

Question No (01)

Product management

Product management is an organizational function within a company dealing with new **product** development, business justification, planning, verification, forecasting, pricing, **product** launch, and marketing of a **product** or **products** at all stages of the **product** lifecycle.

Process Layout

A process layout is where similar items are grouped together. Process layouts are ideal for companies that perform custom work and where the demand for each product is low.

The process layout, also called the functional layout, is designed to keep everything organized in a manner so that everything has its place. Think about an auto mechanic's shop. New tires are stored in one section, whereas wrenches and other tools are stored in another section. The cans of oil are stored together, as are other groupings of supplies or power tools.

Although this is an organized layout in which everyone always knows where all supplies and tools are located, it isn't the most efficient for production lines, where the same job is performed every single time. The process layout is effective when each job is a custom situation. The mechanic's shop illustrates this well. One customer may come in needing only an oil change, but another may come in needing the entire transmission overhauled.

Product Layout

A product layout is where the equipment, tools, and machines are located according to how a product is made.

The product layout is the opposite of the process layout. Rather than have a specific section for each group of tools and supplies, the product layout is an assembly line. The required tools and supplies are located at each section of the assembly line, based on where the product is in production. This is common in auto manufacturing where the car being made is moved down the line and stops at stations where different things are assembled. One section might be where doors are attached, whereas another section inserts the engine.

This is an efficient system when the same product is being made without variation. Workers don't need to search or collect tools or supplies to perform their job. Giving workers one job to perform repeatedly reduces potential mistakes in the product assembly.

Sources of new product ideas include company employees, customers, competitors, outside inventors, acquisitions, and channel members. Both solicited and spontaneous ideas may emerge from the sources, and some even occur by accident.

Question No (02)

The Product Development Process

The product development process is a series of activities by which a product idea is transformed into a final product. It can be broken down into the seven steps

- Evaluate the opportunity and select the best product idea
- Get feedback to refine the product concept
- Make sure product perform and appeal to consumer
- Design with manufacturing in mind
- Build and test prototypes
- Rump up production and run mark tests
- Launch the product

Service development Process

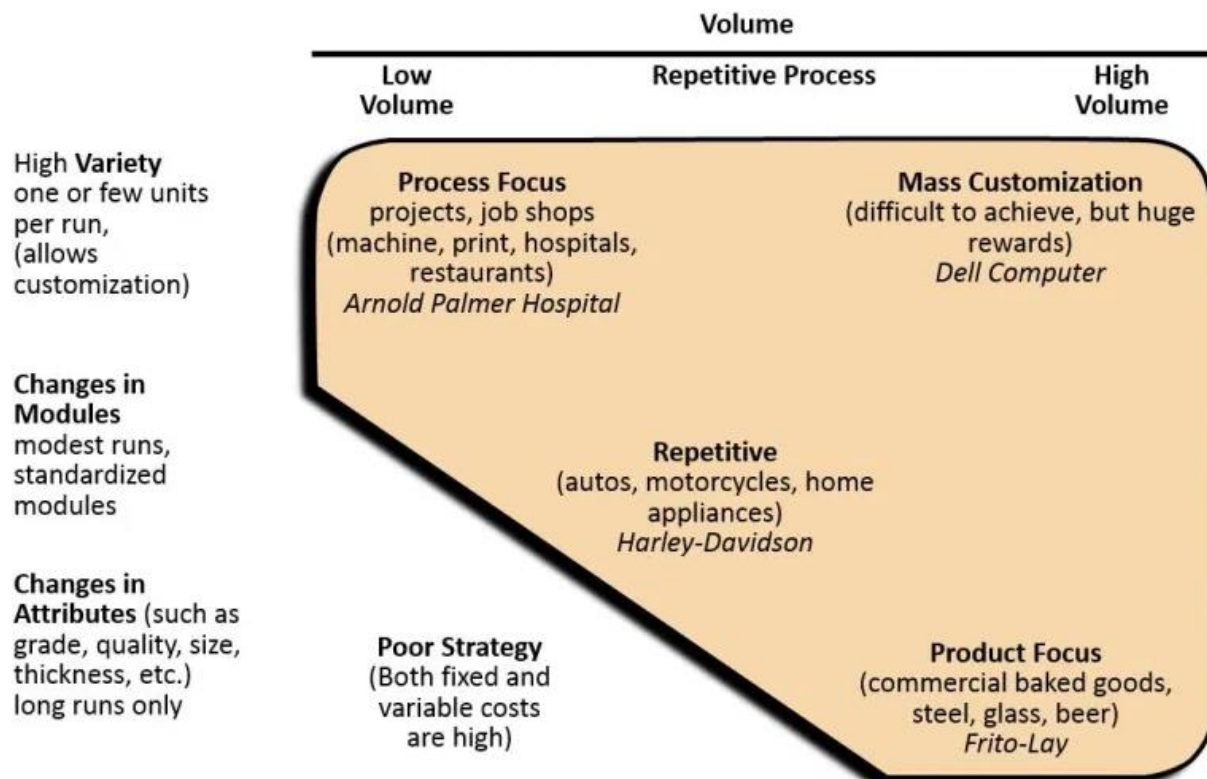
It is the end-to-end process of developing and launching a new service to be sold to customers. This typically includes market research, service strategy, customer experience, marketing, operations and launch of a new service.

This refining process—the product planning and development process—is divided into five major stages: idea stage, concept stage, product development stage, test marketing stage, and commercialization.

Question No .03

There are four process strategies:

- Process Focus.
- Repetitive Focus.
- Product Focus.
- Mass Customization.



A break-even analysis is a financial tool which helps a company to determine the stage at which the company, or a new service or a product, will be profitable. In other words, it is a financial calculation for determining the number of products or services a company should sell or provide to cover its costs (particularly fixed costs). Break-even is a situation where an organization is neither making money nor losing money, but all the costs have been covered

Components of Break Even Analysis

Fixed costs

Fixed costs are also called overhead costs. These overhead costs occur after the decision to start an economic activity is taken and these costs are directly related to the level of production, but not the quantity of production. Fixed costs include (but are not limited to) interest, taxes, salaries, rent, depreciation costs, labor costs, energy costs etc. These costs are fixed respective of the production. In case of no production also the costs must be incurred.

Variable costs

Variable costs are costs that will increase or decrease in direct relation to the production volume. These costs include cost of raw material, packaging cost, fuel and other costs that are directly related to the production.

Benefits of Break-even analysis

- **Catch missing expenses:** When you're thinking about a new business, it's very much possible that you may forget about a few expenses. Therefore, a break-even analysis can help you to review all financial commitments to figure out your break-even point. This analysis certainly restricts the number of surprises down the road or at least prepares a company for them.

- **Set revenue targets:** Once the break-even analysis is complete, you will get to know how much you need to sell to be profitable. This will help you and your sales team to set more concrete sales goals.

- **Make smarter decisions:** Entrepreneurs often take decisions in relation to their business based on emotion. Emotion is important i.e. how you feel, though it's not enough. In order to be a successful entrepreneur, decisions should be based on facts.
- **Fund your business:** This analysis is a key component in any business plan. It's generally a requirement if you want outsiders to fund your business. In order to fund your business, you have to prove that your plan is viable. Furthermore, if the analysis looks good, you will be comfortable enough to take the burden of various ways of financing.
- **Better Pricing:** Finding the break-even point will help in pricing the products better. This tool is highly used for providing the best price of a product that can fetch maximum profit without increasing the existing price.
- **Cover fixed costs:** Doing a break-even analysis helps in covering all fixed cost.