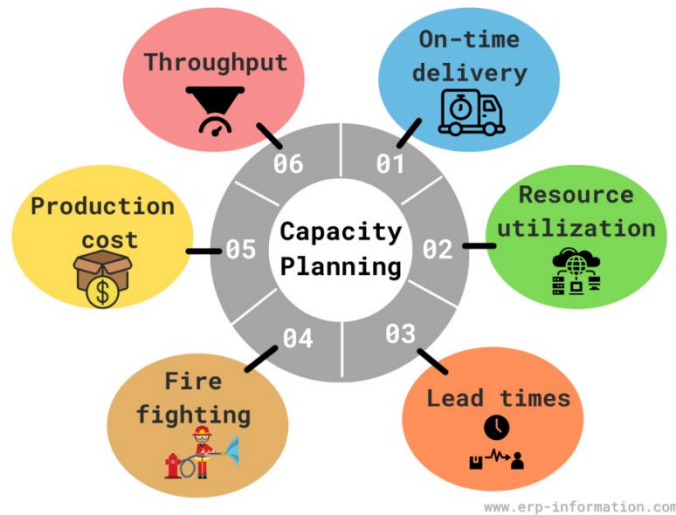


CAPACITY PLANNING

Capacity planning is the process of determining the production capacity needed by an organization to meet changing demands for its products or services. It ensures that a business has the right amount of resources (such as equipment, labor, and materials) to produce goods or services efficiently without overloading or underutilizing resources.



Types of Capacity Planning

1. Long-Term Capacity Planning

- Focuses on overall strategic growth and future expansion.
- Includes investments in new technology, facilities, or workforce expansion.

2. Medium-Term Capacity Planning

- Balances existing resources with expected demand over months or years.
- Involves workforce scheduling, equipment procurement, and process improvements.

3. Short-Term Capacity Planning

- Adjusts resources to meet daily, weekly, or monthly demand variations.
- Includes overtime, shift adjustments, and temporary workforce hiring.

Steps in Capacity Planning

1. Measure Current Capacity

- Assess current production output and available resources.

2. Forecast Future Demand

- Predict future sales and production requirements.

3. Identify Capacity Gaps

- Compare current capacity with future demand.

4. Develop Strategies to Address Gaps

- Options include increasing production efficiency, expanding facilities, outsourcing, or investing in automation.

5. Implement and Monitor

- Execute the plan and continuously monitor performance for adjustments.

Strategies for Capacity Planning

1. **Lead Strategy** – Expanding capacity in anticipation of future demand.
2. **Lag Strategy** – Expanding capacity only after demand has increased.
3. **Match Strategy** – Gradually increasing capacity in small increments based on demand trends.
4. **Adjustment Strategy** – Making short-term changes to capacity based on real-time demand fluctuations.