Operations Strategy
Manufacturing Strategy

OPERATIONS STRATEGY

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All companies, to survive over time, have to build and keep a specific advantage that differentiate them from competitors.

Managing this differentiating advantage is the essence of strategy.

Strategic levels

- **Corporate**: resource allocation between different markets and products

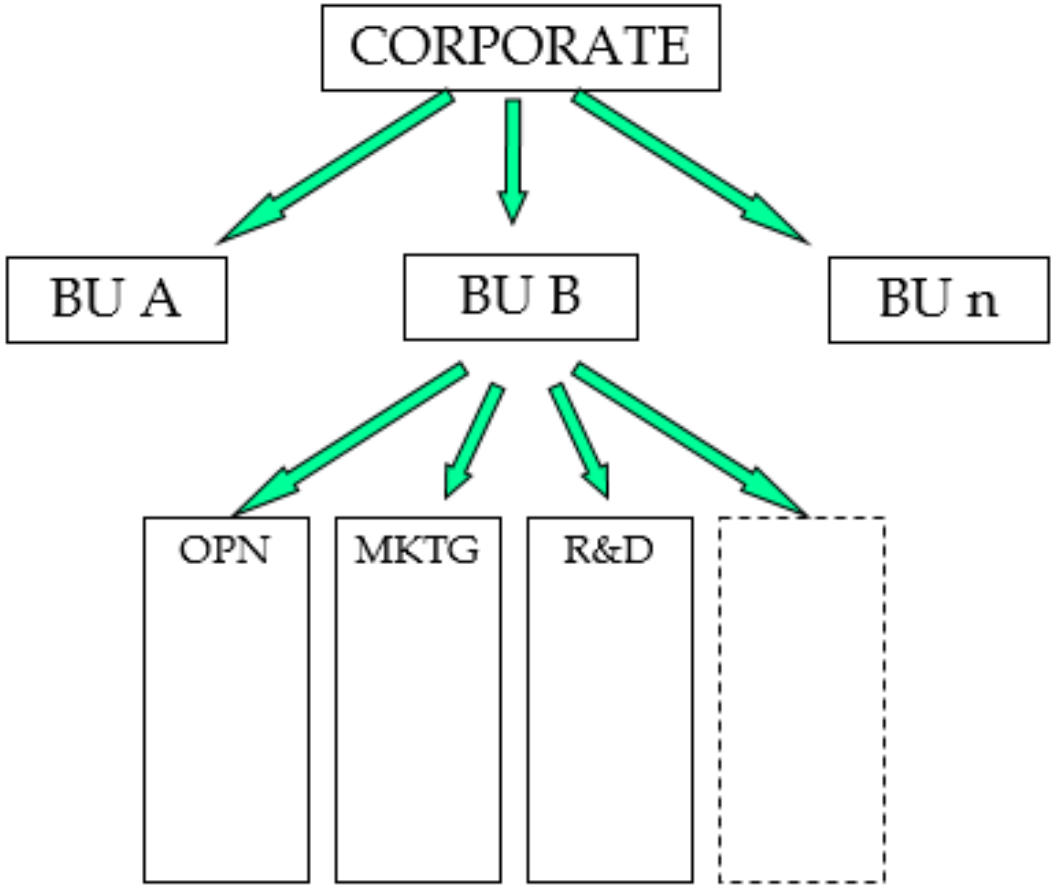
  (in which business?)

- **Business Unit**: what are the markets' needs and how to satisfy them

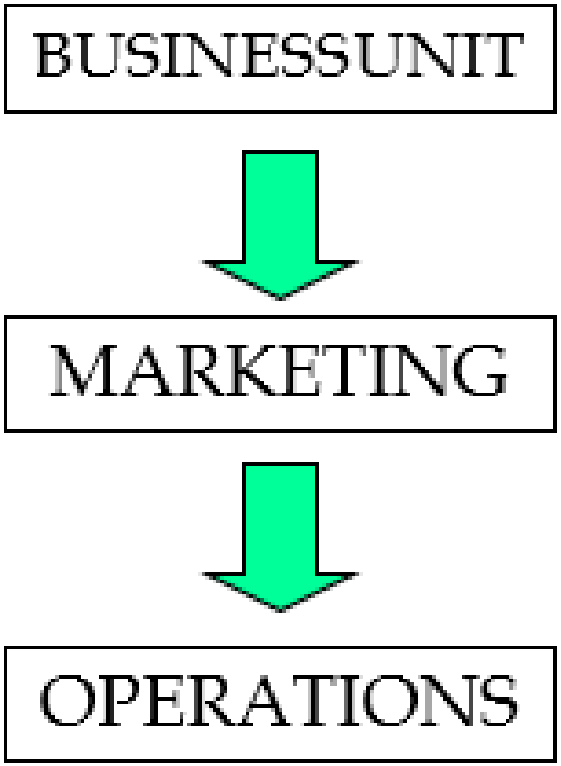
  (how do we compete?)

- **Functional**: support the company in satisfying market needs

Traditional approach



Traditional approach



Wrong beliefs about Operations

- Operations are mostly technical
- Operative aspects are details

For the operations system there is a one best way of improvement: managerial choices are not necessary

There are forces of change

Relevant factors **outside** the company:

- Offer > Demand
- Customisation
- Globalisation
- Speed of technological development

There are forces of change

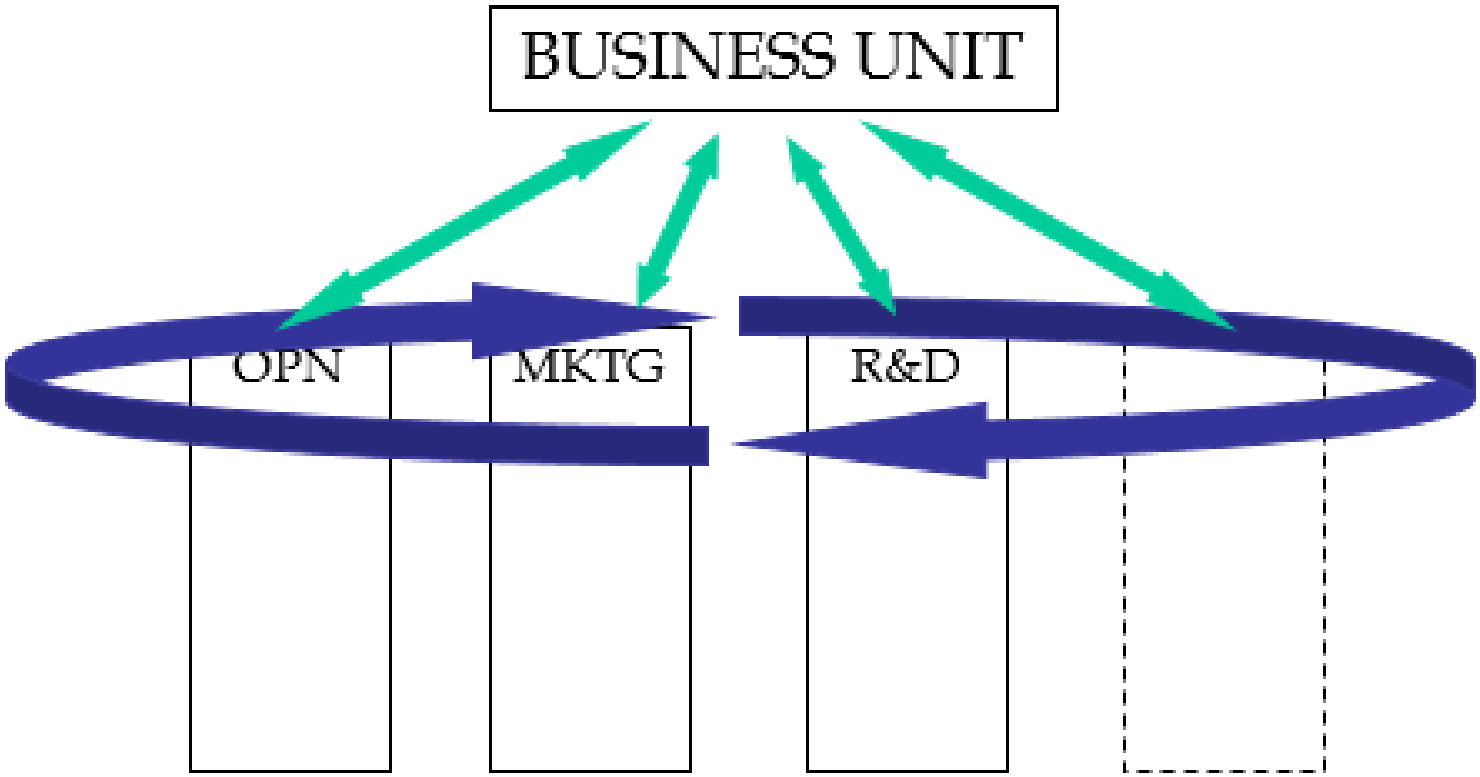
Factors influencing **company's resources**:

- Economical (wealth increase)
- Cultural (education level)
- Social (authority acknowledgment)
- Technological innovation
- ICT

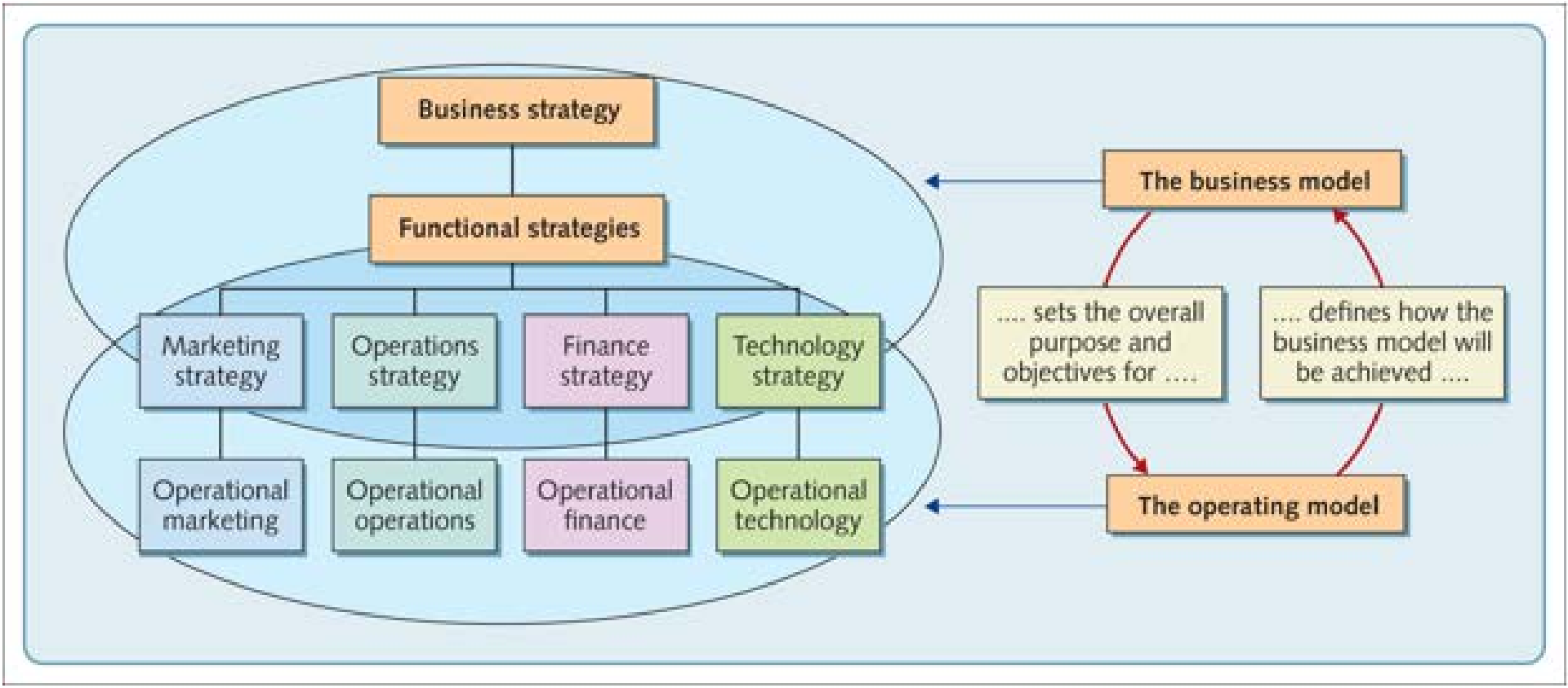
Innovative approach

Functional strategies can neither be independent one from another, nor can they be the sequential outcome of the Business strategy; rather VPs of main Functions have to communicate and interact to define the strategy at the Business Unit and Corporate level.

Integration & Bi-direction



Strategy


Business strategy
Functional strategies
Marketing strategy
Operations strategy
Finance strategy
Technology strategy
Operational marketing
Operational operations
Operational finance
Operational technology
The business model
.... sets the overall purpose and objectives for ....
.... defines how the business model will be achieved ....
The operating model

Strategy

Why is strategy important?

To create a sustainable advantage it's necessary to have a significant amount of time

This advantage is rarely the outcome of just one excellent critical choice. It's the outcome of many little good choices

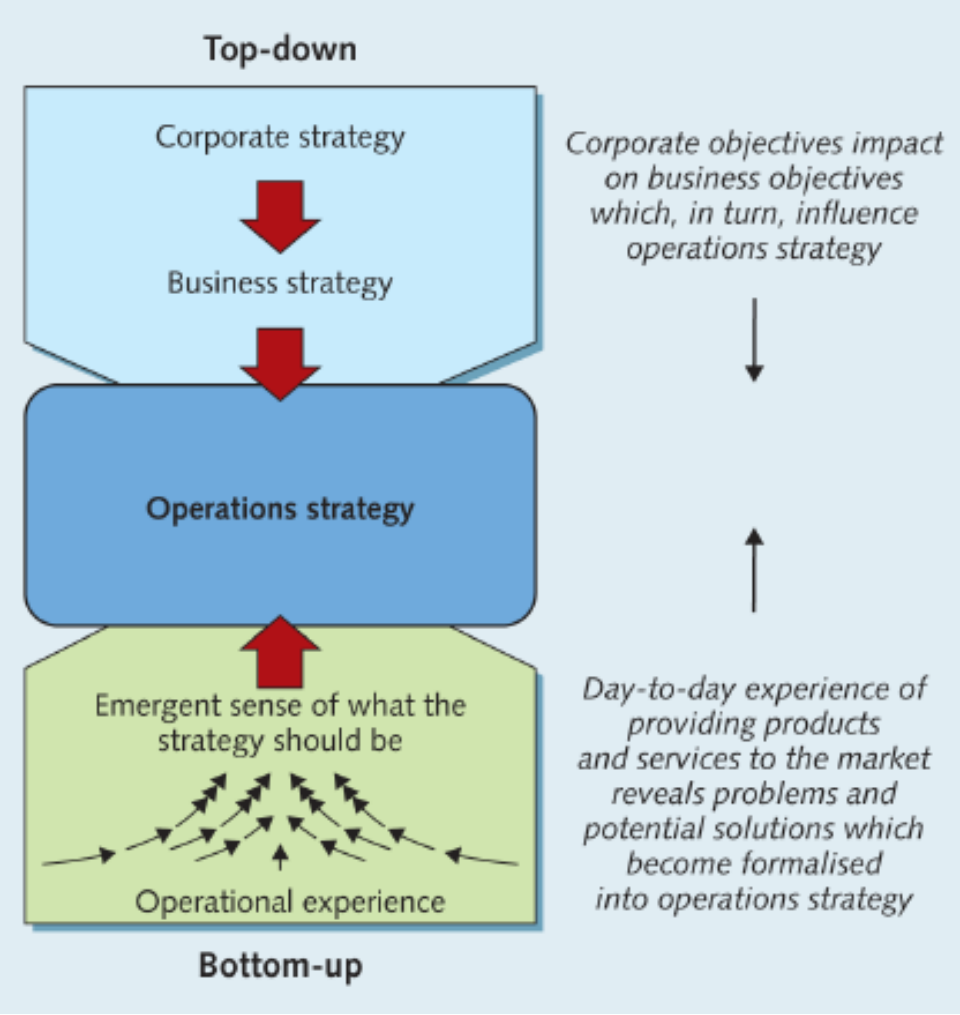
To take many little good choices a clear line is needed

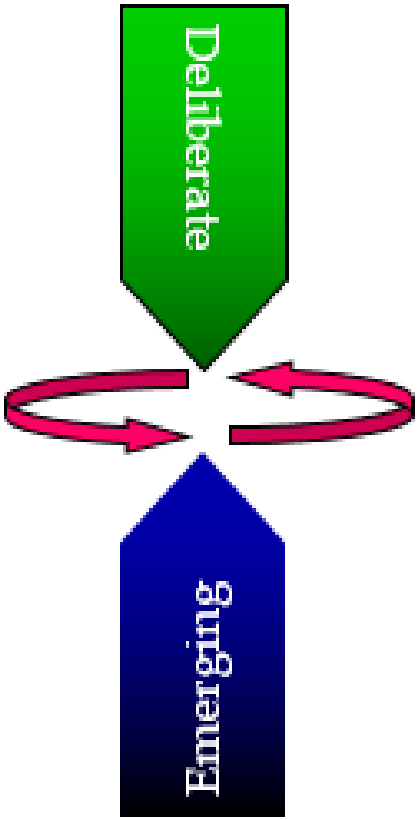
⇒ **Deliberate Strategy**

In highly turbulent environments it's not possible to plan everything in advance:

⇒ **Emerging Strategy**

Strategy


Top-down
Corporate strategy
Business strategy
Operations strategy
Emergent sense of what the strategy should be
Operational experience
Bottom-up
Corporate objectives impact on business objectives which, in turn, influence operations strategy
Day-to-day experience of providing products and services to the market reveals problems and potential solutions which become formalised into operations strategy


Deliberate
Emerging

The voice of the customer

1. Time (delivery speed; delivery reliability,..)
2. Price (cost)
3. Quality
4. Flexibility (product, customization, variety, plan,...)
5. Service

1. Time

- Time to formulate the offer
- Time to confirm the order
- Time to deliver (Delivery speed)
- Delivery reliability (Timeliness)
- ...

2. Price

- Purchase
- Usage
- Maintenance
- Update/Upgrade/Expansion
- Disposal

3. Quality

- Quality of Design (specifications)
- Quality Conformace (NB: only in field)

4. Flexibility

- Product
- Customization
- Variety
- Plan

5. Service

- DELIVERY (MTS)

  Goods availability at the warehouse

- OTHER AREAS

  Training

  Technological improvement

  After-sale support …

Operations' objectives

Time

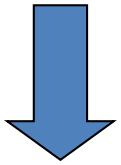
Price (cost)

Quality

Flexibility

Service

These are targets **difficult to achieve** and
it is not possible to reach the optimum value in all dimensions



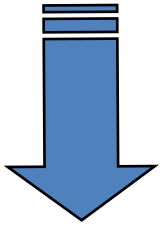
It's necessary to align Operations and Market

Market-operations aligment

Customer needs

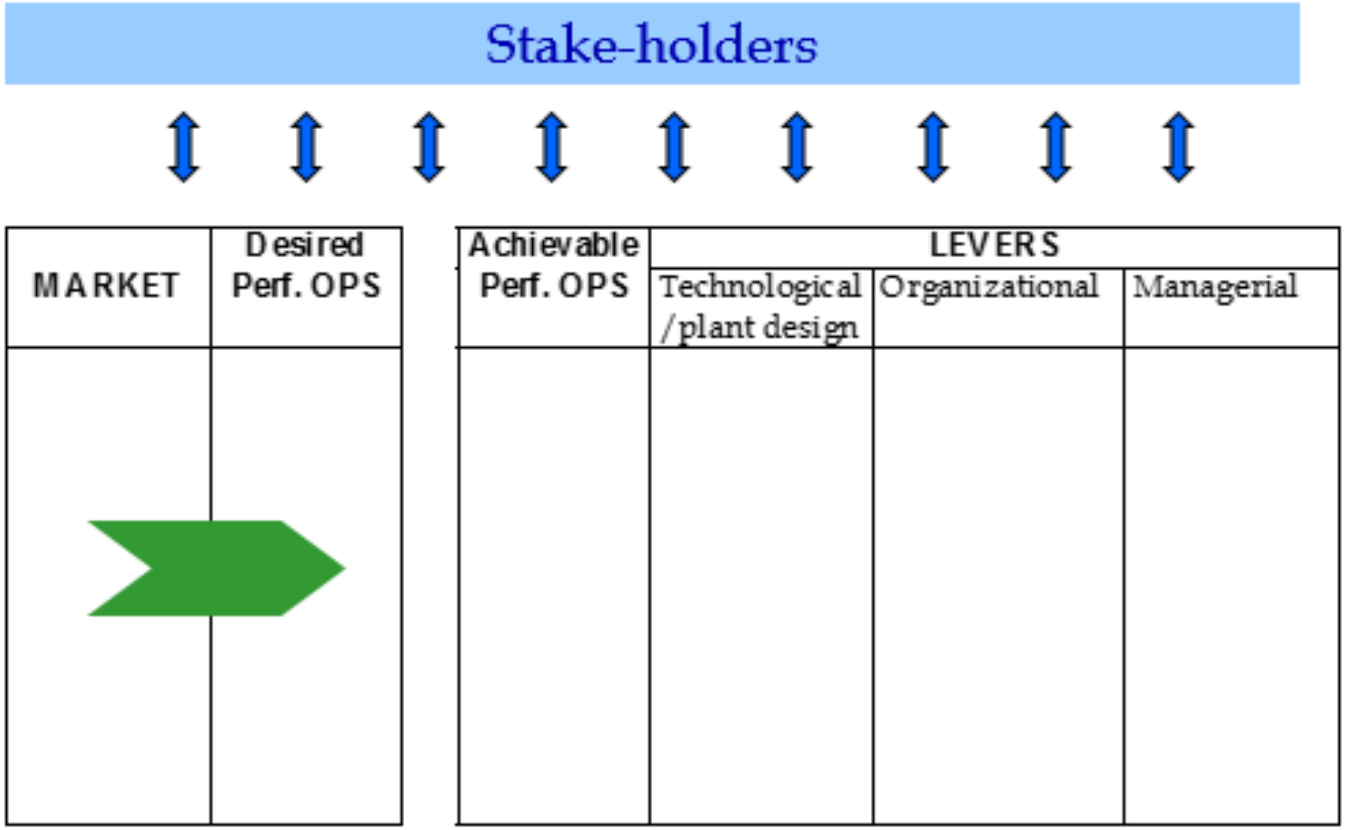
Market positioning

Analysis of competitors' actions

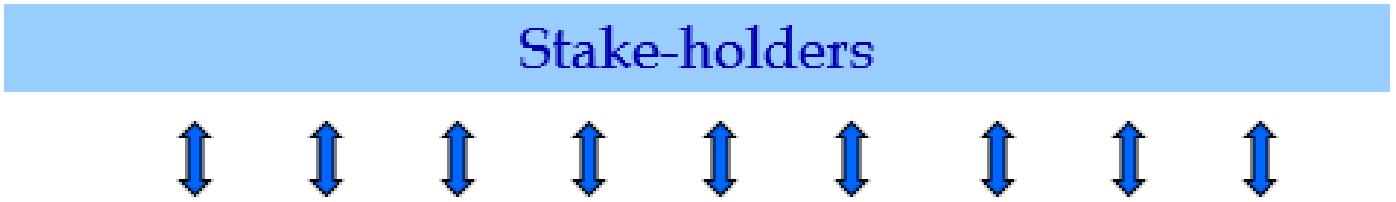


Desired performances

Operations strategy: desired performances



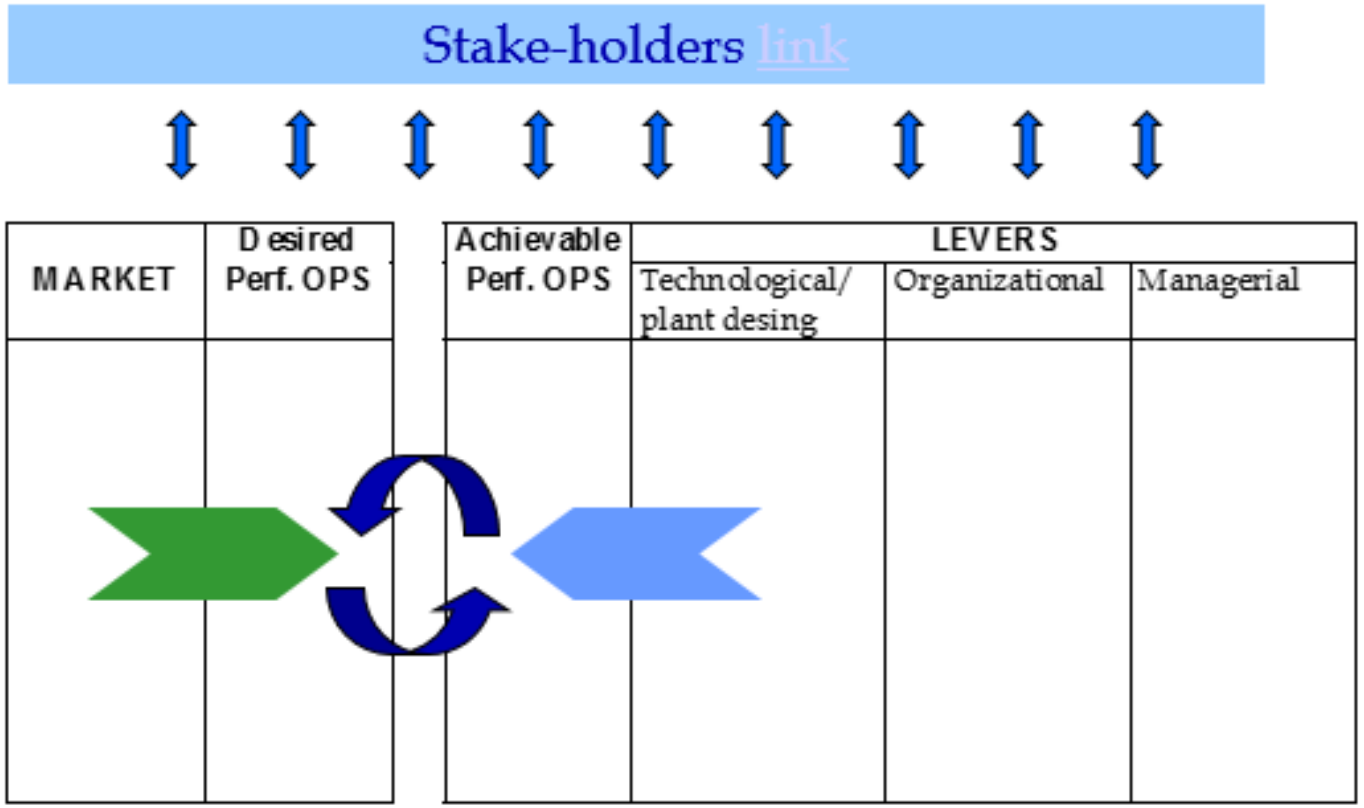
Operations strategy: achievable performances



MARKET	Desired Perf. OPS

Achievable Perf. OPS	LEVERS		
	Technological /plant design	Organizational	Managerial
	– Production capacity sizing and division – Strategic Make / Buy – ~~Technological~~ process – Layout – ~~Automation~~ level ...	– Responsability allocation and decentralization level – Team vs individuals – Incentivisation systems – Information flows between different levels --	– Operations planning systems – Capacity management systems – Mainteinance politcs – Quality control – Costs control procedures – ...

Objectives alignment: reconciliation



Strategic levers

1. Structural design
2. Infrastructural design
3. Delivery (managing the…)

1. Structural design choices

- Overall production capacity, its division and localization (coming up next)
- Strategic Make or Buy
- Technologic process and equipments
- Mechanization/automation grade
- Plant system configuration (coming up next)
- Supply chain configuration

  (eg. choosing the distribution channel)

Capacity sizing, division and localization

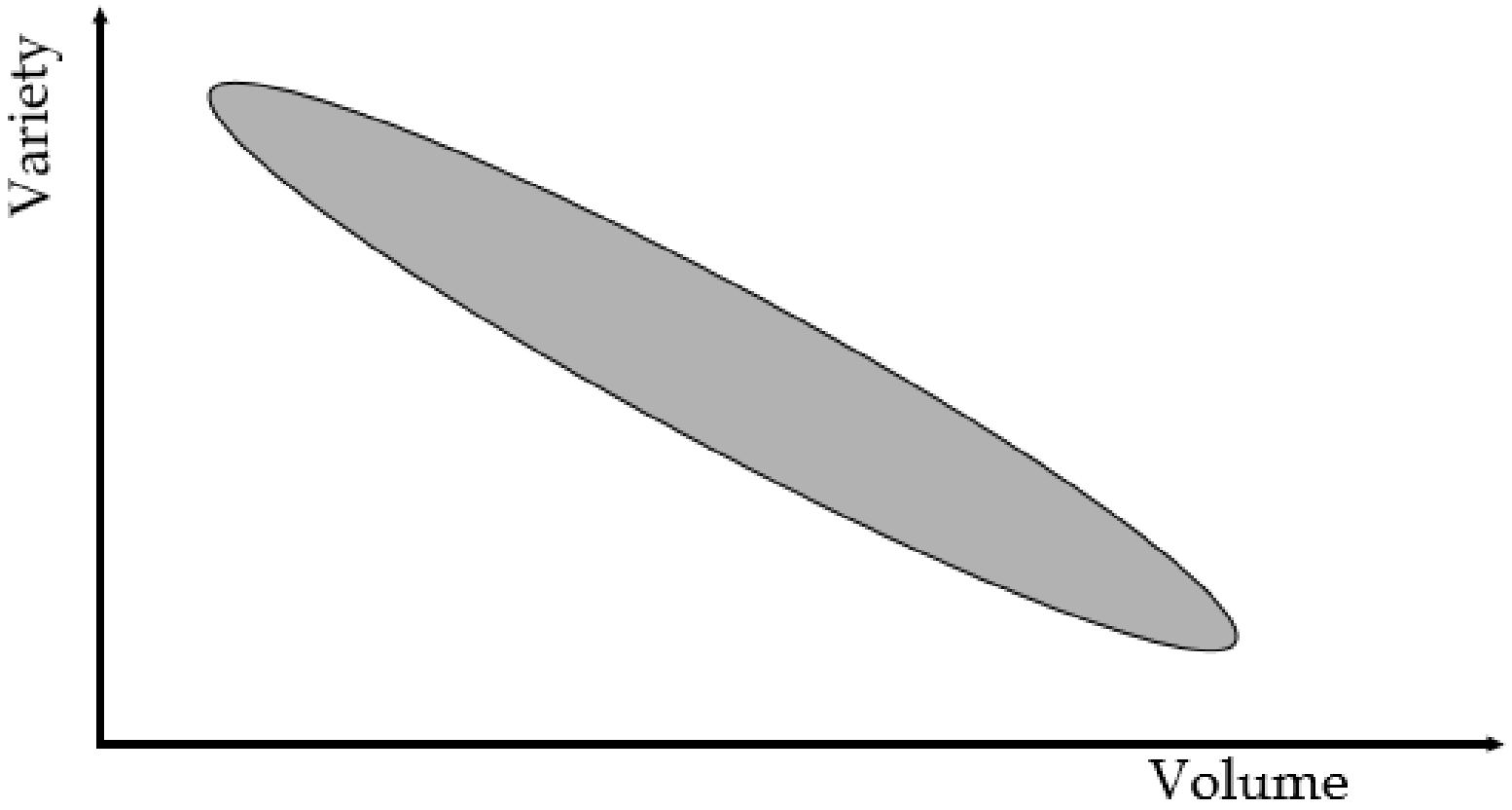
Entry barriers

Face demand variability

Economies of scale
Volume flexibility
Minimum unit of increase/decrease

Work cost
Competences availability, services,..
Response time
Closeness to market

Plant design: types of production systems



2. Infrastructural design choices

- Competences needed and their management
- Responsabilty allocation
- Team vs individuals
- Managing by objectives or process
- Functions integration (Design and Manufacturing, Marketing and Planning, ...)
- Incentive system
- Information flows between:
  - Different functions
  - Different hierarchical levels

  …

3. Delivery management choices

- Operations planning and control system
- Choice of how to meet demand (eg. MTS, ATO, MTO)
- Choice of how to realize the product
- Supply chain coordination systems
- Maintenance managing and realization systems
- Continuous improvement systems

…

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