is a loss of \$400, 000. So the EMV is  $(.5)(700,000) + (.5)(-400,000)$  which is \$320, 000. The Auburn Mall Store's EMV would be  $(.5)(300,000) + (.5)(-50,000)$  which is \$125, 000. The EMV of doing nothing is, of course 0. This all based on not doing any research survey. All of these changes contribute to the changes in the EMV which is what we are analyzing to determine which store to proceed with.

The top part of the decision tree is conducting a \$20, 000 dollar market survey and observing those probabilities change based on the new data. The best decision is to chose the project that produces the highest EMV, in this case, it is my recommendation conduct a market survey and chose the Auburn Stand Alone store. Based on the survey results, the probabilities have changed based on the outcomes. The best positive actions along that process, are that Shuzworld will have a positive survey results and have a favorable market. Again, Due to the stand-alone store having the highest EMV, it is recommended that Shuzworld open a stand-alone store. This option has the potential of \$700, 000 in profits with a favorable market or a loss of \$400, 000 if the market is unfavorable. This makes the potential for profit on this project much higher than the other projects, especially when considering that the market research survey could bring the possibility of achieving those profits up to 70%. This data was calculated using the POM application.

The Decision Analysis Module was chosen, with the Graphical Decision Tree being selected. This was the proper decision tool because it allowed for a <https://assignbuster.com/decision-analysis-study-essay-sample/>

visual representation of Shuzworld's choices. It clearly shows the options, and displayed the recommended direction (decision). This decision analysis tool was also able to calculate Expected Monetary Values based on either maximizing profits or minimizing costs. Since the information given in the case study was for profitability, maximizing profits was the option chosen. 1.

COPY OF THE OUTPUT FROM THE DECISION ANALYSIS TOOL OF CHOICE.

NOTE: Copy of the output by using this decision analysis tool (decision tree analysis tool), from the POM and OM software does not allow me to copy and paste the results here, but they are well described above. (I had to use Prt Sc).

a. EXPLANATION TO WHY I CHOSE THIS DECISION ANALYSIS TOOL.

I chose this tool because of the purpose of the tool. Planning, developing, and balancing, are the vital topics affiliated with cost-effectively and profitability process. The goal of this task is to identify cost-effective and profitability issues. Mostly, cost-effectively and profitability patterns are utilized for a low-variety, high-volume manufacturing. Fluctuation of a generic product is essential for the manufacturers as the demand is basically customer driven in the present economic world market. Because of the design, the pattern, the methodology, and the approach. Different cost design norms, and cost performance levels, have been identified in the initial stage of looking to open a new store or not. As the task progresses, it will focus towards an integrated patterns for cost-effectiveness and profitability, mostly used in small and medium level manufacturing. The small scale practical problem has been confirm with the integrated cost-effective and profitable pattern implemented by the decision tree analysis model.

Because of the findings. The cost and profitability, requires many crucial elements to be considered. Diverse cost-effective and profitable orientations, cost-effective and profitable characteristics, cost-effective and profitable approaches, problem definitions, cost-effective and profitable performance, all this in conformity with the assigned functions that are needed to be taken in consideration by Shuzworld, before deciding to open a new store or not.. Because of the originality and results. This task has highlighted the pivotal cost-effective and profitable plan characteristics and at the same time provided an approach for a cost-effective and profitable opening of a new store. The results of this task can be helpful for Shuzworld while planning and developing a cost-effective and profitable opening of new stores pattern. The approach for the cost-effective and profitability process, can be used as a practical tool for large manufacturing modern industries (www.emeraldinsight.com). I also chose this tool, because of the following crucial elements.

The internal use: To see and find out, what certainly needs to be done, in regards of opening a new store or not, when looking for a cost-effective and profitable approach. This way, establishing the cost and profits, also budgets can improve, because the cost of opening a new store (if necessary) will not increased, and the profitability can increase. Because this tool allow us to see the best case scenario of profitability. The possibility of external use: In case Shuzworld needs another related company to provide new stores. The possibility of strategic use: To evaluate the company's financial performance, especially when the opening of new stores are necessary. The leader in the industry will have the knowledge necessary to keep the sales,



and be able to comply with the demand, in a cost-effective and profitable manner. This will allow us to not lose business, by not having enough stores in relation to the market demand.

The conclusion, to why I chose this decision analysis tool, is that Shuzworld will be optimize the use of financial resources so that cost-effective and profitable objectives are met, when thinking in the opening of new stores. Because, the decision tree analysis tool can be used as a successful tool in business planning. The decision tree analysis tool can help us to determine the optimal cost-effective and profitable option. To understand the equations and know what we are trying to find, as opposed to blindly plugging numbers into a formula. Accurate inputs (EMV) are the key to optimizing the use of the decision tree analysis tool. If we have this basic understanding of the decision tree analysis tool, we will avoid many problems commonly found in the manufacturing industry.

Another reason, why I chose this decision analysis tool (decision tree analysis), is because is a typical cost-effective and profitable analysis model of independent cost, exactly like in our case study. I chose the decision tree analysis tool in the POM application because it allowed for the most manipulation of the data to produce the desired outcome. Two things that should be considered when determining the site for the new store should be the states of nature, and what their expected monetary values are. It also presents information out in a graphical form which makes it easy to interpret, and understand. Decision trees help to make decisions when large amounts of data are necessary to interpret the data most efficiently. When you have to make a decision and there are various outcomes and different

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probabilities and inputs, it is best to use the decision tree tool. The POM application, decision analysis module tool, calculates the EMV as you input probability and profit or loss.

## 2. DISCUSS TWO IMPORTANT FACTORS THAT SHUZWORLD SHOULD CONSIDER WHILE EVALUATING LOCATION ALTERNATIVES FOR A NEW STORE.

This tool in the POM application can be helpful when you need information quickly and without calculating this information by hand. When deciding on where to build a new location, there are environmental factors that must come in to play as well as profitability. One major thing to consider would be the size and cost of the building. Cash flow is very important to the success of the business. Knowing whether you must lease or buy a site, how much the materials to build will cost, and how much this will affect net cash flows. Will the building appreciate in value? What is the net present value of the building in 10-15 years? There are a variety of things to consider. Another thing to consider is how the city government regulates commercial zoning laws. Is there a piece of equipment that you need that is too large for a building that you are looking to use?

Will you have a back door to allow for shipments and if so is there enough room for the driver to get back there? Is there a regulation on how long the driver may be parked in that spot based upon traffic? . Other important factors to consider when evaluating locations are the proximity of the store to its market and the proximity of its store to suppliers. For a company like Shuzworld, it is going to be vital to their success that they are located next to their market. With the number of shoe stores in existence, many customers are likely to go to whichever one is closest to them. Shuzworld

needs to ensure that they have immerse into the shoe-selling and buying (customers) market by being as close to it as possible. Placing their store in a location near their customers would be much wiser than building a store far away from a town. As can be seen in the map on the slide, the recommended stand-alone store along Route 20 is the closest option to the Auburn market. Their proximity to the shoe market could be excellent if Shuzworld accepts the stand-alone store recommendation.

The proximity of a store to its suppliers is also important. In the case of Shuzworld, the suppliers are the Shuzworld production facilities and warehouses. It is unknown in our case, how close or far, are these facilities, to the proposed Auburn location. But, the company will need to ensure that the costs of shipping shoes to the new store will not affect the profits.

Transportation costs can be quite high if the store is located too far away from the supplier. There are many things to consider, but the ones (many, not just two) mentioned above, I believe are the most important of all. B.

RECOMMEND PROJECT TECHNIQUES THAT CAN BE USED WITH THE CONSTRUCTION PROJECT PLAN FOR THE STORE BEING BUILT. 1. PRESENT A NETWORK DIAGRAM INDICATING THE CRITICAL PATH.

There are two project techniques that Shuzworld can use for the upgrade of their store in Bellevue: PERT (Project Evaluation and Review Technique) and CPM (Critical Path Method). PERT and CPM are somehow similar, because they both use the same six basic steps. These steps are:

Define the project and identify the breakdown of the work.

Determine the relationship between activities.

Draw out the “ network” that connects all those activities. Determine and assign both time and cost to each activity.

Determine the critical path (discussed on next slide).

Use all this information to help plan and control the project. The difference between PERT and CPM, is that CPM assumes that one time estimate will be correct. PERT uses three different time estimates for each activity, which gives calculations for standard values and standard deviations. In this task we are presented with a schedule for the construction of the new store.

Project management can be a difficult task, but can be quite simple. The first things that must be done is to determine the activity time for each task. For this project I used the project management tool in the POM application. After input the data into the POM application (Decision analysis tool) that was given, such as the optimistic, most likely, and pessimistic times using the triple time estimate module in project management.

Then, after input each task by it is position giving the predecessors. The POM project management tool, calculated the activity time and based on that was able to shows at the earliest start, earliest finish, latest start, and latest finish. Using this information, we are able to determine the critical path, or the longest path, which is determined by the path having the least amount of slack. Project D must be done on schedule or the total completion time of the project is disrupted. This can become easier by determining the total activity time. This is done by using the equation  $t = (a + 4m + b) / 6$ . Where “ a” is your optimistic time, “ m” is your most likely time, and “ b” is your pessimistic time. These times were given in the case study.

These activity times are represented in the diagram above over the nodes for each activity. The tasks that lie on the critical path are denoted in color red in the graphic. A, B, C, E, F, G, H, I, and J. The total activity time for these tasks are 108.2 days. Activity D takes 20 days, and it is not part of the critical path. Activity D will not delay the project, even if the activity is delayed. The variance for the activities on the critical path is 90.2. The standard deviation is 9.5. Z is the number of days the due date lies from the expected due date which according to the calculations is 108.2 days. Z represents .1645 which gives us x being 108.2 days. This gives us a result of 122.07.

This at the same time means that, Shuzworld needs a to plan for 123 days if they want a 95% likelihood of finishing the project within the time frame. In order to get this project done 5 days sooner, task D must be crashed 5 times creating a new cost of \$2,500 dollars (\$500- dollars per day). By crashing Activity I would be the best way for Shuzworld to ensure that their store is ready for the grand re-opening in time.

The use of PERT Chart and CPM analysis in the POM application, allows me to get this results. By using this project management tool, specifically the triple time estimate, proved competent in determining the critical path, and what must be done to determine the project completion date with crashing. NOTE: Copy of the output by using this decision analysis tool (project management, triple time estimate tool), from the POM and OM software does not allow me to copy and paste the results here, but they are well described above. (I had to use Prt Sc). C. EVALUATE THE TRADE-OFFS OF ALLOCATING PRODUCTION LINE WORKERS TO MINIMIZE PRODUCTION COST. In this case, linear

programming is used to determine trade-offs. Usually companies have to be able to allocate their resources in order to meet their goals.

One way that linear programming can be used is to minimize their production costs by developing a staffing plan that meets production line goals while minimizing staffing. A company might determine through linear programming that in order to minimize their production costs, they will have to allocate fewer production line workers. Fewer production workers would minimize the cost of a production line. Those employees could be better allocated to another production or to another function within the company. Maximizing profits is one of the most important goals for any business. In this case we are asked to find an optimal number of batches of Tassel loafers, and the number of batches of Penny Loafers, that will maximize the total profit and meet the required constraints. The Tassel loafers spend 2 hours in assembly and 8 hours in finishing with a profit of \$800- dollars per batch.

The Penny loafers spend 6 hours in assembly and 4 hours in finishing for a profit of \$1200- dollars per batch. There are capacity hours of 1200 and 1600 for tassel loafers and penny loafers respectively. Initially we need to set this equation up by hand before moving to the POM application, for a more clear and supportive solution. Assigning a variable for each constraint, the Penny loafers and Tassel loafers are variables, therefore there are 2 variables. There are 4 constraints. 2 hours of  $x$ ,  $2x$ , and 6 hours for  $y$ , or  $6y$ , for assembly for which we have 1200 hours. The equation looks like this,  $2x + 6y$  is less than or equal to 1200. This is the first constraint. The second constraint is  $6x + 4y$  is less than or equal to 1600. The third constraint is

based on minimum production levels.  $X$  is greater than or equal to 50, because that's a minimum, and  $y$  is greater than or equal to 100. The profit per batch is  $800x+1200y$ .

Loading this into the POM application gives me the optimal production level.

1. RECOMMEND A PRODUCTION MIX THAT MAXIMIZES PROFITS FOR SHUZWORLD'S SHANGHAI PLANT, UTILIZING THE APPROPRIATE DECISION ANALYSIS TOOL. Shuzworld is in need of a production plan for a total of 50 batches of Kidshuz shoes and sneakers for the coming month. The forecasted demand requires Shuzworld to produce at least 25 batches of the shoes and 10 batches of the sneakers.

The latest figures show that a batch of shoes cost \$2, 000- dollars to produce, and a batch of sneakers cost \$1, 500- dollars per batch. Shuzworld needs a production plan that meets all of these constraints, and at the same time they want to minimize the production costs. This data can be input into the POM application to determine a solution. The solution output is shown in the graphic. The output shows that in order to minimize the production costs, Shuzworld should produce 25 batches of Kidshuz shoes and 25 batches of Kidshuz sneakers. This will give a total cost of \$87, 500- dollars for production.

The Linear Programming decision tool was use, with the option of minimizing costs. The linear programming tool was appropriate for this calculation, because linear programming is used to determine the decisions that need to be made to allocate resources. Since Shuzworld was looking to minimize costs, the minimizing option was also appropriate. Shuzworld also needs to

know the optimal number of batches to produce of their Tassel Loafers and Penny Loafers. The batches of tassel loafers spend 2 hours in the assembly department and 8 hours in the finishing department, for a total profit of \$800- dollars. The batches of Penny loafers spent 6 hours in the assembly department and 4 hours in the finishing department for a total profit of \$1, 200- dollars. The assembly department has 1, 200 hours of capacity for the tassel loafers, with a minimum production level of 50.

The finishing department has 1, 600 hours of capacity for the penny loafers, with a minimum production level of 100. The company is looking to maximize total profit while meeting the required constraints. This data will need to be input into the POM application, to receive the results from the graphic attached. If 120 batches of Tassel loafers and 160 batches of Penny loafers are produced, profits will be maximized at \$288, 000- dollars. a. COPY OF THE OUTPUT FROM THE DECISION ANALYSIS TOOL OF CHOICE. NOTE: Copy of the output by using this decision analysis tool (P chart), from the OM software does not allow me to copy and paste the results here, but they are well described above. (I had to use Prt Sc). i. EXPLANATION TO WHY I CHOSE THIS DECISION ANALYSIS TOOL.

I chose this tool because of the purpose of the tool. Planning, developing, and balancing, are the vital topics affiliated with cost-effectively and profitability process. The goal of this task is to identify cost-effective and profitability issues. Mostly, cost-effectively and profitability patterns are utilized for a low-variety, high-volume manufacturing. Fluctuation of a generic product is essential for the manufacturers as the demand is basically customer driven in the present economic world market. Because of the <https://assignbuster.com/decision-analysis-study-essay-sample/>



design, the pattern, the methodology, and the approach. Different cost design norms, and cost performance levels, have been identified in the initial stage of production. As the task progresses, it will focus towards an integrated patterns for cost-effectiveness and profitability, mostly used in small and medium level manufacturing. The small scale practical problem has been confirm with the integrated cost-effective and profitable pattern implemented by the decision analysis model (Linear programming). Because of the findings.

The cost and profitability, requires many crucial elements to be considered. Diverse cost-effective and profitable orientations, cost-effective and profitable characteristics, cost-effective and profitable approaches, problem definitions, cost-effective and profitable performance, all this in conformity with the assigned functions that are needed to be taken in consideration by Shuzworld, before deciding to start the production Because of the originality and results. This task has highlighted the pivotal cost-effective and profitable plan characteristics and at the same time provided an approach for a cost-effective and profitable production.

The results of this task can be helpful for Shuzworld while planning and developing a cost-effective and profitable opening of new production patterns. The approach for the cost-effective and profitability process, can be used as a practical tool for large manufacturing modern industries ([www.emeraldinsight.com](http://www.emeraldinsight.com)). I chose this tool in the POM application (Linear programming module) because once the number of constraints were determines and the number of variables, an equation could be designed that would allow data to be loaded to produce the most desired output with <https://assignbuster.com/decision-analysis-study-essay-sample/>

minimal effort. Linear programming is an optimal way of developing an equation using a collection of variables to determine the best solution to any given problem.

This can only be used if the relationship between the variables are is linear and can be computed into a mathematical equation. In this example, an equation was developed and the graphics show the optimal point where we could maximize profits and minimize costs, which was exactly what Shuzworld wanted to do. This tool in the POM application (Linear programming module) was exact for developing an graphical idea, and the same time to provide output results that satisfied Shuzworld needs. This results were calculated with the use of the POM application. The Linear Programming decision tool was use, with the option of maximizing profits. The linear programming tool was appropriate for this calculation, because linear programming is used to determine the decisions that need to be made to allocate resources. Since Shuzworld was looking to maximize profits, the maximizing option was also appropriate. The results from above, were calculated with the use of the POM application.

The Linear Programming decision tool was use, with the option of maximizing profits. The linear programming tool was appropriate for this calculation, because linear programming is used to determine the decisions that need to be made to allocate resources. D. EVALUATE SHUZWORLD'S REORDERING PRACTICES AT THE BALTIMORE STORE, UTILIZING THE RESULTS OF THE MONTECARLO SIMULATION. Shuzworld has been having difficulties with their reordering/restocking at their Baltimore store. Their daily demand for cases of shoes runs between seven and twelve cases. When placing an order, there

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are varying lead times, anywhere from one to three days. The company has provided the frequency of case demand for a period of 200 days. They have also provided a frequency of lead times for a period of 40 days. Shuzworld would like to know a technique that they can test and see if reordering 30 cases of shoes whenever the inventory reaches 12 or lower will be effective or not.

This decision can be made using a Monte Carlo simulation. A Monte Carlo simulation is one that uses random numbers in the evaluation, because many factors are based on chance (Heizer & Render, 2011). A simulation of the Baltimore store shows that this store has an average demand of 10.5 cases per day. It would be wise to remember that this average demand is based on random numbers that provide simulated demands. The Monte Carlo simulation shows how the Baltimore store will be able to handle their inventory if they reorder 30 cases of shoes whenever that inventory drops to twelve or below. Days 1-5 do very well, with no lost sales. Day 3 ends the day with only one case of shoes in their inventory, which cuts it pretty close. However, the big problem is on Day 6. The store had an ending inventory of 9 cases on Day 5, so they reordered. The simulation gave them a lead time of 2 days. This was not soon enough, and on Day 6, the store shows a zero ending inventory, with three lost sales. Although not shown on the simulation, Day 7 will also see lost sales, because the shipment will not be received until Day 8.

This one simulation shows that reordering 30 cases will not work for the store when the inventory gets to twelve cases or below. It should once again be noted that this is just one simulation. A company should ideally run this

simulation numerous times with random numbers, in order to get a more accurate picture (Heizer & Render, 2011). It could be discovered that reordering 30 cases when inventory hits twelve actually would work, and that this simulation just received a very pessimistic set of random numbers. It would be wise for the Monte Carlo simulation to be ran numerous times before the Baltimore store manager changes his reordering plan.

E. DISCUSS WAYS TO GIVE SHUZWORLD A COMPETITIVE ADVANTAGE BY DOING THE FOLLOWING: 1. RECOMMEND A HUMAN RESOURCES STRATEGY TO IMPROVE EMPLOYEE EFFICIENCY AND EFFECTIVENESS IN THE OPERATIONS SEGMENTS OF SHUZWORLD. Before we try to recommend anything, we should see below the purpose of Job Design and HR Strategy: The people are effectively managed and are staying within the parameters set by the company. People feel valued and that their jobs help to promote a feeling of value and self-worth. Also the labor Standards:

Employment Stability.

Work Schedules.

Work Rules.

Job Rotation.

Job enrichment.

Employee empowerment.

Shuzworld can embrace a number of HR strategies to create a work environment directed to satisfaction and value. A way to promote this, is to offer a rewards and incentive program. This program should be designed to make employees feel valued and appreciated and can also promote a spirit for greater success. Introducing goals as contests can promote friendly

competition where employees are directed to higher productivity while also accomplishing of the Shuzworld objectives. Rewarding these employees for meeting these goals promote recognition and make employees feel valued. Another useful tool to use, is to establish standards of labor that will promote employee stability, create efficient work schedules, and establish work rules.

Create cross-training employees to be able to do more than one position empowers employees by making them feel more valuable to the company, and can also be used to fill in spots due to sickness, vacation, or turnover. The more employees know, the more useful they can be. Also determining a work schedule that fits operations can be extremely helpful. Based upon job order, some jobs may be able to offer 10 hour days, 4 days a week, or 12 hour days, 3 days a week with a 4th day the following week. This gives employees more time to spend with the families which can promote a greater sense of respect and appreciation for their jobs. By keeping employees happy in the long run will greatly impact Shuzworld production, because happy employees are productive employees and they have a greater loyalty, at the same time lowering turnover. Training costs money.

Constantly replacing employees means constantly wasting money. Labor standards also include proper scheduling. Making sure the right amount of people are staffed so that one employee does not get stuck running multiple machines which weakens morale and value. An effective human resource strategy will improve both efficiency and effectiveness in the operations segments of Shuzworld. A company can use a good human resource strategy for competitive advantage when they manage labor and job design. This means that employees should have a job that is reasonably safe, appropriate

physically, and psychologically appropriate. The strategy will aim to make sure that both employees and employers are working towards the same goals, and that policies are equally and honestly enforced to gain mutual trust.

Achieving a workplace that has a reasonable quality of work life is not always easy. In order to help with this process, Shuzworld will need to be involved in labor planning to develop policies concerning work schedules, rules, and employment stability. This will ensure that all employees know what is expected of them, and will lay out the guidelines for these policies and procedures to be carried out fairly. Shuzworld will need to partake in job design, which will properly define each job, its duties, responsibilities, and the skills needed for it. A study of ergonomics will help Shuzworld understand how employees interact with their work environment, and will help the company find ways to make that environment more efficient.

Additionally, Shuzworld will need to have as a goal, to make the workplace as safe as possible. Some jobs are dangerous, some are loud, some other require extreme physical exertion. In these cases, a proper human resource strategy would aim to make a reasonable trade-off for these types of conditions, such as higher pay and better benefits. This will help keep employees motivated and working efficiently. An effective Human Resources strategy involves defining labor standards. When Shuzworld knows the amount of time it takes to complete a job, they will be able to more effectively plan manpower for it. Using historical experience, time studies, and work sampling will give Shuzworld a clear idea of how many resources to allocate to a specific job, so that employees will not feel over-worked or have

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too much idle time (Heizer & Render, 2011). Last, in order to have an effective human resource strategy, Shuzworld needs to make sure that they have an ethical workplace.

This will help build employee's trust in the company, which will in turn encourage them to work more efficiently (Heizer & Render, 2011). 2.

DISCUSS APPLICABLE OPERATIONS MANAGEMENT PHILOSOPHIES THAT FOCUS ON REDUCING WASTE AND INCREASING EFFICIENCY IN SHUZWORLD'S PRODUCTION PROCESSES. Shuzworld can use Just-in-Time and lean operations to reduce waste and increase efficiency in their production process. Eliminating waste is a large part of lean operations. Lean operating attempts to eliminate seven wastes: Overproduction, queues, transportation, inventory, motion, over processing, and defective product. Lean operations is a customer-based approach, which tries to ensure that the customer gets the product they want, when they want it (Heizer & Render, 2011). Just-in-Time is a large part of lean operations. Just-in-Time reduces waste, which improves cost effectiveness. This is done by having goods produced when the customer wants them, or in other words, having the “right part in the right place at the right time”.

By using Just-in-Time, Shuzworld can reduce excess costs caused by extra inventory, obsolete parts, and unnecessary movement of supplies. Just-in-Time also exposes bad inventory, because the cost of acquiring good quality supplies is cheaper. It also allows for fewer bad components to be made, since inventory is kept to a minimum. Just-in-Time is a proven way to increase cost effectiveness (Heizer & Render, 2011). Implementing lean operations and Just-in-Time will help Shuzworld reduce waste and increase

efficiency in their production plants. Just-in-Time focuses on reducing waste and making only what it is needed. This concept fits the Shuzworld model perfectly. It is designed to reduce unnecessary waste and promote efficient use of the product to design or use only what is needed. Just-in-Time focuses on reducing waste while Toyota Production System focuses on consistent training so employees are developed enough to be more productive at work.

Toyota Production System is great for assembly lines which would be great for the assembly of shoes while Just-in-Time is a problem solving directive that will be helpful in determine production mixes and inventory ordering issues. Just-in-Time can reduce the amount in queues, control overproduction, optimize transportation, and control inventory. Remember, Just-in-Time focuses on problem solving. All of the situations brought to my attention have been problems that Just-in-Time can help to solve. Toyota Production System is about constant training and development that can prove most useful in minimizing costs and maximizing profits. Lean operations intends to reduce waste and make information more user friendly to improve overall operations from the customer point of view. One great way that Shuzworld can use LEAN operations is to continually use the services of consulting agencies that look for ways to improve operations with computer generated models which can reduce costs when companies attempt trial and error tactics for improving service.

Rather than making changes and waiting to see how business operates, running the risk of losing competitive advantage or losing money, we can employ other methods such as simulations to allow for trial and error without interrupting the normal run of business to monitor how changes in processes



affect the net profit or improve service. One LEAN practice is the 5s. Shuzworld can benefit greatly from this. Sort, straighten, shine, standardize, and sustain are all parts of the 5s LEAN program. Developed in Japan, this practice embraces ways to improve the visual dynamic of the workplace. Proper sorting of materials reduces clutter while straightening improves productivity and workflow. This minimizes waste because, ergonomically, a clean and well thought layout makes operations faster and improves SOS, or speed of service. Standardizing products help reduce waste because it is a well-known fact that repetition is the best way of improving one's skill at any given task.

Once something has been done over and over the same way, the likelihood of mistakes are minimal. Jidoka, is a system of Just-in-Time systems that focuses on improving quality at the source. This means that making sure processes are effective and efficient from the beginning can cut down on confusion late on. This will, in the end, make the process stronger and more effective. This can be accomplished through thorough training when new processes are introduced and that continuous training is offered throughout to make sure that all employees are comfortable with their jobs and tasks.

Read more:

[http://www.ukessays.com/essays/business/memo-providing-](http://www.ukessays.com/essays/business/memo-providing-recommendations-for-shuzworld-business-essay.php#ixzz2vmecc9jl)

[recommendations-for-shuzworld-business-essay.php#ixzz2vmecc9jl](http://www.ukessays.com/essays/business/memo-providing-recommendations-for-shuzworld-business-essay.php#ixzz2vmecc9jl) A.

Recommend whether Shuzworld should build the proposed stand-alone store, the strip mall store, or not proceed with construction, utilizing the appropriate decision analysis tool. 1. Submit a copy of the output from your

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decision analysis tool of choice. a. Explain why you chose the decision analysis tool you used. 2. Discuss two important factors that Shuzworld should consider while evaluating location alternatives for a new store.

B. Recommend project techniques that can be used with the construction project plan for the store being built. 1. Present a network diagram indicating the critical path.

C. Evaluate the trade-offs of allocating production line workers to minimize production costs. 1. Recommend a production mix that maximizes profits for Shuzworld's Shanghai plant, utilizing the appropriate decision analysis tool.

a. Submit a copy of the output from your decision analysis tool of choice. i. Explain why you chose the decision analysis tool you used.

D. Evaluate Shuzworld's reordering practices at the Baltimore store, utilizing a Monte Carlo simulation to evaluate variables that exhibit random (probabilistic) behavior as inputs to a 20-day inventory simulation.

E. Discuss ways to give Shuzworld a competitive advantage by doing the following: 1. Recommend a human resources strategy to improve employee efficiency and effectiveness in the operations segments of Shuzworld. 2. Discuss applicable operations management philosophies that focus on reducing waste and increasing efficiency in Shuzworld's production processes.