



POLITECNICO
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Operations Strategy

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Strategy



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.



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Strategic Levels



Corporate

Resource allocation between different market and products

In which business?



Business Unit

What are the markets needs and how to satisfy them.

How do we compete?

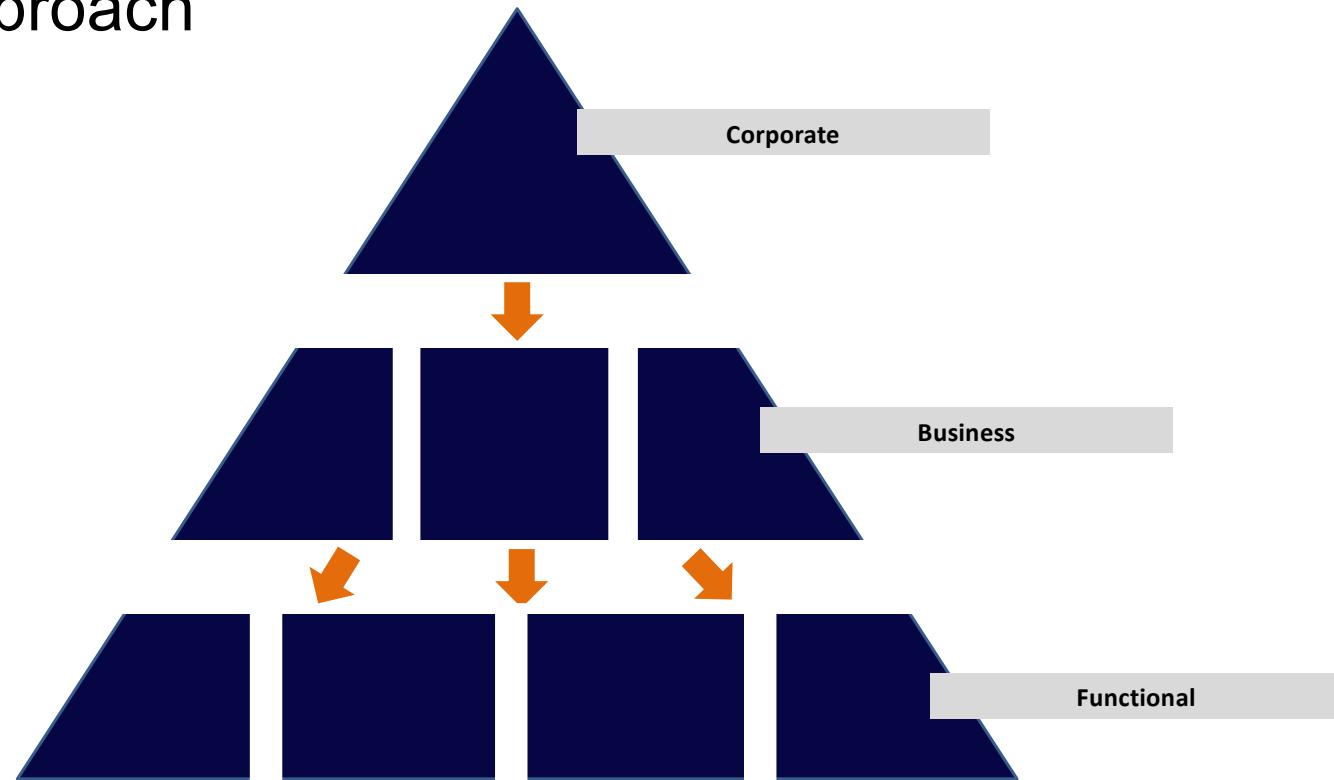


Functional

Support the company in satisfying market needs



Traditional Approach



Relevant factors **outside** the company

Offer - Demand



Customisation



Globalisation



Speed of technological development



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Factors influencing company's resources

Economical (wealth increase)

Cultural (education level)

Social (authority acknowledgment)

Technological innovation

ICT



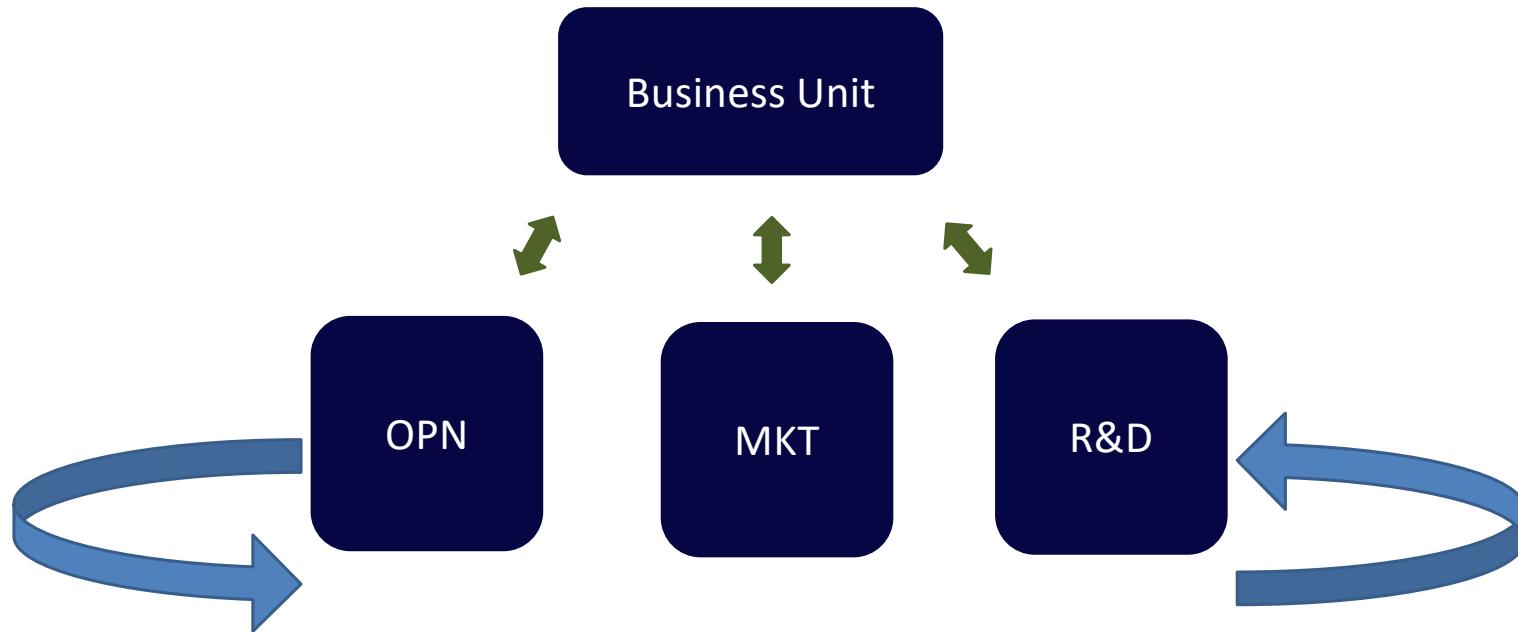
Innovative Approach



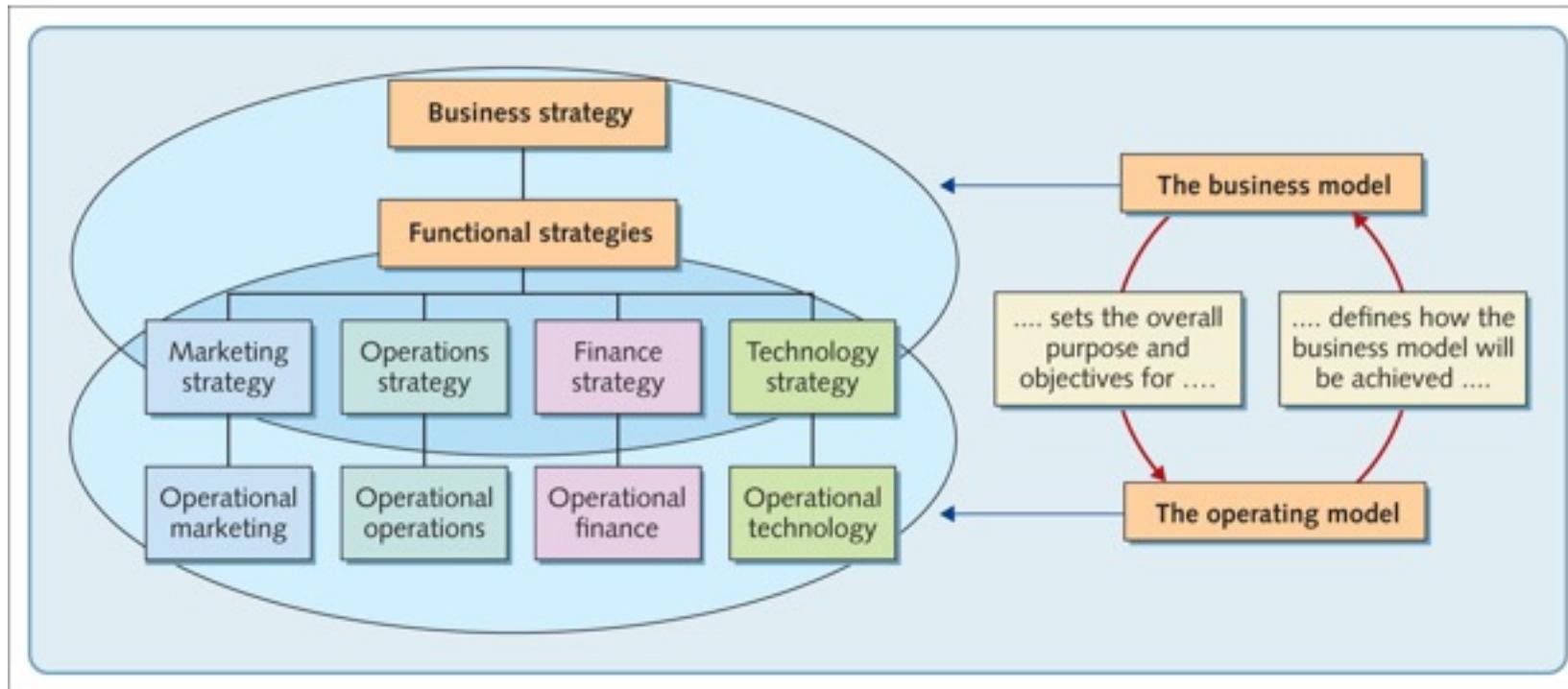
Functional strategies can neither be independent one from another, nor can they be the sequential outcome of the Business strategy; rather VPs of main Functions have to communicate and interact to define the strategy at the Business Unit and Corporate level.



Integration and Bi-direction



Strategy



Strategy

development over time

what they planned

**Intended
Strategy**

Non-realized
strategies

assessed , decided to do

**Deliberate
Strategy**

what has been relaize

**Realized
Strategy**

NOW

Emergent
strategies

changes and emerging from situation
adjusting to situation coming up



Why is strategy important?



where to go and how to get there?

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

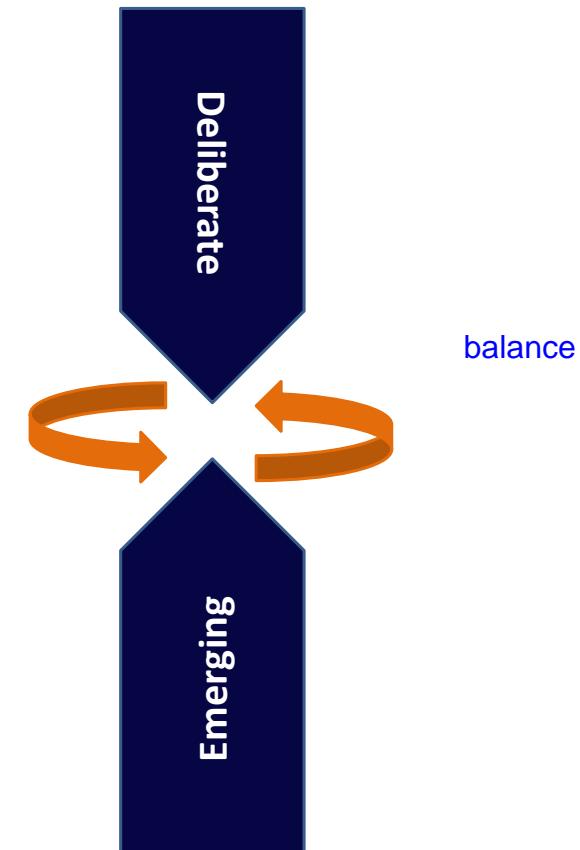
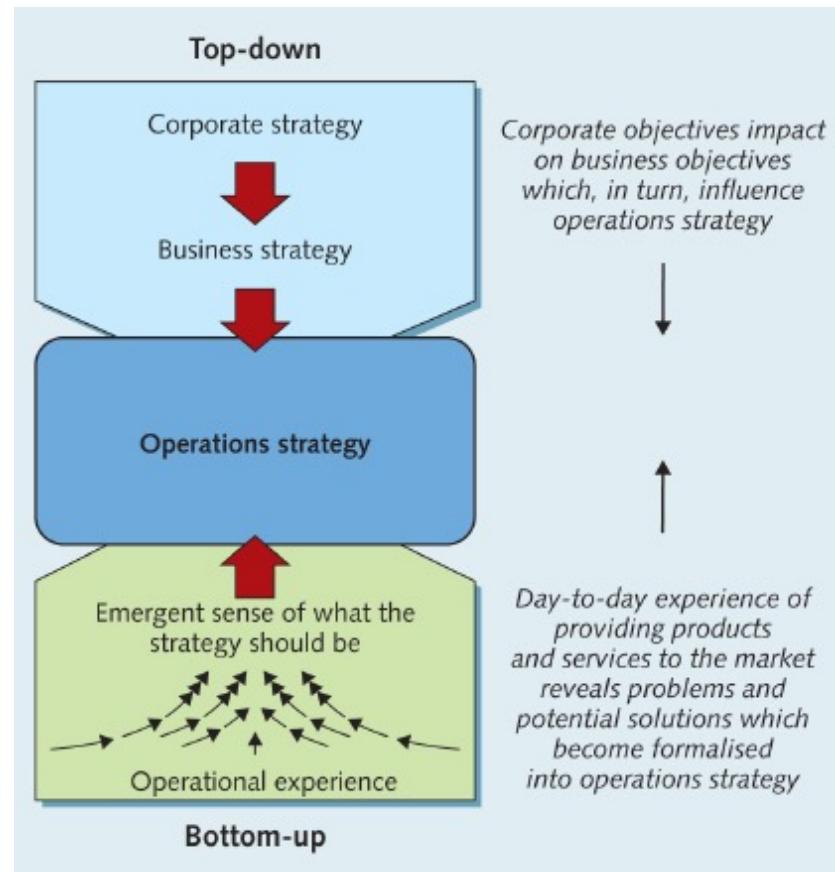
To take many little good choices a clear line is needed

→ Deliberate Strategy

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

→ Emerging Strategy

Strategy



when we look at what customer wants

The voice of the customer



Time



Price



Quality



Flexibility



Service

the performances that is related to operations

customer can see for choosing

Customer - Time

how long does it take to ask
to get it
place the order / deliver

- Time to formulate the offer
- Time to confirm the order
- Time to deliver (Delivery speed)
- Delivery reliability (Timeliness) oct 15th deadline
- ..



Customer – Price

- Purchase cost of the produce
 - Usage
 - Maintenance
 - Update/Upgrade/Expansion
 - Disposal
 - ..
- full life cycle cost



Customer - Quality

- Quality of Design (specifications)
match with customer needs
- Quality Conformance (NB: only in field)
ability to deliver the system/product with the same performance
external conformance from customer

انطباق



Customer - Flexibility

change something with little effort

- Product new product with small effort,
- Customisation % of product you can customize
- Variety
- Plan ability to change in customer order before delivering it.
measure by frozen horizon (time before delivery date you can't change)



Customer – Service

- DELIVERY (MTS) make to stock
- Goods availability at the warehouse
- OTHER AREAS
- Training
- Technological improvement
- After-sale support ...





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



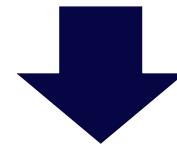
It's necessary to align Operations and Market!



Market-operations alignment

Customer needs
Market positioning
Analysis of competitors' actions

segment them
position close to them
consider competitors



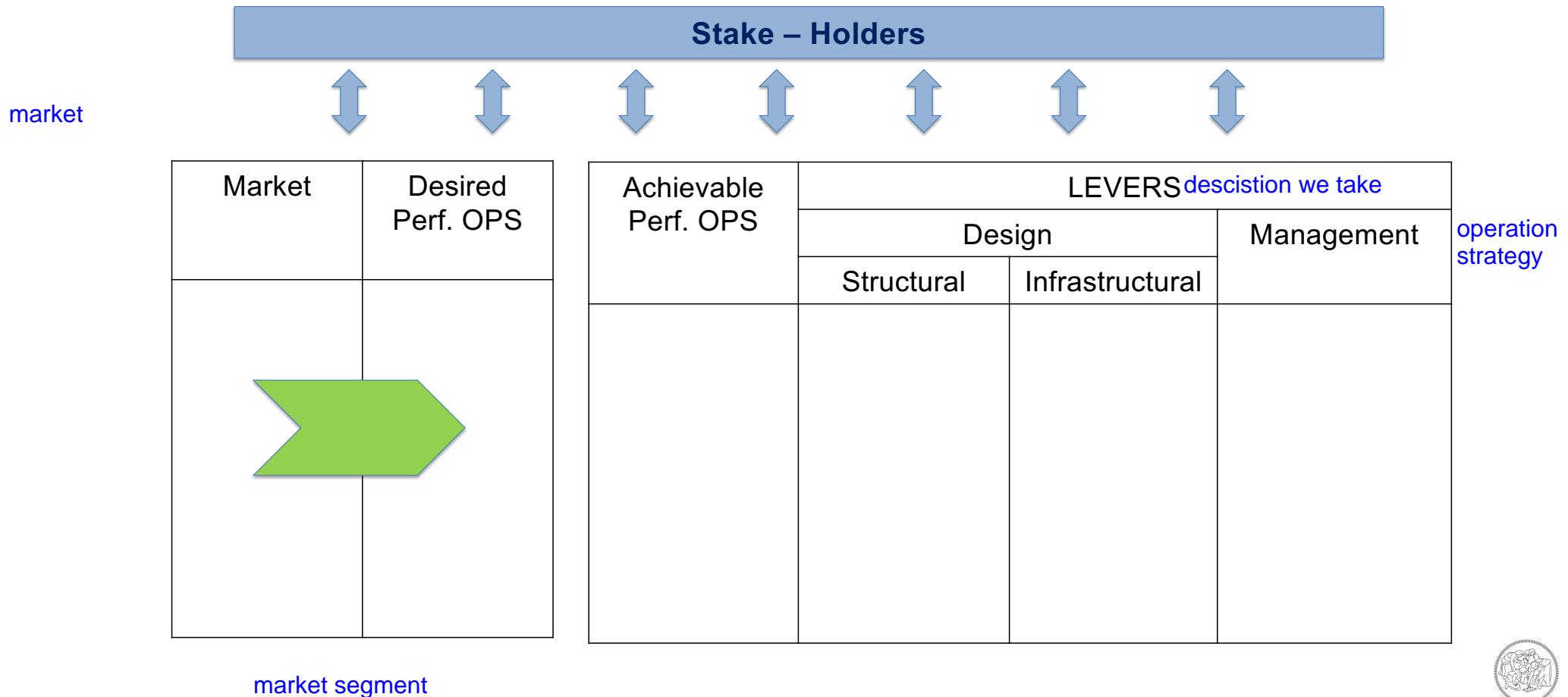
Desired performances



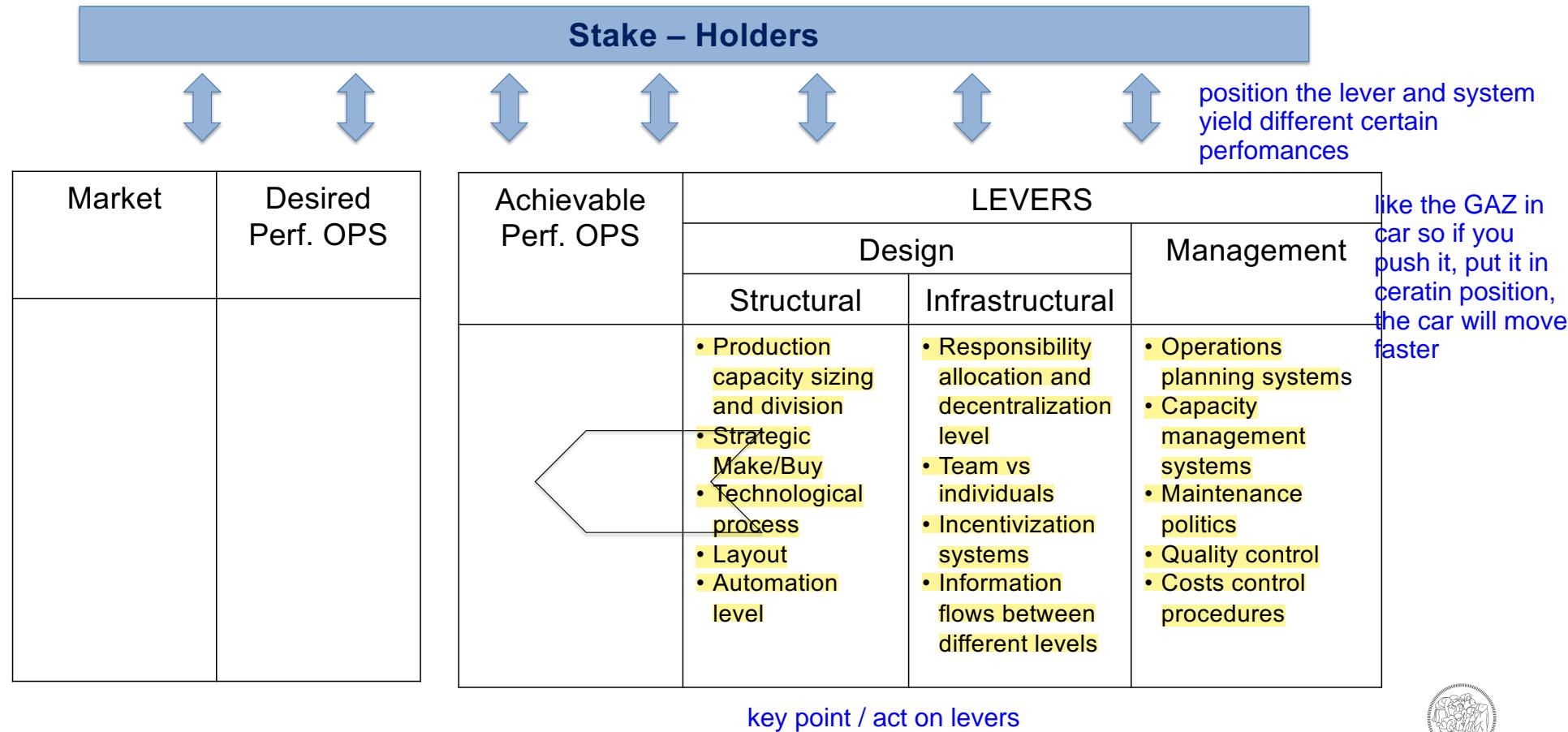
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Operations strategy: Desired performances

reference skeem



Operations strategy: Achievable performances



align them.
kinda swot

you have different levers (GAZ, brake, gear,...), condition of envirement,

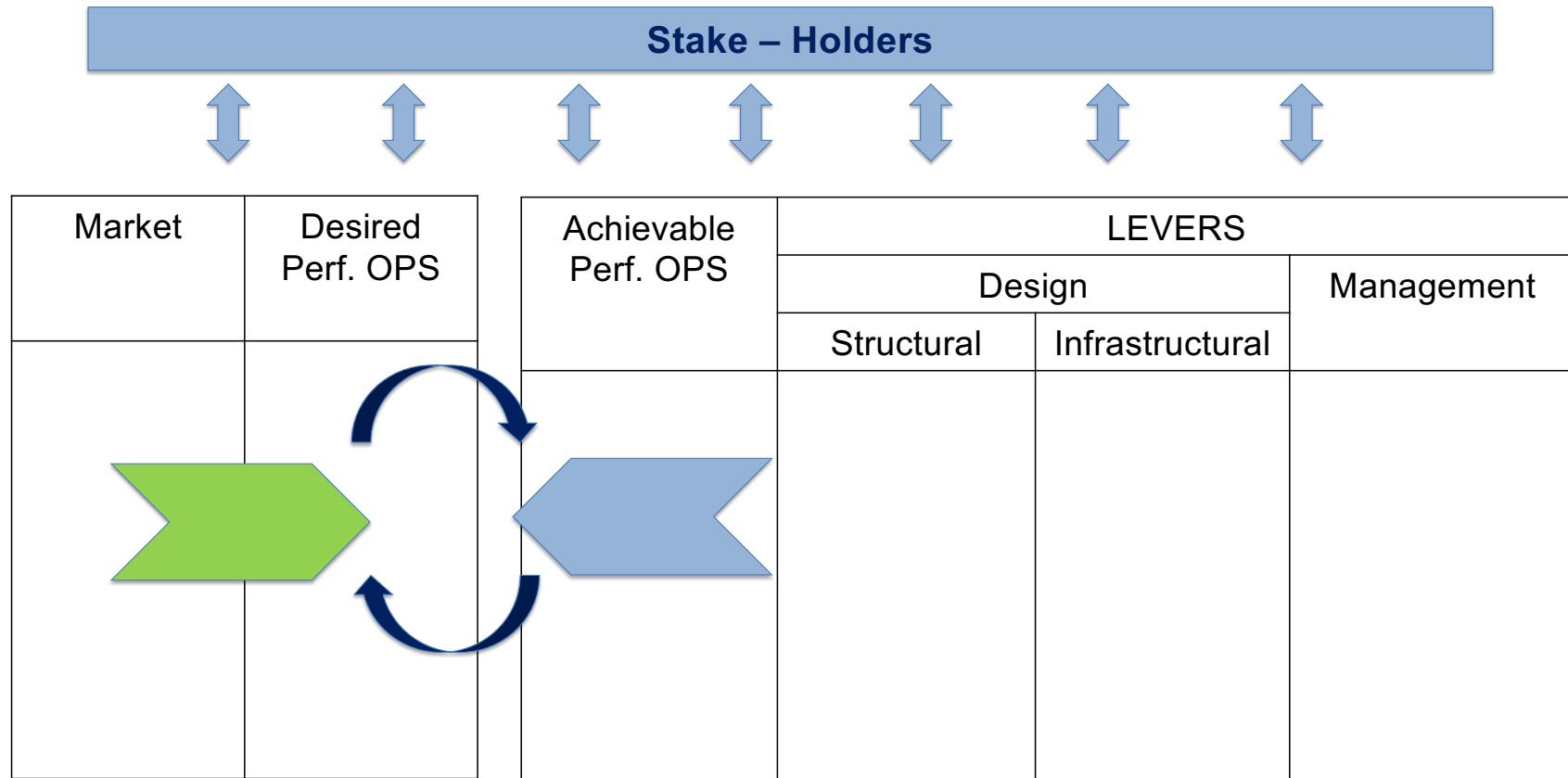
find the relationship between levers and performances. ex: increasing the delivery speed => what are the levers ?

levers of our system to create different performances
levers are decisions



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Objectives alignment: Reconciliation



Strategic Levers

depending on company ...
there is a long list in references



1. Structural design

softwares,
organizational
structure,
process, activities
system

2. Infrastructural design

3. Delivery management

hardware,
building,
automations, ...

how to manage
every day
functioning
functions



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1. Structural design choices

hardware

installed in company not production capacity

where to build factories economy of scale

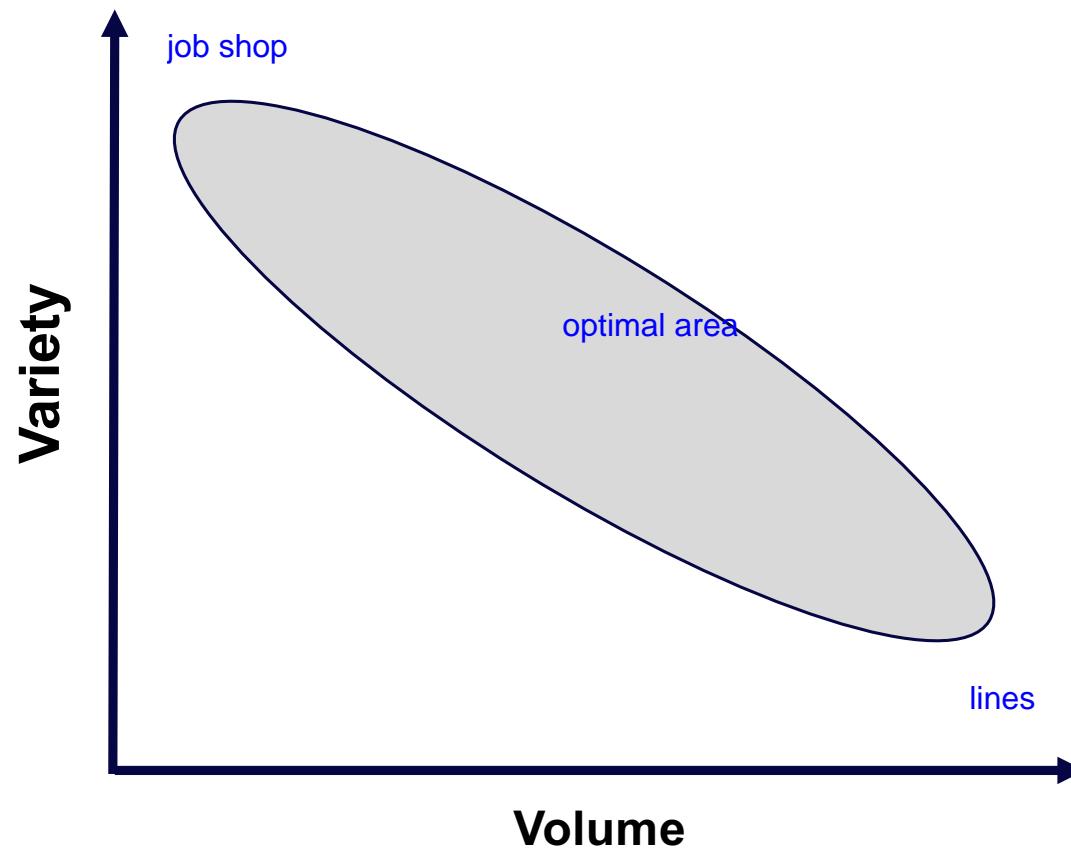
- Overall production capacity, its division and localization (coming up next)
- Strategic Make or Buy internal or outsource or buy
- Technologic process and equipment which one to adopt what degree of automation
- Mechanization/automation grade
- Plant system configuration (coming up next)
- Supply chain configuration (e.g. choosing the distribution channel)

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
- Responsibility allocation
- Team vs individuals
- Managing by objectives or procedures
- 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 (e.g. MTS, ATO, MTO) [engineering to order](#)
-
- Choice of how to realize the product
- Supply chain coordination systems
- Maintenance managing and realization systems [preventive predictive , ...](#)
- Continuous improvement systems



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Thank you!

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