

# Process and design

[Design](#)



Number of consumers served, consumer: time ratio, consumer satisfaction level, cash- flow Down times, number of defects, quantity produced, quantity: time ratio Factory location Office branch and machine stations based on the accessibility of consumers Definite location based on efficiency-related factors such as availability of materials and ease of distribution Facility layout Adjusted for efficient service providence and consumers' comfort and accessibility Arranged to optimize movement of materials and their operations Process design Employee and machine accommodation of consumers

Continuous flow of materials by machines and operators Scheduling Adjusted to consumer needs Virtually non-stop. Efficient with minimal down times Production planning Certain protocols present but mainly depend on the consumers. No stored orders. Highly detailed and easy to follow. Adjusted to correspond to raw materials availability and efficiency of work times. Stored orders present. Workforce Humans and machines combined, proportion depends on the scale and technology level of bank Humans and machines combined, with higher machines proportion Quality Variable Standardized and uniform Capacity

Variable, depends on the demand of consumers High volume, especially in peak seasons Inventory Mostly intangible products, cash, equipments for services and support such as machines Make-to-stock, mostly tangible products associated with the products and machines Executive Summary There are various approaches which are available in process design. Their use, however, depends on the types of process involved, which may either be product or service.

In this summary, soft drink will be selected as an example for the product process design and banking service as an example for the service process design. For the product sector, there are four types of approaches to the process design namely assembly line, continuous flow, batch, and Job shop. Assembly line deals with the process where materials are carried through progressive stages with allocated operations in each stage. There are some periods spent in each stage to finish the operations allocated. Continuous flow is similar to assembly line, but the movement of the materials in the process is continuous.

Batch approach involves the division of the process into parts and operations for the particular part are done on all batches before the process is continued. Meanwhile, Job shop process involves the handling of all the required tasks by a specific group of workers until completion. Job shop process is suitable only for tailor-made products in which the variability between products is high, and thus is not suitable for soft drink production. Batch approach may be applicable but is less efficient compared to assembly line and continuous flow for products with high production volume.

Assembly line is more suitable for products which consists of complex procedures and require certain stay-in periods in each progressive stage. Continuous flow is the most suitable approach since it responds best to the overall process of soft drink production which is relatively simple and is the most efficient compared to the other approaches. In the service sector, there are three types of approaches to the process design namely personal attention, self-service, and production line approach.

Personal attention approach focuses on developing good relationships with the customers by specially enhancing interactions between the company representative and the consumers. This is commonly used in companies in which customer loyalty and satisfaction is very important such as hotels or other amenities related services. Self service approach focuses on the efficiency of services by including the consumers in the service generation processes. This approach is common in automated services such as online and electronic services, in which speed is of utmost importance.

Meanwhile, in production line approach, the company controls the process in each outlet to ensure the quality and efficiency of the offered services. This is typically used in companies which require rapid processes but also sound and carefully controlled quality such as restaurants and food related services. In terms of banking services, personal attention is definitely unsuitable since it is not that crucial to develop personal relationships with the customers and the efficiency of the process would be largely compromised.