



SS3 – From Research to Business : socio-economic impacts

CENTRE D'ETUDE DE LA PERFORMANCE DES ENTREPRISES –
CEPE – HEC ULIEGE

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Going from research to business, why is it so important ?

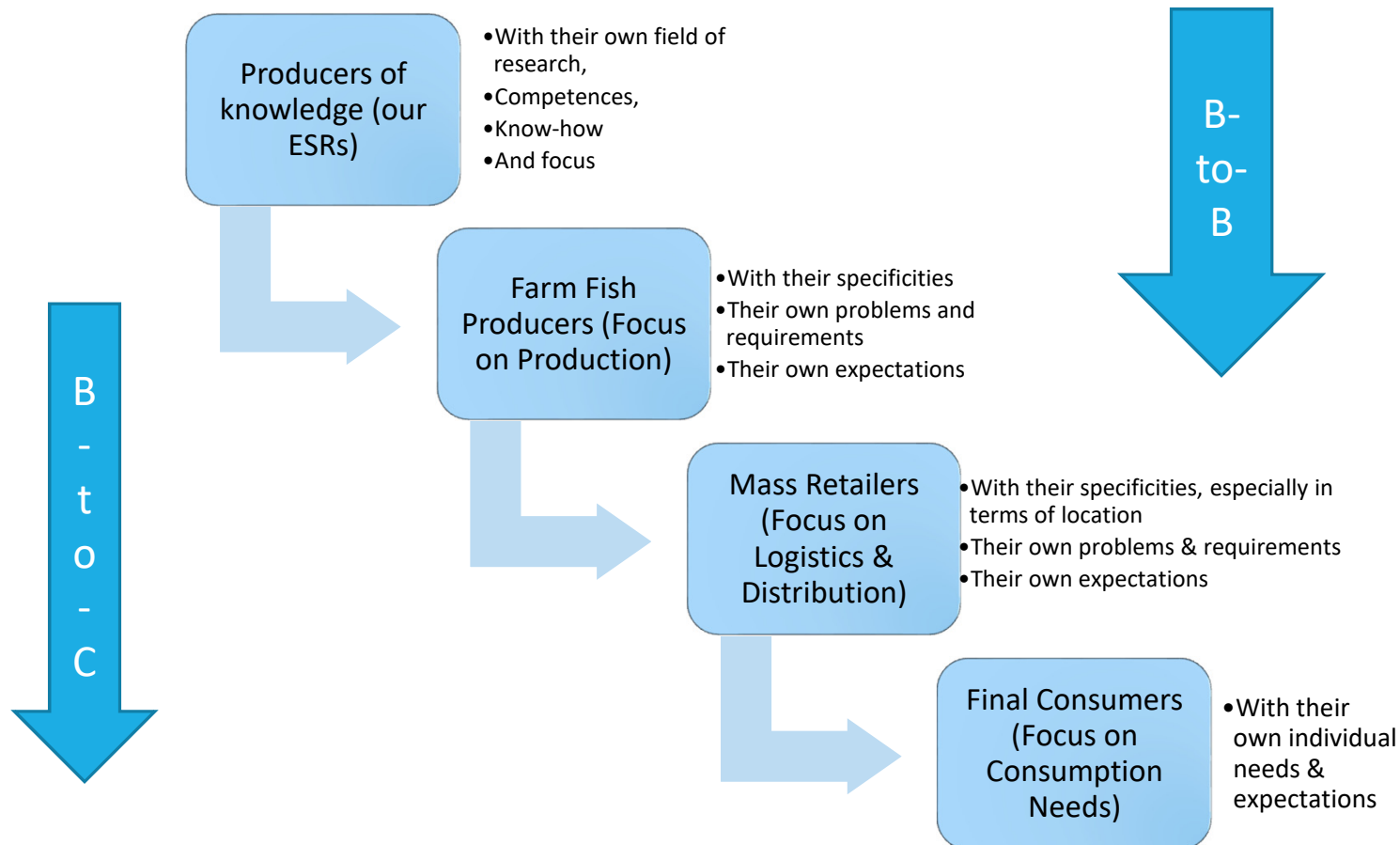
Science creates ...

- New scientific knowledge & dissemination through the literature
- Societal potential outputs that must benefit to the Society because the Society has financed research

How to generate these potential societal outputs ?

- By protecting new knowledge & know-how with patents ... or secrets and by licensing them
- By creating new ventures !
 - Spin-offs from existing laboratories or Universities
 - Spin-outs from existing companies

From Research to Business : an holistic view of the aquaculture industry



Our agenda (1/2)

November, 20 :

9.30 – 10.15 : From Research to Business : an introduction (Didier Van Caillie)

10.15 – 11.00 : From Research to Business : the lessons from experience (Didier Allaer)

11.15 – 12.00 : From Research to Business : in search for New Ventures that are aligned with our current socio-economic environment (Didier Van Caillie)

12.00 – 13.00 : The context : a look at the BioTech Industry

The frontiers of the BioTech Industry and its importance in Europe and the world (Jean-Pierre Segers)

14.00 – 15.00 : The process : how to generate new ventures from research

Open Innovation in the BioTech Industry: principles and key challenges for creating new ventures and protecting your Intellectual Property (Jean-Pierre Segers)

15.30 – 17.00 : The content

Creating new ventures from the BioMedAqu project – a methodology for supporting your creativity (Didier Van Caillie)

Team assignment : what is expected from you for our next session on Monday, 23 ?

Our agenda (2/2)

November, 23 :

9.30 – 10.10 : From Research to Business : an entrepreneurial approach

10.10 – 12.00 : From Research to Business: initiating your own value proposition with the Jobs-Pains-Gains methodology (D. Van Caillie & C. Honhon – Moving from group to group on the Collaborate platform)

13.30 – 15.00 : Exploitation strategy : exploitation of results (Andrea Di Anselmo)

15:00 – 16.15 : From Research to Business: Creating your own Business Model with the CANVAS methodology – Feed-Backs from the groups

16.30 – 18.00 : Lessons from experience

16.30 The Artialis case (Yves Henrotin)

17.15 The Cytomine case (Grégoire Vincke)



9.30 – 10.15 : From Research to Business : an introduction

BY DIDIER VAN CAILLIE



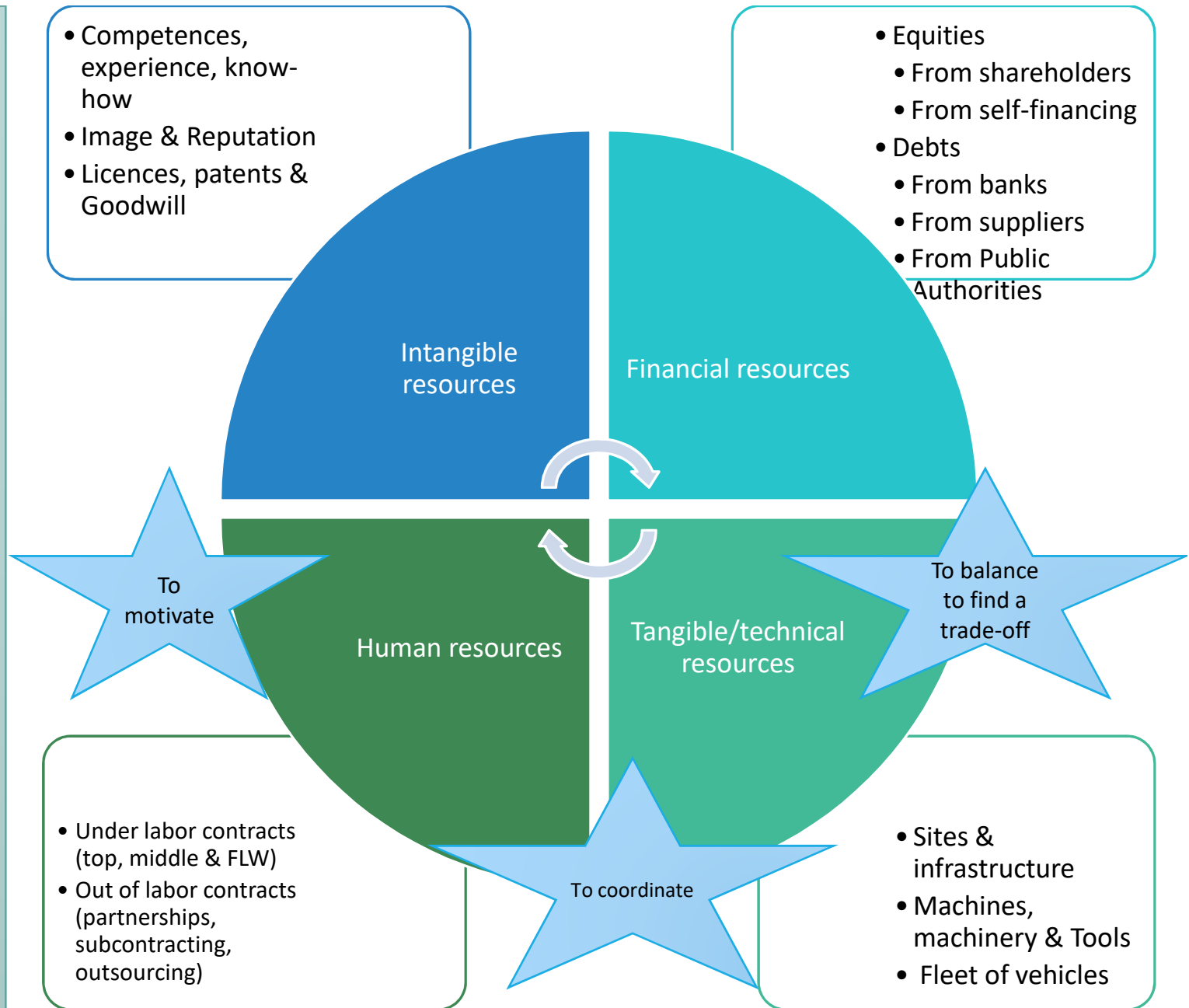
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Structure

What is a firm ?

- A firm is a portfolio of scarce resources
- A firm is a living organism continuously adapting to its evolving environment (the biological metaphor)

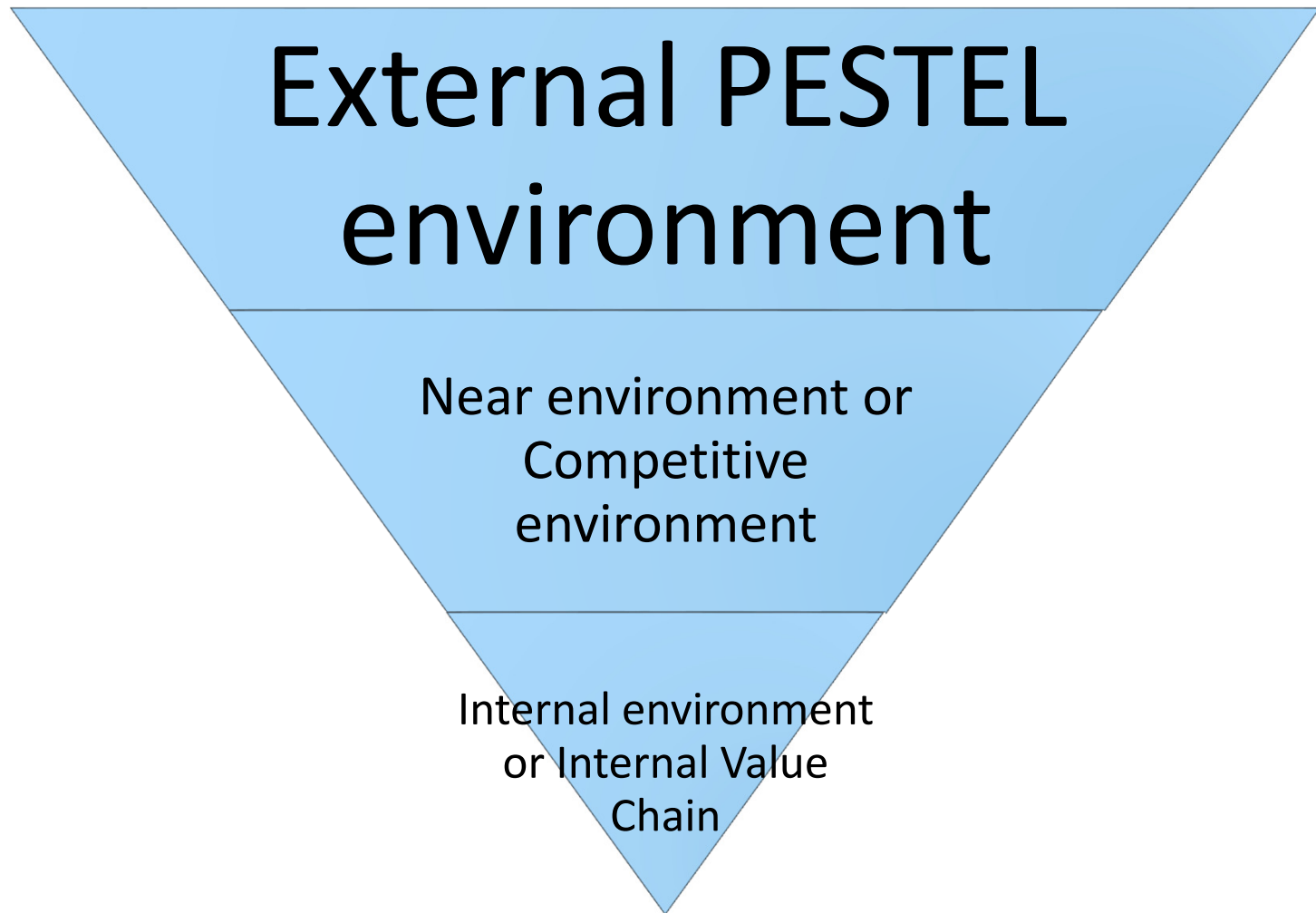
**1.
A firm is a
portfolio of
scarce
resources**

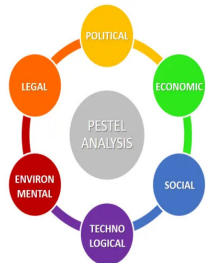


A firm is fundamentally a living organism impulsed by Humans that continuously adapt its structure and its operating activities to the constraints and requirements of its EVOLVING environment

2.
A firm is a
living
organism

(the Biological
Metaphor)





2.

A firm is a living organism

-

A PESTEL analysis of the external environment

-

which are the threats & opportunities coming from our environment

P	E	S	T	E	L
<ul style="list-style-type: none"> - Government policy - Political stability - Corruption - Foreign trade policy - Tax policy - Labour law - Trade restrictions 	<ul style="list-style-type: none"> - Economic growth - Exchange rates - Interest rates - Inflation rates - Disposable income - Unemployment rates 	<ul style="list-style-type: none"> - Population growth rate - Age distribution - Career attitudes - Safety emphasis - Health consciousness - Lifestyle attitudes - Cultural barriers 	<ul style="list-style-type: none"> - Technology incentives - Level of innovation - Automation - R&D activity - Technological change - Technological awareness 	<ul style="list-style-type: none"> - Weather - Climate - Environmental policies - Climate change - Pressures from NGO's 	<ul style="list-style-type: none"> - Discrimination laws - Antitrust laws - Employment laws - Consumer protection laws - Copyright and patent laws - Health and safety laws

Five Forces Analysis (Porter)

2.

A firm is a living organism

-

The 5 forces of our competitive model

-

The Porter's model



11.15 – 12.00 :
From Research to Business :
in search for New Ventures that
are aligned with our current
socio-economic environment

BY DIDIER VAN CAILLIE



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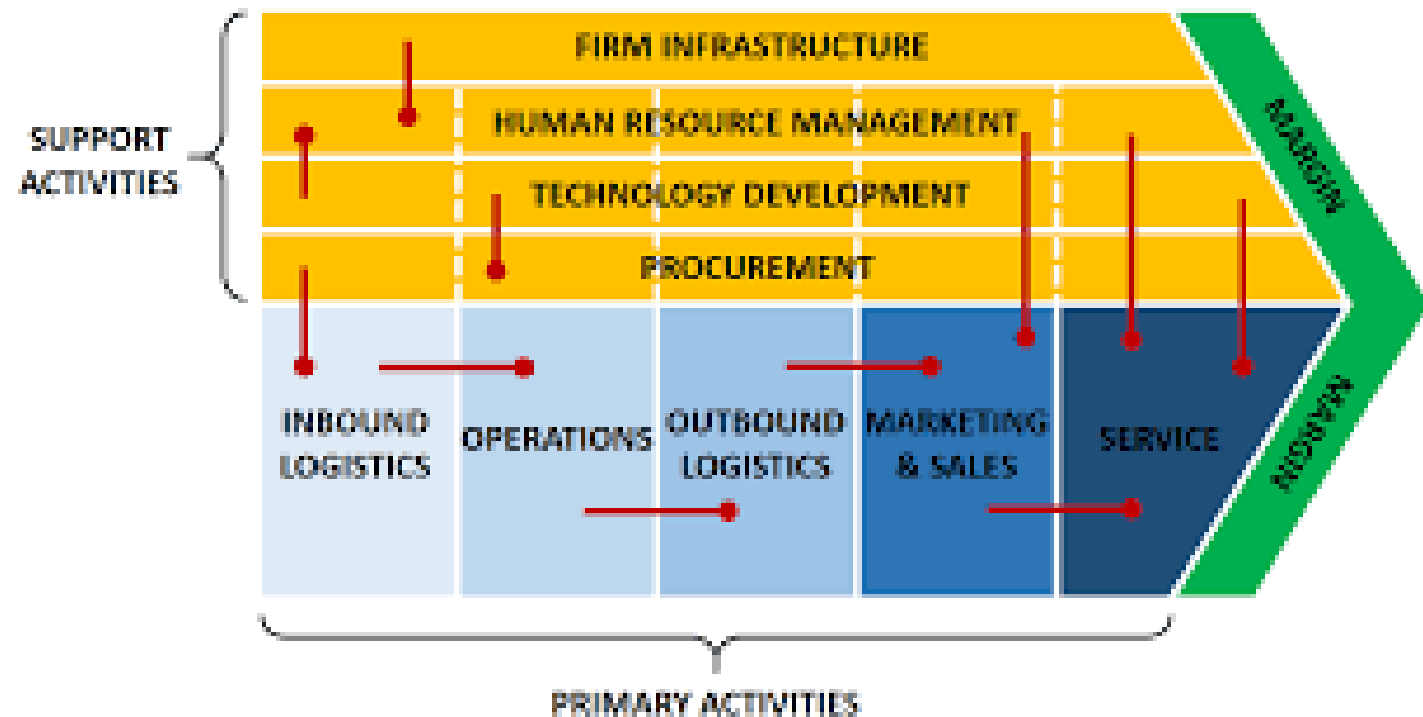
Structure

How does a firm operate ?

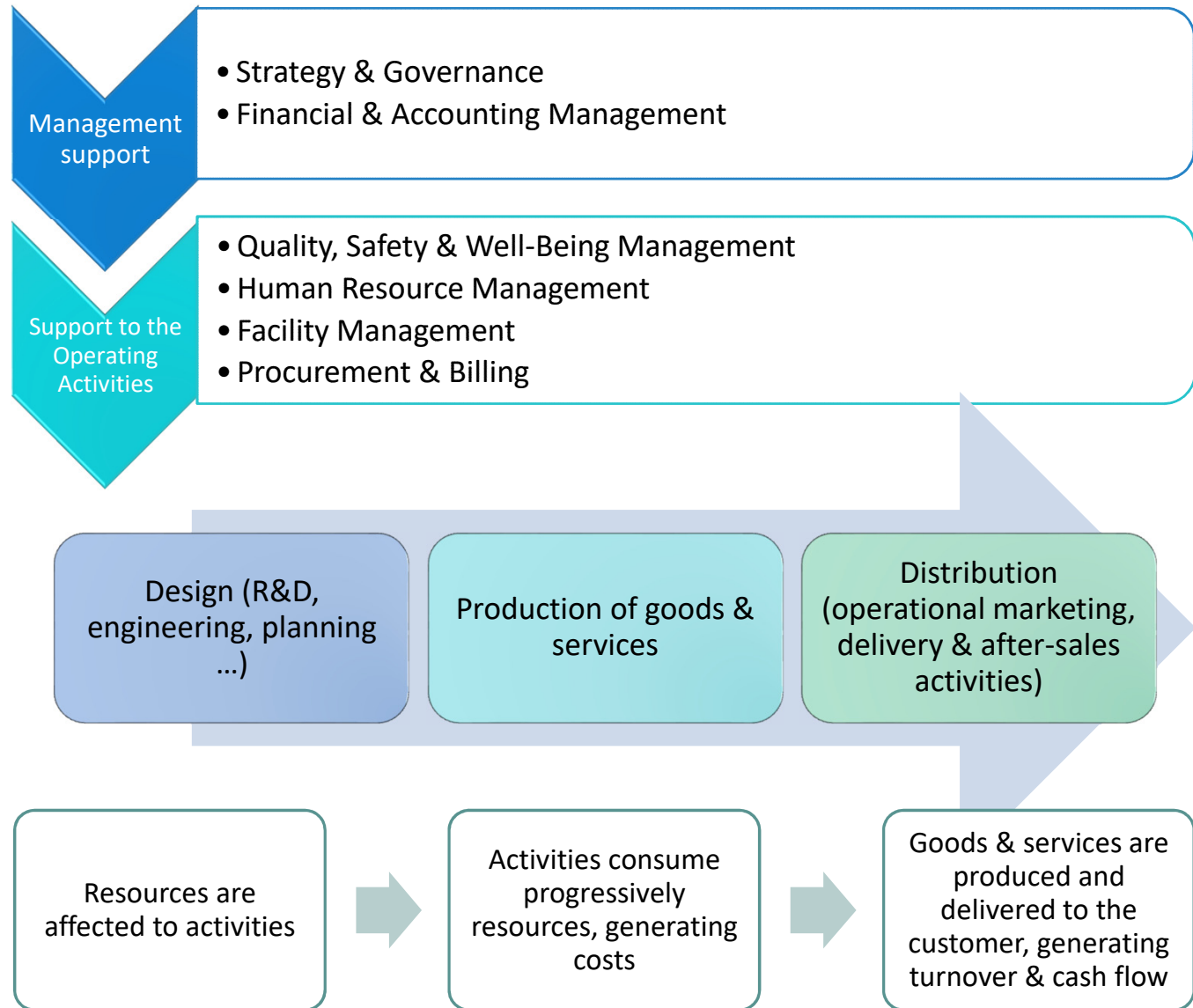
- A firm is a Value Chain
- The Business Excellence Model (EFQM)
- The firm and its management system
- The firm and its SWOT analysis
- The firm and its Value Proposition
- The firm and its Business Model CANVAS

3. A firm as a Value Chain

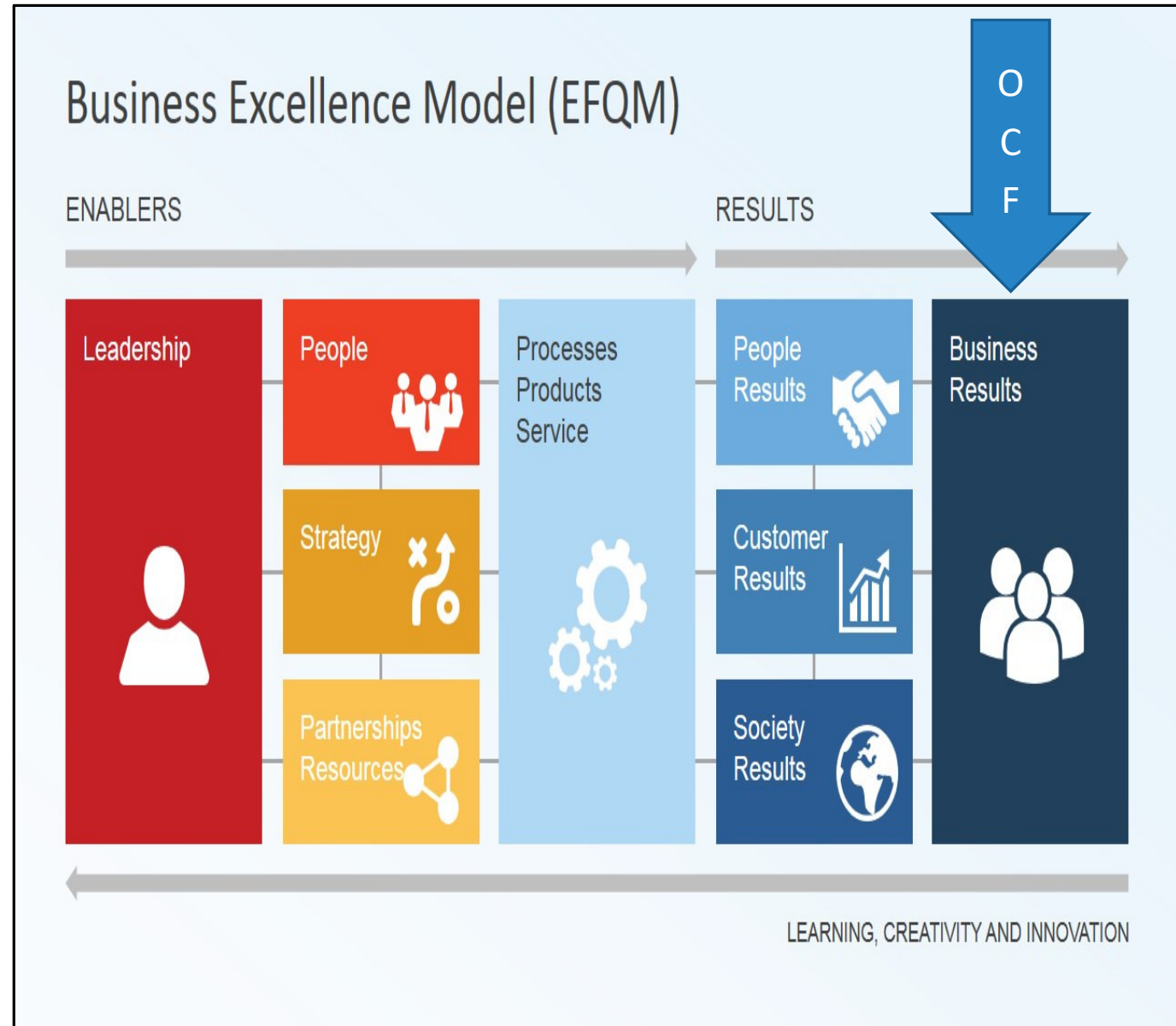
- ✓ Michaël Porter's original model (1982)
- ✓ Firm is a chain of interrelated activities generating internally costs & externally products/services
- ✓ The customer pays the price that allows for covering costs & generating profits IF ONLY price > costs



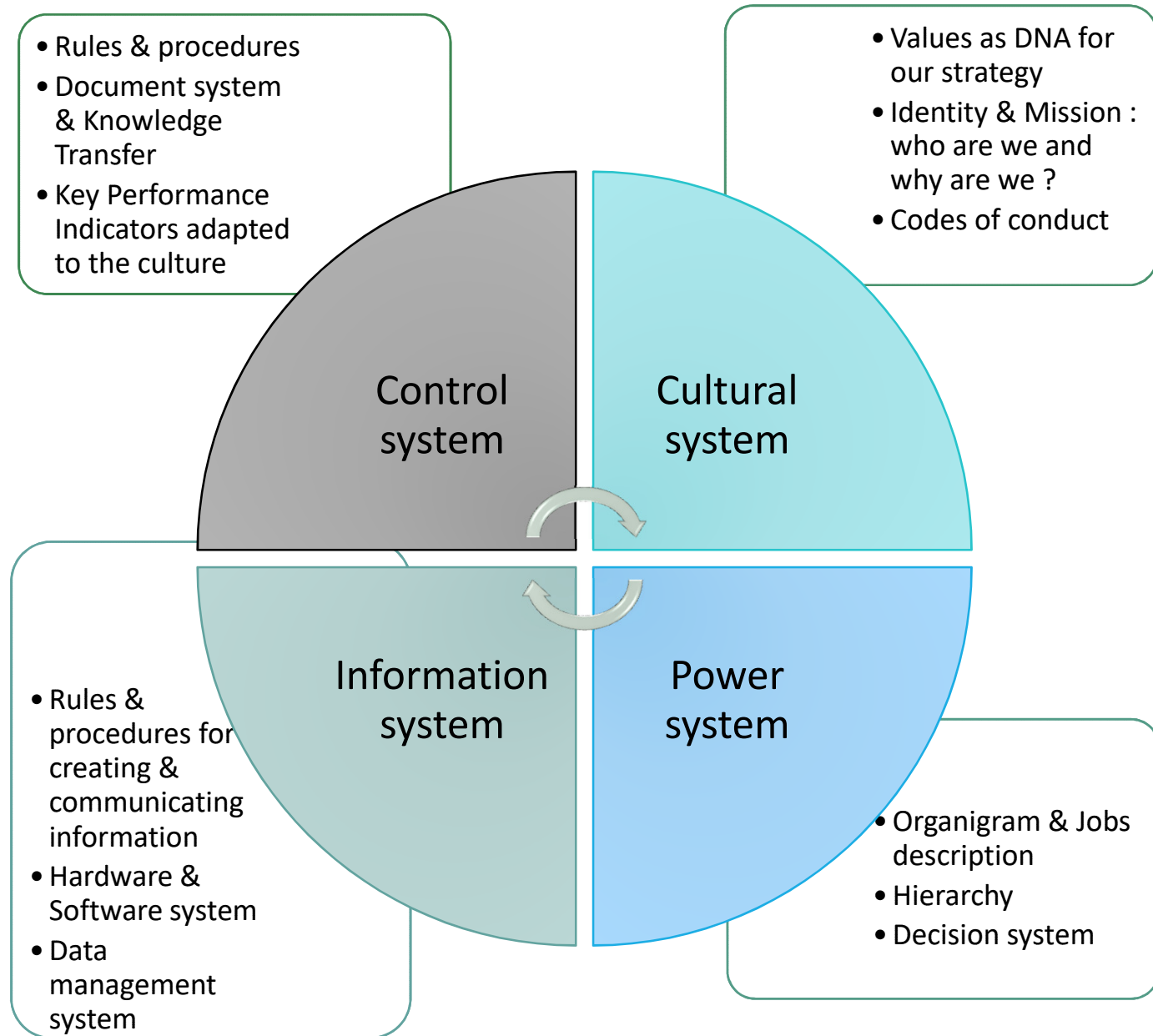
3. A firm as a value chain – A revised vision



**4.
The Business
Excellence
Model
-
The EFQM
model**



5.
The firm and its management system
-
The conditions for taking daily good decisions



SWOT ANALYSIS

	Helpful to achieving the objective	Harmful to achieving the objective
Internal origin (attributes of the organization)	S Strengths	W Weaknesses
External origin (attributes of the environment)	O Opportunities	T Threats

6.

The firm and its SWOT analysis

-
Combining pressures from external environment with capabilities from internal environment

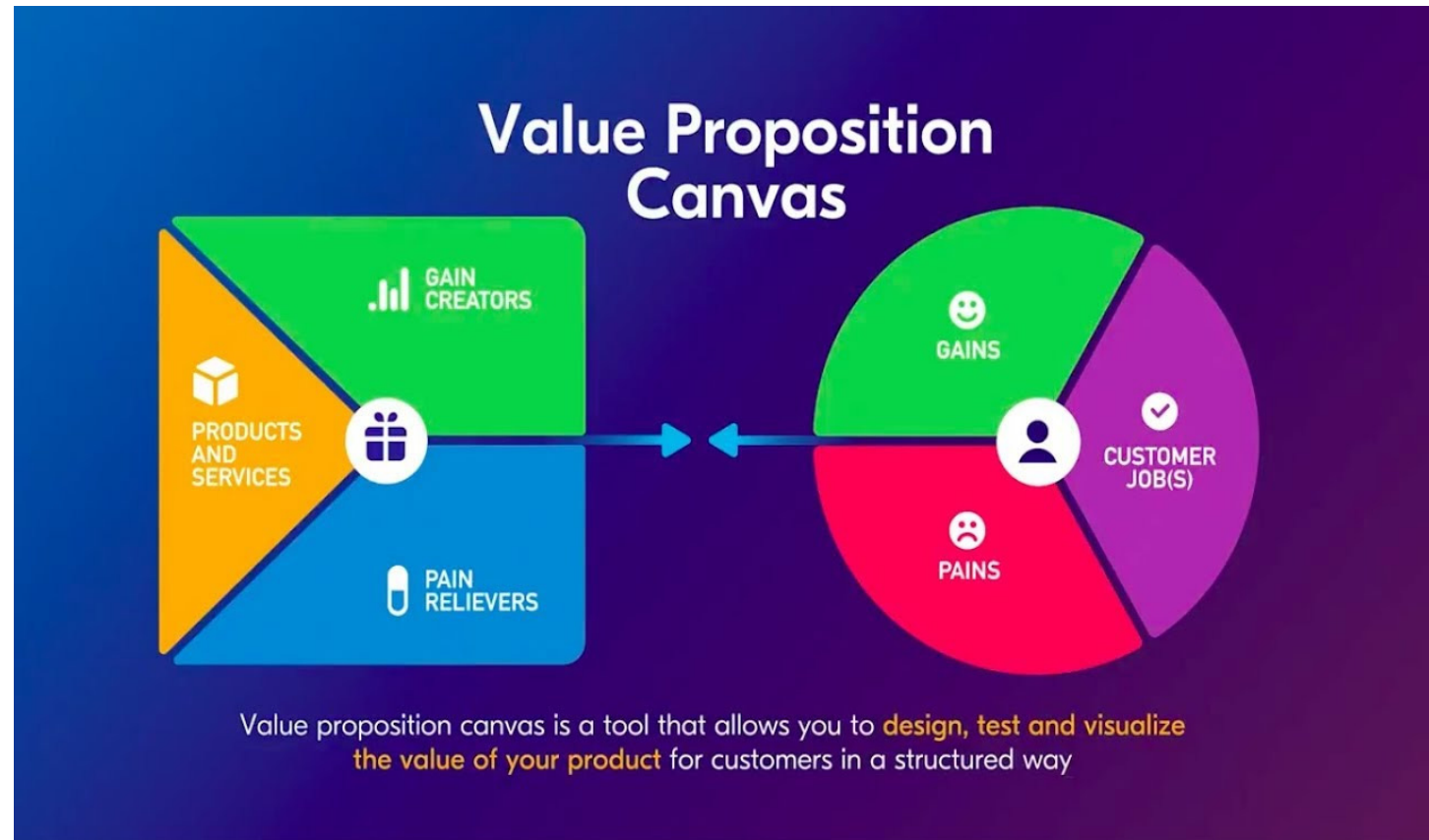
S	W	O	T
STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Things your company does well • Qualities that separate you from your competitors • Internal resources such as skilled, knowledgeable staff • Tangible assets such as intellectual property, capital, proprietary technologies etc. 	<ul style="list-style-type: none"> • Things your company lacks • Things your competitors do better than you • Resource limitations • Unclear unique selling proposition 	<ul style="list-style-type: none"> • Underserved markets for specific products • Few competitors in your area • Emerging need for your products or services • Press/media coverage of your company 	<ul style="list-style-type: none"> • Emerging competitors • Changing regulatory environment • Negative press/media coverage • Changing customer attitudes toward your company

WordStream

7. The firm and its value proposition

-
*What value do
we propose to
our customer
segments ?*

-
*How do we
make them
dream ?*

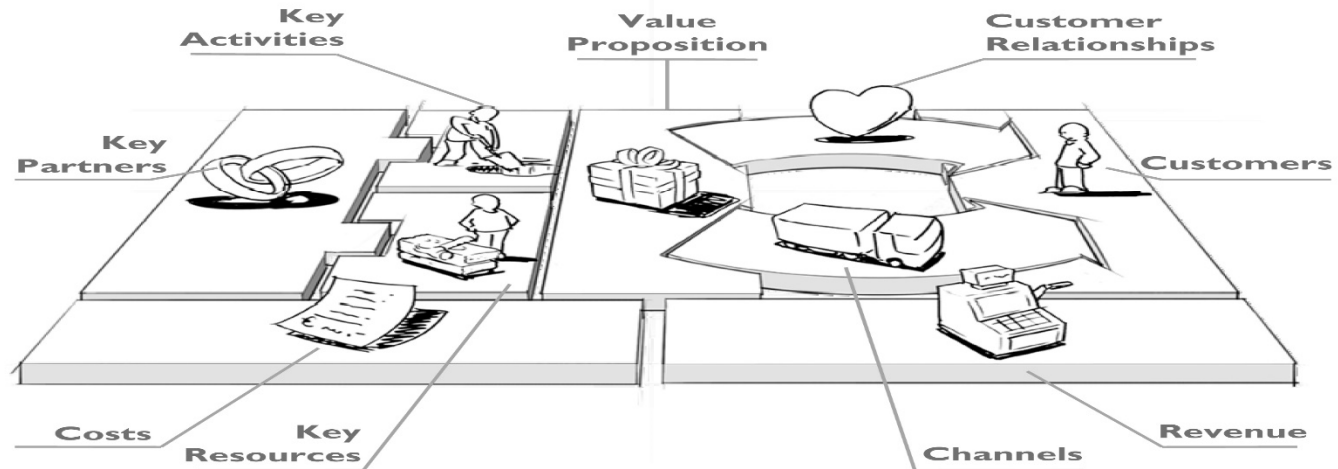










° Adjusting what you propose to what your customer segments do expect from you -> A customer-centric approach

° Adapted to each of your customer segments :

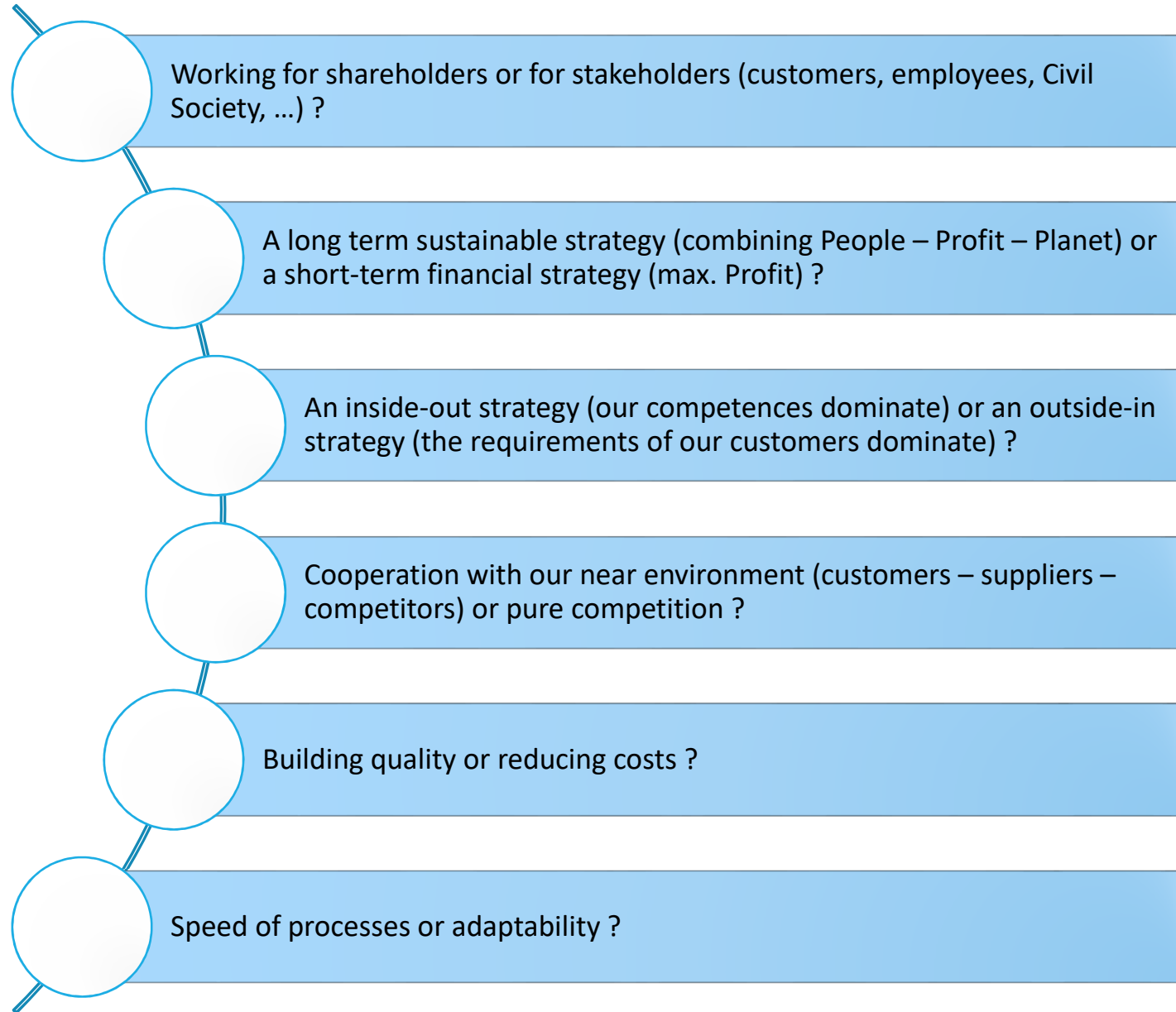
- Producers
- Mass retailers
- Final consumers

8.
The firm and its Business Model CANVAS
 -
How do we operate daily?



Key Partners 7  Who are our Key Partners?	Key Activities 5  What Key Activities do our Value Propositions require?	Value Propositions 1  Which one of our customer's <i>problems</i> are we helping to solve? or Which customer <i>needs</i> are we satisfying? What is the specific product/service? What are the <i>features</i> that match customer needs?	Customer Relationships 4  How will we Get, Keep and Grow customers? Channels 3  Through which Channels do our Customer Segments want to be reached?	Customer Segments 2  For who are we solving a problem or fulfilling a need? Who are the customers? Does the value proposition match their needs? Is this a single-sided or multi-sided market?
Cost Structure What are the most important costs in our business model? 9 		Revenue Streams What is the revenue model? What are the pricing tactics? For what value are our customers willing to pay? 8 		

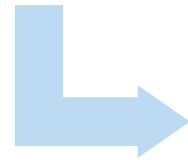
8.
**The firm and
its Business
Model
CANVAS**
-
*How do we
solve strategic
paradoxes ?*



9.
**And finally,
what is
expected
from you ?**

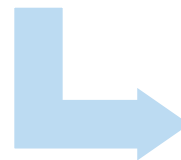
Generating
ideas for a
new
product or
service

- For the aquaculture industry : Producers or Mass Retailers or Final Customers
- Based on the knowledge you are creating currently with the other members of your group



Elaborating
a Value
Proposition
for your
new
venture

- Based on the Value Proposition Design methodology
- For ONE customer segment only !
- Based on your current perception of the Jobs – Pains & Gains of your customer segment



Elaborating
a Business
Model
CANVAS for
launching
your new
venture

- A schematic one !
- Incorporating some of the strategic paradoxes presented