

New Challenges in the Food Industry

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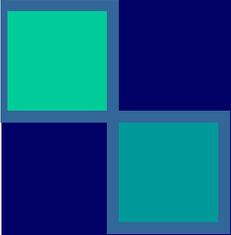
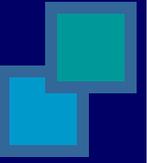


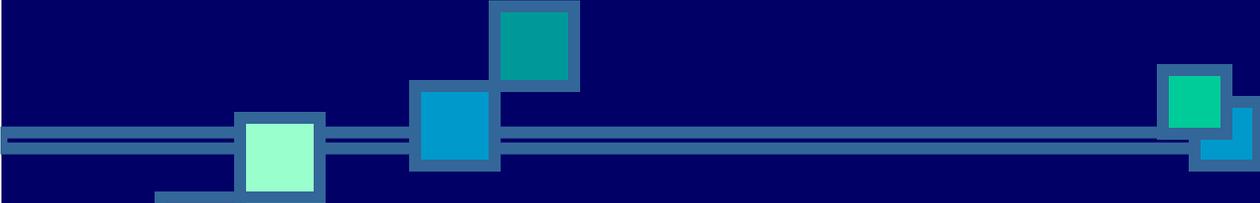
The food market is not truly a single market. Rather it is a collection of markets with many different types of products, processes and needs. Each category of the food business has unique issues and needs.

- **The amount of product differentiation in the food industry can be viewed as a continuum from customised products (ready-to-eat meals, cakes) at one end of the spectrum to commodity products (sugar, oil, flour etc) at the other end.**
 - **Majority of the food industries in India are small scale industry employing few people (less than 50)**
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Raw material characteristics

- Few types of main materials, relatively few ingredients per product
 - Main raw materials constitute a major part of the total production cost
 - The food materials vary in composition and quality attributes.
 - Raw materials can be non-discrete and perishable
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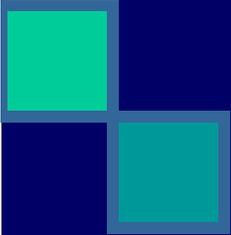
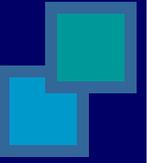


Process characteristics

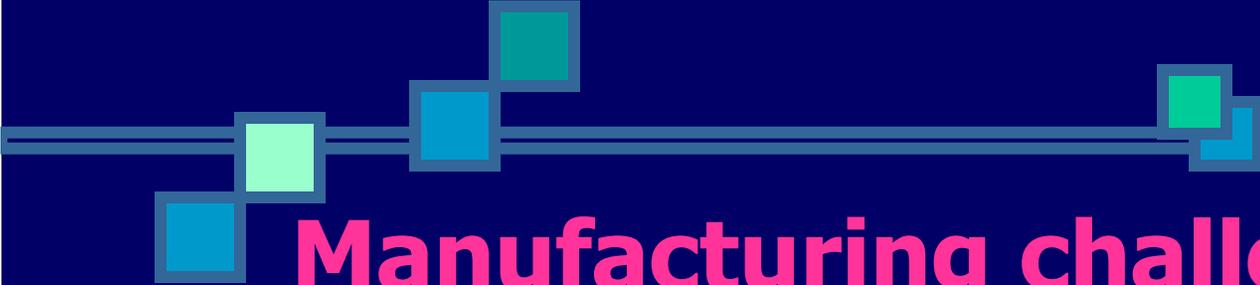
- Long(sequence-dependent) set up times
 - The product at all stages of manufacturing is perishable
 - Process have a variable yield and processing time
 - Production rate is determined by the its capacity.
 - Strict regulatory control
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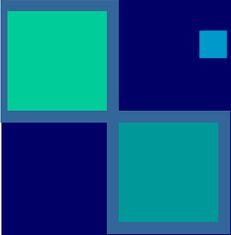
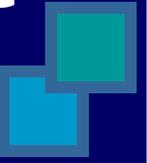
Business challenges in the food industry

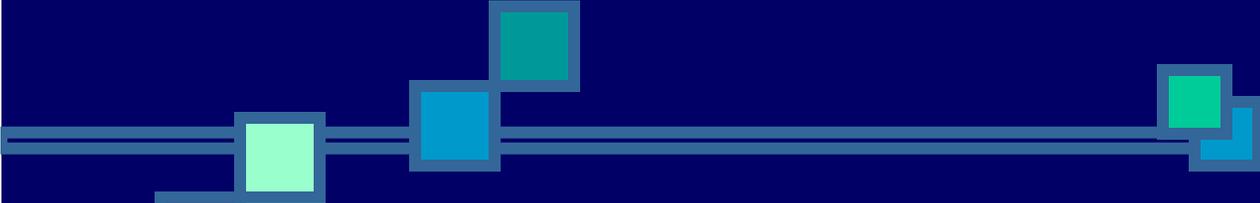
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- Emergence of few big retailers and their own brands, bigger store size, demand for one stop shopping, increased retailer access to information via electronic point of sale (EpoS), introduction of loyalty cards
 - Product variations are developing at an increasing rate with both the customer and the market becoming more fragmented and specialised.
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- **the retailing revolution in the present scenario is transforming the power balance from the manufacturer to the retailer's side.**
 - **the linkage with customer will only possible through the retailers who control and regulate the market in the future.**
 - **De-listing and reduced shelf space will be one of the big threats.**
 - **The retailers have introduced their own brands as alternatives to established brands of food manufacturers.**
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Manufacturing challenges in the food industry

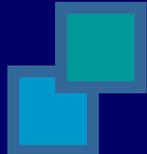
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- **Most of the food manufacturers will now have to do business with powerful retailers, who demand a wider range of products, shorter delivery times, frequent deliveries and price reductions.**
 - **Moreover, retailer brands present both opportunities and threats to manufacturers**
 - **The food products that are highly perishable, pose a big challenge for the manufacturer.**
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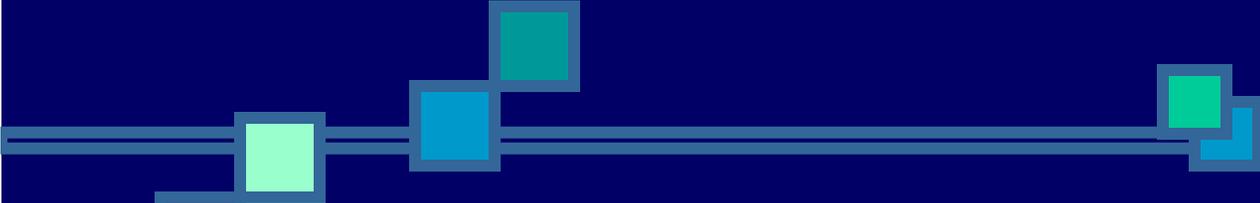


Wide demand variability, limited shelf life, variable process yield, variable raw material quality and food safety issues restrict the food industry to align its production with demand.

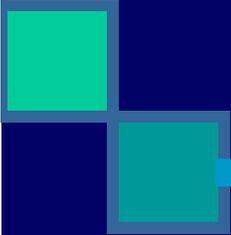


High demand variability and increased service level drive the food industry to adopt MTS strategy.

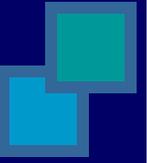
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- **Availability of raw material to the food industry is also not assured due to fluctuating harvest conditions.**
 - **The food industry, in light of vulnerability of their products to contamination, is under pressure to comply with HACCP standards.**



In present scenario, the food manufacturing focus is expected to be on safe, efficient and responsive operation of plants producing a variety of products.



The pressure on margins requires minimum wastage and a high resource utilisation. This demands maximum flexibility from manufacturing operations.



- The ability to handle short product runs, variable batch sizes, frequent speed changeovers, robust control of individual batch operations and the ability to quickly introduce new product formulations will be important.**