Fdi in insurance india essay sample

Business, Management

Q1. What is value engineering? List the main benefits of value engineering?

A Definition and explanation of Value Engineering (VE) Definition-1

Example/s-2

Where is it used?-1

Why is it used?-2

How is it helps the organisation?-2

Listing of the main benefits (any four):-2

Cost reduction

Overall cost consciousness

Culture of effecting savings across organizations

Streamlining of administration

Development of reliable suppliers

Answer.

Value Engineering (VE) or value analysis

Definition

It is a methodology by which we try to minimize the cost and improve the revenue of a product or an operation. This methodology is widely used in business reengineering, government projects, automakers, transportation and distribution, industrial equipment, construction, assembling and machining processes, health care and environmental engineering, and many others.

Example

Let us consider a component which needs a round brass rod as raw material of diameter 21. 5mm. The component has to perform seven operations: cutting, drilling, chamfering, boring, milling, plating, and polishing. Value

analysis considers all aspects of each of these and investigates whether any of them can be substituted by another material, a different size, a different tool, a different machine, a different cut sequence, a different tool for an operation, a different chemical, a different concentration, a different voltage, shorter time or processing.

For the above example, studies can be conducted to verify whether any operation can be eliminated. Simplification of processes reduces the cost of manufacturing. Every piece of material and the process should add value to the product so as to render the best performance. Thus, there is an opportunity at every stage of the manufacturing and delivery process to find the alternatives which will increase the functionality or reduce the cost in terms of material, process, and time. It also includes analyzing the methods used and the tools and equipments involved.

Where it is used

This methodology is widely used in business reengineering, government projects, automakers, transportation and distribution, industrial equipment, construction, assembling and machining processes, health care and environmental engineering, and many others. Thus, there is an opportunity at every stage of the manufacturing and delivery process to find the alternatives which will increase the functionality or reduce the cost in terms of material, process, and time. It also includes analyzing the methods used and the tools and equipments involved.

Why it is used

Value engineering or value analysis is a methodology by which we try to find substitutes for a product or an operation. It finds alternatives for increasing the functionality or reducing the cost in terms of material, process, and time by simplification, variety reduction, and parts reduction. It should be remembered that we are not seeking a cost reduction sacrificing quality. It has been found that there will be an improvement in quality when systematic value analysis principles are employed.

How it helps the organisation

Value engineering in any organizations helps to identify:

The problem or situation that needs to be changed/improved

All that is good about the existing situation

The improvements required in the situation

The functions to be performed

The ways of performing each function

The best ways among the selected functions

The steps to be followed to implement the function

The person who executes the function

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Benefits

The main benefits of the application of VE are:

Cost reduction

Overall cost consciousness

A culture of effecting savings across organisation

Development of reliable suppliers

Q2. (Case Study) Why did SABMillller revamp its supply chain? Describe the domain application used for SCM integration? (Analysis of the major and minor issues for revamping the supply chain with evidence-5, Description of the SAP system, why it was used and the benefits from using the system-5) 10 marks Answer.

Reason to revamping its supply chain

SABMillller, the $24bn global brewing giant, is revamping its supply chain management system to reduce stock-outs caused by an increasingly complex and hard to predict market. The firm is developing and testing the new system in South Africa with an eye on rolling it out to group companies worldwide, says SABMiller program manager Rudi van Schoor. The trigger for the revamp came when the company’s customers ran out of stocks of popular SABMiller brands during peak periods in two consecutive years, 2007 and 2008. The shortfall on some brands was as high as 22%. “ That had a direct impact on the bottom line,” Van Schoor says.

Given SABMiller’s ambition to be the world’s most efficient producer, such a gap was never going to be tolerated. But instead of addressing the symptom, it called in management consultancy McKinsey to look at the entire supply chain system to see where it could be improved and future stock-outs avoided.

After a global search, SABMiller settled on Infor’s advanced supply chain management system, in particular Infor’s demand forecasting system. This takes information from modules of SABMiller’s SAP enterprise resource management system, integrates them with sales forecasts from the field, and feeds back to the manufacturing resource planning system and financial systems to generate production schedules, raw materials orders and volume and financial forecasts. This will let SABMiller make any of its products in the most cost-effective location, given the local demand, manufacturing, transport and inventory costs. It will also increase its flexibility in responding to changes in demand. Products will no longer be made only in a single plant to optimise production runs, but, based on more holistic data, in the plants that optimise overall profitability. This flexibility also gives the company greater cover to handle factory downtime and to meet rapid changes in demand. But some parts of the legacy system will still be around.

The domain application used for SCM integration

SCM can be easily applied and integrated with:

a. ERP systems

b. Design systems like auto-CAD, Pro-E

c. R&D systems

d. ISO 9000 systems

e. Accounting and financial systems

f. Costing systems

g. Manufacturing systems

SAP System and benefits to using it SAP, have many modules that store, sort, and analyse data and make them available to the staff across the globe in many plants, enabling managers to streamline their operations. Software specific to functions, applications, or organisation can be obtained. Microsoft Operations Manager 2005 is a useful tool in this regard.

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Q3. Write short notes on:

Ingredients of a business process

Acceptance sampling

Work Breakdown Structure

Productivity

(Ingredients of a business process, Acceptance sampling, Work Breakdown Structure, Productivity) 10 marks 2. 5 marks each

Answer.

Ingredients of a business process

Running a successful business requires a delicate mix of many different ingredients. By paying attention to these 3 key ingredients you are sure to be onto a winning recipe. The key to business success (or lack thereof) can largely be attributed to 3 key ingredients: 1) Time: You must understand that time is money. In business, our objective is to make money. Period. But the question is how productively you convert your time into money. Are you making full use of your time or you just let the time pass by you? How much you make depends on how good you are at converting time to money. If you are already productive, then you may want to ask what are the things you can do to improve further the ratio of dollar/second? If you are making $0. 01/second, what you can do to make it $0. 02/second? Or even more.

Remember time is the most valuable asset and once it’s gone, it’s gone. Also time is also the fairest distribution of resources every human being receives. 2) People: To be successful in business, you must have people connections. I mean the right people. People consist of customers, suppliers, partners, staff, and associates. One thing that you must not leave out is your mentor or coach. Having genuine mentors or coaches is very important and it can make a very big difference in your business. To make sure that you have more profits, you must serve people well. Organize your database of people connections. By simply knowing who does what, who supplies what, who needs what, where to get what make you miles ahead of other people. To organize your connections, you can either use a paper folder or computer spreadsheet. 3) Knowledge and Skills: When I talk about knowledge and

skills, I am not referring to academic knowledge that you find in schools or colleges. What’s more important to you is knowledge and skills that can bring you results you want. Acceptance sampling

Acceptance sampling is also known as end of line inspection and categorising the products based on sample based inspection. In acceptance sampling method of quality control, the supplier and customer agree upon accepting a lot, by inspecting a small number taken randomly from the bulk supply. Out of the sample, if a small number as agreed upon by the parties or as validated by a sampling scheme, is determined as defective, the lot is accepted. If the number of defectives is more than the agreed size, the entire lot is rejected. Obviously, risks for the producer and buyer exist. As the sample size increases and the number of acceptable defectives decreases, the risk for the buyer decreases. And the converse is true.

That is the reason these numbers cannot be fixed as they depend on the customer’s requirements. Sometimes parties go for a doubling sampling plan. In this case a range of defectives is fixed. If defectives are less, the lot is accepted. If it is more than the higher number, the lot is rejected. If the number of defectives falls between the above two numbers, another sample of a higher size is taken for inspection and if the total number of defectives is less than another determined number, the lot is accepted. Acceptance sampling is not quality improvement or correction, but only a way of ensuring that the number of defectives is within a certain permitted number.

Work Breakdown Structure

WBS is the technique to analyze the content of work and cost by breaking it

down into its component parts. Project key stages form the highest level of the WBS, which is then used to show the details at the lower levels of the project. Each key stage comprises many tasks identified at the start of planning and later this list will have to be validated. The entire process of a project may be considered to be made up on number of sub process placed in different stage called the Work Breakdown Structure (WBS). WBS is produced by identifying the key elements, breaking each element down into component parts and continuing to breakdown until manageable work packages have been identified. These can then be allocated to the appropriate person. The WBS does not show dependencies other than a grouping under the key stages. It is not time based; there is no timescale on the drawing.

Productivity

Productivity is generally expressed as the ratio of outputs to inputs.

Prodactivity = Output/Input

While the above ratio may imply efficiency, productivity is the value added for every unit of investment. Thus, it is value added upon cost. Enhancement of productivity is achieved by either reducing the inputs for the same output or increasing the output by using the same input. Productivity can be calculated for: A single operation

A functional unit

A department or division

A plant

Productivity is a measure of the efficiency of the system and looks at the

economies achieved during the processes. Every process will have a number of contributors which help in achieving the maximum productivity. The processes are people, machines, facilitating goods, ancillary equipments, and technology. Each of these elements attempts to enhance the contribution of other elements. Quite often, productivity may suffer because of several problems associated with different elements of production. In such cases, quality circles are very efficient in executing low cost projects by using non-intrusive methods of improving productivity and quality throughout the organisation.

Q4. Collaborative Forecasting Running Smoothly at Brooks Sports (Case Study) What is the main issue of the case study? Analyze the forecasting solution. (Description of the main issue (forecasting process needed to change), forecasting challenges-4, Evaluation of the collaborative forecasting process, Evaluation-4, Conclusion on whether the solution could be improved or not-2) 10 marks Answer.

Main issue of the case study

The main theme of the case study is to change the forecasting process of the company to make the company grow because existing forecasting process is entirely based on the judgment of the sales team. Forecasting challenges

The strategy shift created a number of forecasting challenges for Brooks including:

♦ Inconsistent style growth: the new line of products experience growth rates anywhere from 0 to 50 percent annually.

♦ Long production planning horizon coupled with short product life: production and capacity decisions are typically made 18 months before a style is launched, average lead time for a style is 6 months and the product life of Brooks' styles range from 6 to 24 months. This means that planners must sometimes set the entire demand plan for a style prior to ever receiving a customer order, underscoring the importance of accurate forecasts.

♦ Increasing " at-once" orders: " at once" orders, which are placed for immediate shipment, historically accounted for less than 20 percent of total sales. Since 2001, however, " at once" orders have increased to nearly 50 percent of total sales.

♦ Evolving size curves: with its new focus on serious runners, the standard footwear size curve would not adequately reflect distribution of sales by sizes.

♦ No exposure to retail sell-through: the high-performance products are sold primarily through independent specialty stores who don't have the capability to share sales data with vendors. With a corporate mandate from senior management emphasizing the importance of creating accurate and timely forecasts, Brooks completely revamped its forecasting process. An independent forecasting group, reporting directly to the COO and CFO, was established to coordinate input from various groups—sales, marketing, product development and production and to remove bias from the forecasting process.

Evaluation of the collaborative forecasting process

The forecasting group established a collaborative forecasting process with three primary steps:

Step 1: Produce monthly statistical forecasts at the SKU level to capture level, trend, seasonality and the impact of events based on historical data. Brooks chose Forecast Pro to create these forecasts due to a number of features available in the software:

♦ Ability to create accurate forecasts

♦ Flexibility to choose forecast models or let software automatically select models

♦ Capability to model events (particularly important for predicting spikes in demand with new product launches)

♦ Support for multiple-level models to produce consistent forecasts at all levels of aggregation

♦ Powerful override facility to enable collaborative forecasting

“ Forecast Pro has been a great solution for Brooks,” says Tom Ross, Financial Analyst. “ Implementing Forecast Pro’s event modeling is very simple, which is an essential feature for us because of our moving product launches. We also use event models to address the challenge of forecasting events that don’t occur on a regular basis such as races which can have a dramatic impact on the sales of specific products. Another powerful feature of Forecast Pro is the ability to forecast a product hierarchy. This helps us to

serve our multiple constituents within Brooks we review higher-level forecasts with management and easily generate detailed forecasts at the SKU level for demand planning.”

Step 2: On a quarterly basis, get sales management and sales reps to forecast sales for a 12- month horizon, focusing on major accounts. This input is gathered via the Web and then aggregated by the forecasting group. Step 3: Compare the statistical and judgmental forecasts, and make adjustments to create the final monthly forecast. Ninety percent of the final forecasts are the same as the statistical forecasts—changes are most commonly made to the forecasts for new styles where the sales organization has important knowledge to add. These final forecasts are then automatically fed into Brooks’ ERP system. “ Forecast Pro allows us to easily apply judgmental overrides, which is critical for us,” notes Ross. “ We now can systematically track changes, giving us a better understanding of our forecasting performance.” Conclusion

The commitment to forecasting has paid off at Brooks. Forecast accuracy has improved on average by 40 percent, unfulfilled demand has been lowered from approximately 20 percent to less than 5 percent, and closeouts have been reduced by more than 60 percent. The improved forecasting has also helped to smooth out production, resulting in lowered costs and better margins.

Q5. Explain the risk management and its various components.
(Definition of risk management and what it entails, Description of the four

components of risk management-2, Risk assessment-2, Risk control-2. 5, Risk prioritizing-1, Risk mitigation-2. 5) 10 marks Answer.

Risk management

Risk management aims to identify the risks and then take actions to minimize their effect on the project. Risk management entails additional cost. Hence, risk management can be considered cost-effective only if the cost of risk management is considerably less than the cost incurred if the risk materialises.

Four important components in risk management are risk assessment, risk control, risk prioritising, and risk mitigation as depicted in figure.

Fig.: Components of Risk Management

1. Risk assessment: Risk assessment identifies the possible risks and assesses the consequences by means of checklists of possible risks, surveys, meetings and brainstorming, and reviews of plans, processes and products. The project manager can also use the process database to get information about risks and risk management on similar projects.

2. Risk control: Identify the actions needed to minimise the risk consequences. This is also known as risk mitigation. Develop a risk management plan. Focus on the highest prioritized risks. Prioritisation requires analyzing the possible effects of the risk event, in case it actually occurs. This approach requires a quantitative assessment of the risk probability and the risk consequences. For each risk, determine the rate of its occurrence and indicate whether the risk is low, medium or of high

category. If necessary, assign probability values in the ranges as prescribed based upon experience. If necessary assign a weight on a scale of 1 to 10.

3. Risk prioritizing: Rank the risks based on the probability and effects on the project. For example, a high probability, high impact item will have higher rank than a risk item with a medium probability and high impact.

4. Risk mitigation: Select the top few risk items for mitigation and tracking. Refer to a list of commonly used risk mitigation steps for various risks from the previous risk logs maintained by the project manager and select suitable risk mitigation step. The risk mitigation steps must be properly executed by incorporating them into the project schedule. In addition to monitoring the progress of the planned risk mitigation steps, periodically revisit the risk perception for the entire project. The results of this review are reported in each milestone analysis report. To prepare this report, make fresh risk analysis to determine whether the priorities have changed.

Q6. Why redesign of layouts may be necessary? List the differences between product and process layout. (Listing of reasons why redesigning of existing layout is required-5, Listing of any five differences-5) 10 marks Answer.

The primary objective of plant layout is to increase productivity and also to ensure employee satisfaction and lowering the costs. Redesigning of a layout There are several reasons as to why a redesigning of an existing layout may be required. These are as follows: Building not suited for requirements

Product design or process changes made without making necessary changes in the layout Installation of additional equipment without considering relationship to the existing flow pattern Unexplainable delays and idle time

Stock control difficulties

Decreased production in an area

Crowded conditions

Many people are moving material

Bottlenecks in production

Backtracking

Excessive temporary storage

Obstacles in materials flow

Scheduling difficulties

Wasted cubic space

Idle people and equipment

Excessive time in process

Poor housekeeping

Product layout and process layout

A layout refers to the arrangement of facilities connected with production, support, customer service, and other activities. It involves the physical arrangement of work centers, storage, space for material handling and movement, utility areas and other essential spaces required for production and operations. 1. Process layout

This type of layout is concerned with the grouping of machines, process, or services according to their function. This grouping of machines by function is

characteristic of job shops and batch type production facilities. Hence this type of layout is also called as functional layout. Process layout typically uses general purpose machines that can be changed over rapidly to new operations for different product designs. Consider a car service and repair centre. Each car entering into the service centre will follow the following steps: Arrival at office

Customer informs about the type of problem

Front office guides the customer to drive the car to the required departments

Car is given the necessary service

Customer returns to front office and makes payment

Car exits from the service centre

Fig.: Process Layout

2. Product layout

Product layout commonly referred to as ‘ line layout’, focuses on the sequence of production or assembly operations required for manufacturing or assembling a part or a product. These are used in mass or continuous production. Examples are automobile assembly, cement manufacturing, oil refining. In contrast to process layouts, they are not flexible as they are specifically designed for making or assembling one product. Figure depicts the various machines in a component manufacturing layout.

Fig.: Product Layout

Table depicts certain factors and logic that we go by while designing the type of layout.

Table: Differences between Product and Process Layout

Product layout

Process layout

1. Mass production of one product or similar types of products

1. A large variety of’ products with low to medium demand

2. Standardized product with little or no design changes

2. Emphasis is on special orders or products having significant and frequent design changes

3. Materials or products permit bulk or continuous handling by mechanical means

3. Materials or product are too large or heavy and used in small quantities

4. The same machine or work station is seldom used for more than one operation

4. Frequent need to use the same machine or work station for two or more different operations

5. Production of stock i. e. for steady demand

5. Production for individual orders