



BECOMING AN INNOVATOR: UNCOVERING YOUR INNER PROBLEM-SOLVING POWER

POWERING THE “DYNAMICS OF INNOVATION” TO ENABLE SPECTRUM OF
POSSIBILITIES - 3

PARTHA S. GHOSH

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author in structuring and solving strategic, tactical and operational issues

This document provides an outline of a presentation and is incomplete without the accompanying oral commentary and discussion.

Partha S Ghosh

Agenda for the 5 Days

Becoming an Innovator

- 1 Putting Innovation in the context of the Modern Civilization
- 2 Demystifying Innovation: Unlocking the Power within you
- 3 Nurturing Genuine Problem-Solving Skills: The 3 Vectors?
- 4 Becoming an Innovator: Opportunities abound?
- 5 Practicing Innovation: Being in the flow as an active player

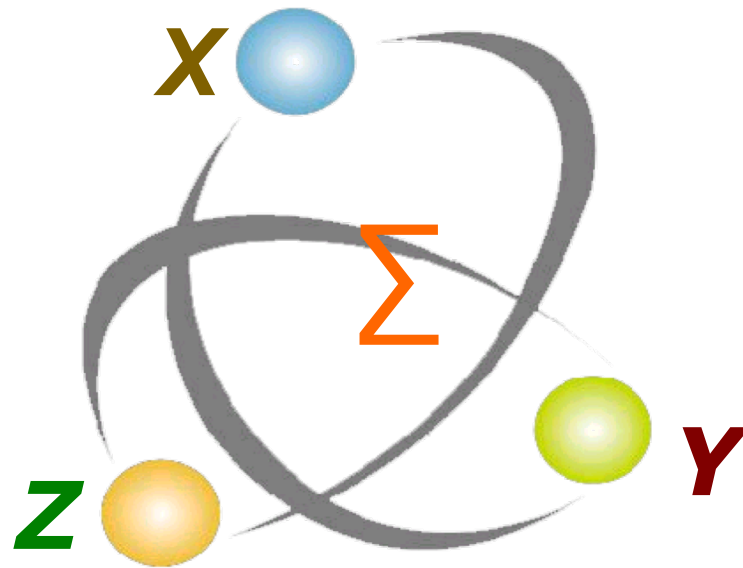
Culture is fundamental – unlocking the “power of desire” to solve problems around you...

Culture is indeed a very fundamental property of a society: *It could be energizing .. as it could be suffocating..... each one contribute to it*



Ensuring Innovation Is Self-Perpetuating

Dynamics of different types thought &
Cultural attributes



Agenda Session 3

Nurturing Genuine Problem-Solving Skills: The 3 Vectors?

- 1. Ninety percent of problem solving is in asking the right question?**
- 2. Problem solvers' Charisma: Excelling along 3 Vectors - *Conscience, Courage, & Communication***
- 3. Relating with your own environment with positive and resilient mindset**

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Problem Solving?

Defining the problem right?

90%

Deeper insights on
the domain

Solving the problem with rigor

10%

Sensing early signals and/or
non-obvious patterns
with open mind set*

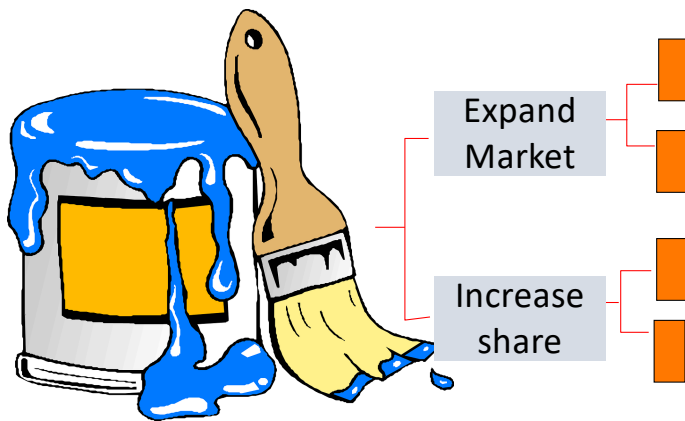
“If I had an hour to solve a problem I'd spend 55 minutes thinking about the problem and 5 minutes thinking about solutions.”

The formulation of the problem is often more essential than its solution, which may be merely a matter of mathematical or experimental skill.”

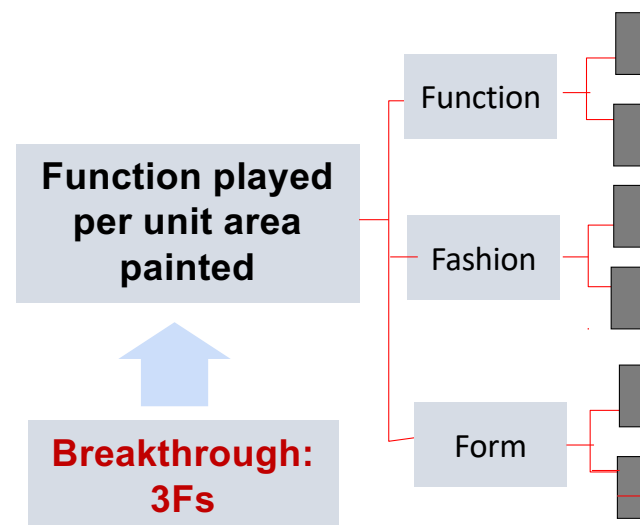
— **Albert Einstein**

Paint case: Defining the problem with a different perspective

Value of Paint: \$/liter

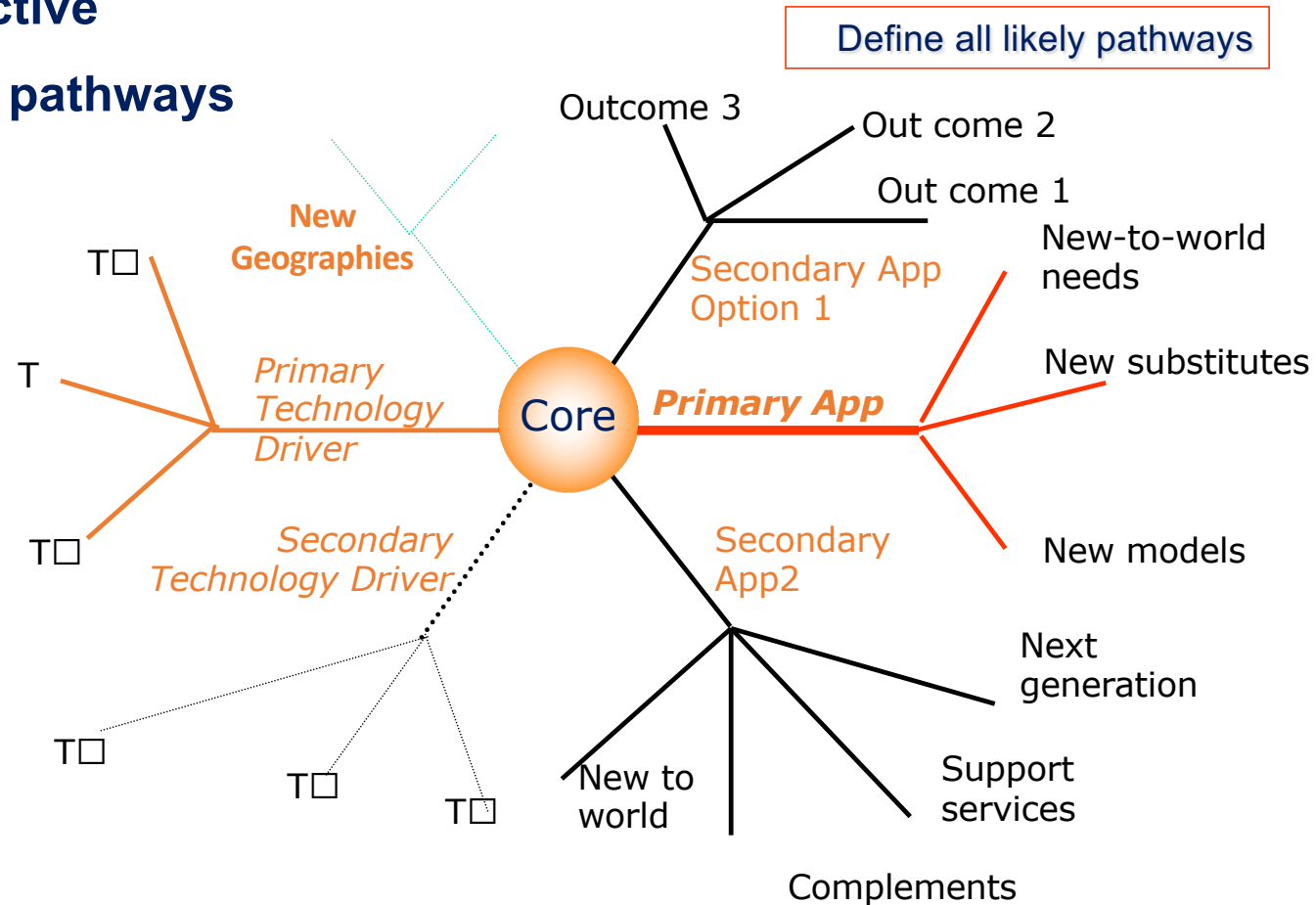


Value of Paint: \$/unit area for function performed



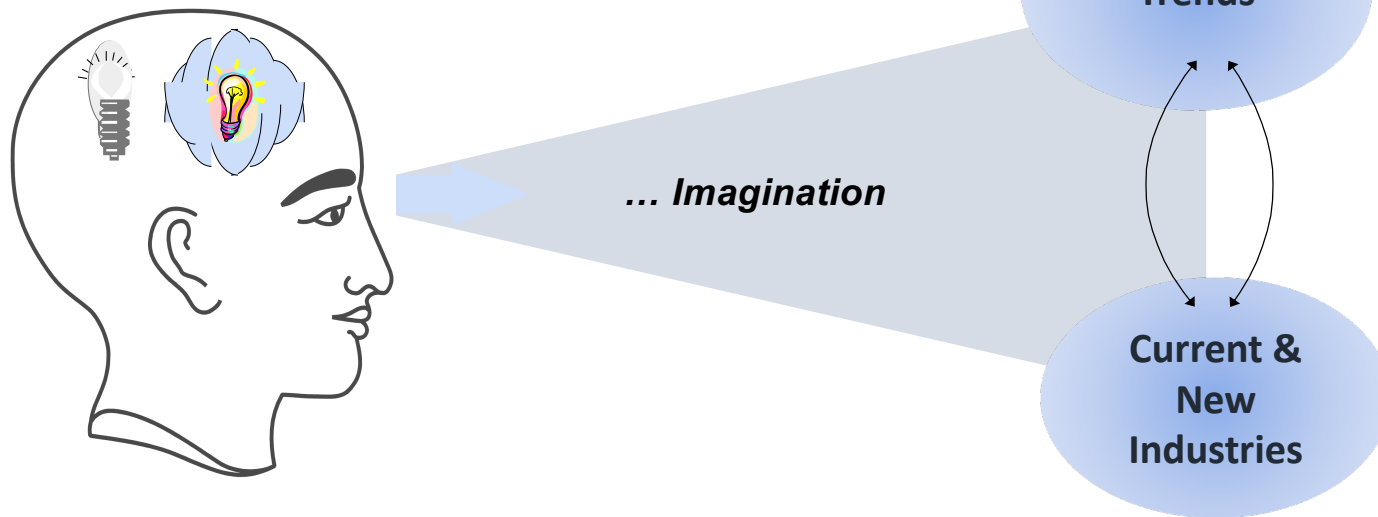
Successful diversification typically build on the core and having full perspective

Platform to pathways

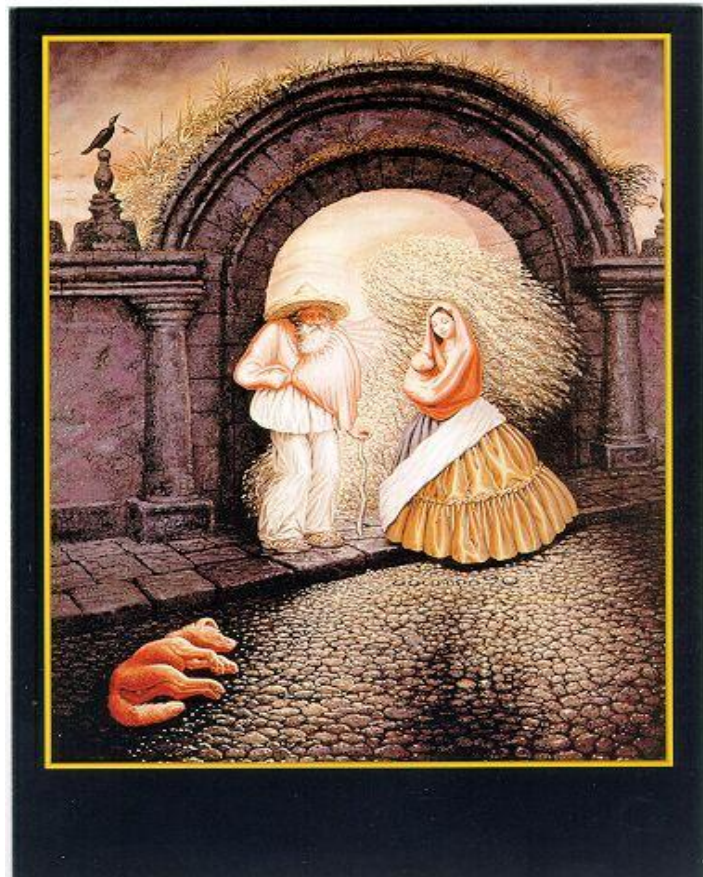


It is the imaginative capacity that help strategists to creatively emerging trends with current and future industries

Strategist ...



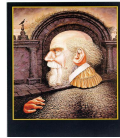
Power to observe is perhaps the first critical step – A quick test



© Partha S Ghosh

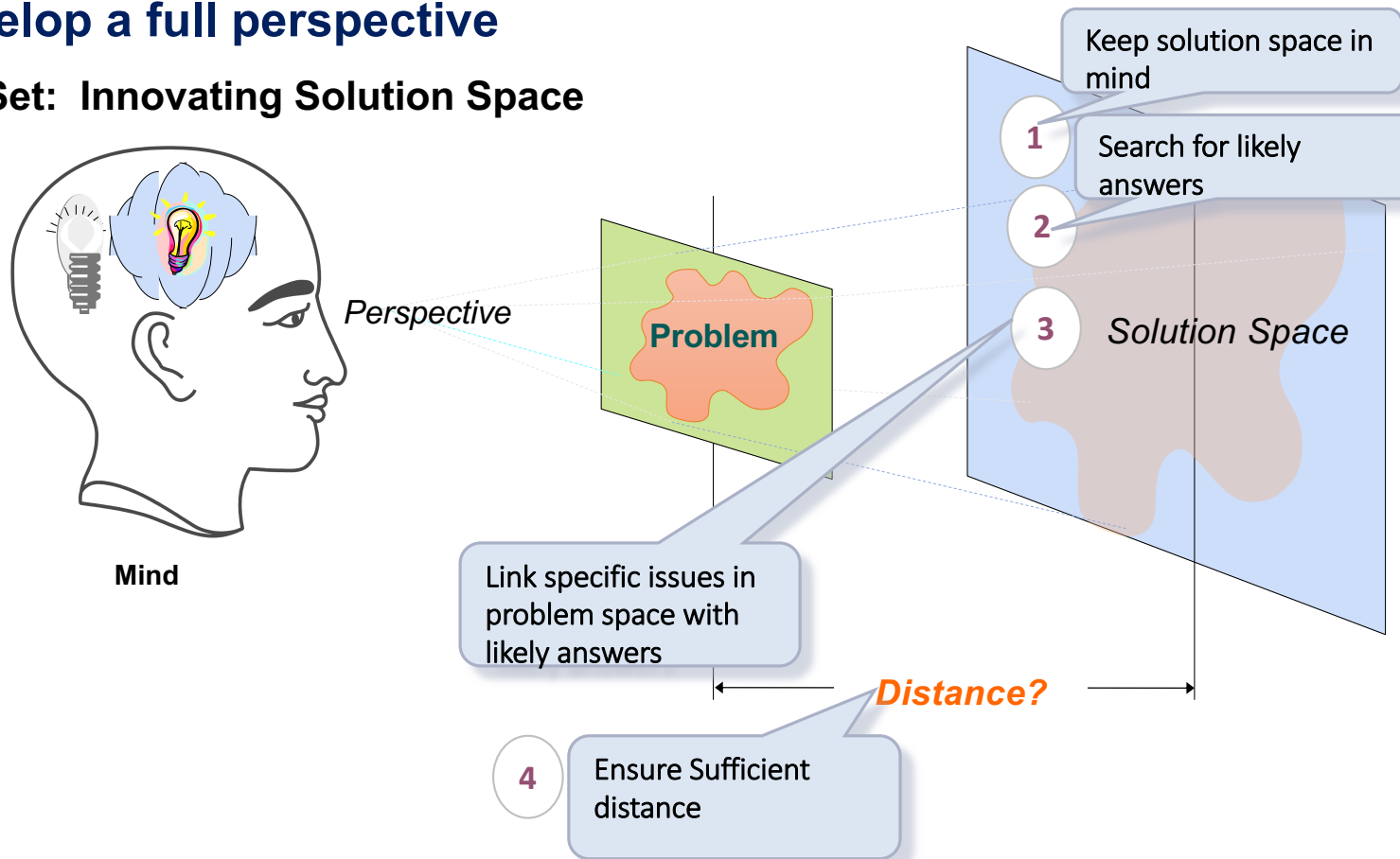
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Cultivating your Power to Imagine

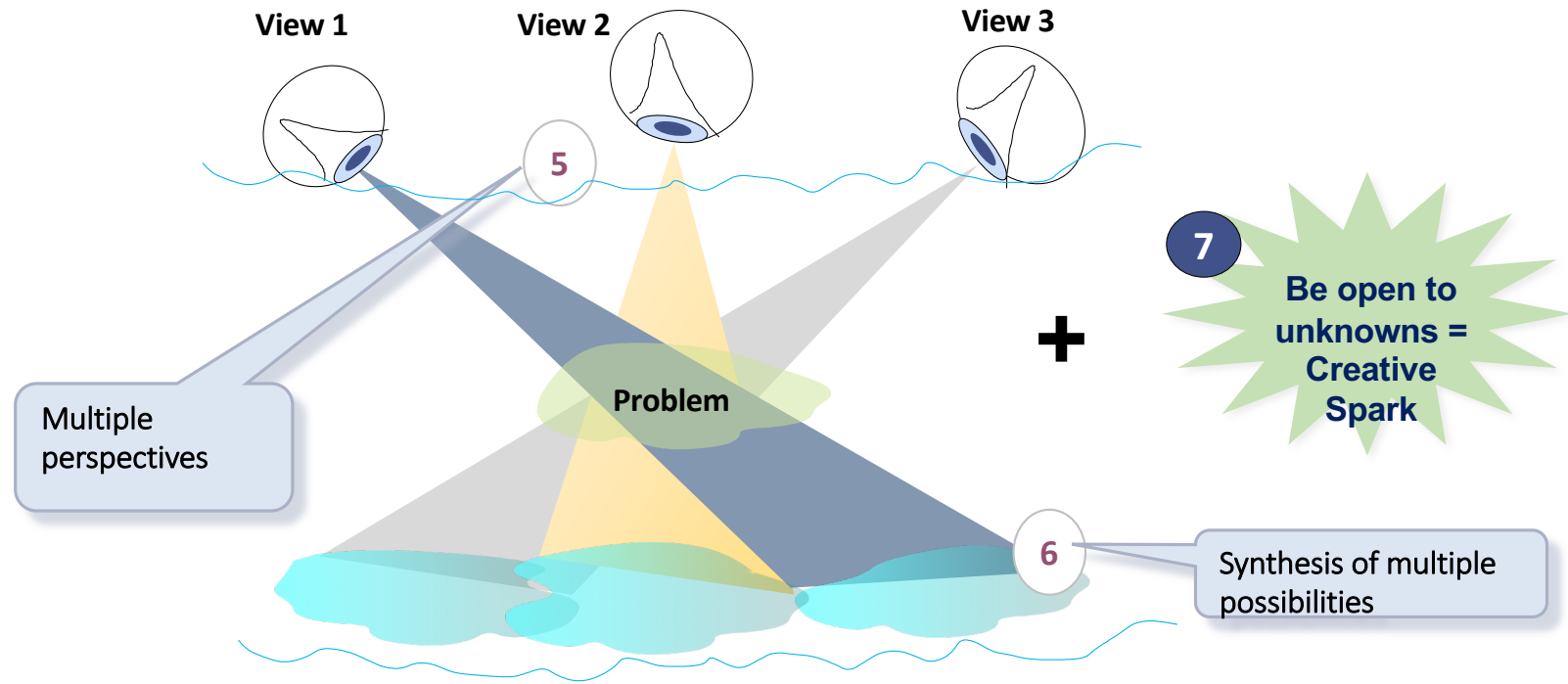


Ensure there is sufficient distance from the problem you wish to solve to develop a full perspective

Mind-Set: Innovating Solution Space



Three more: Ensure multiple perspectives are captured



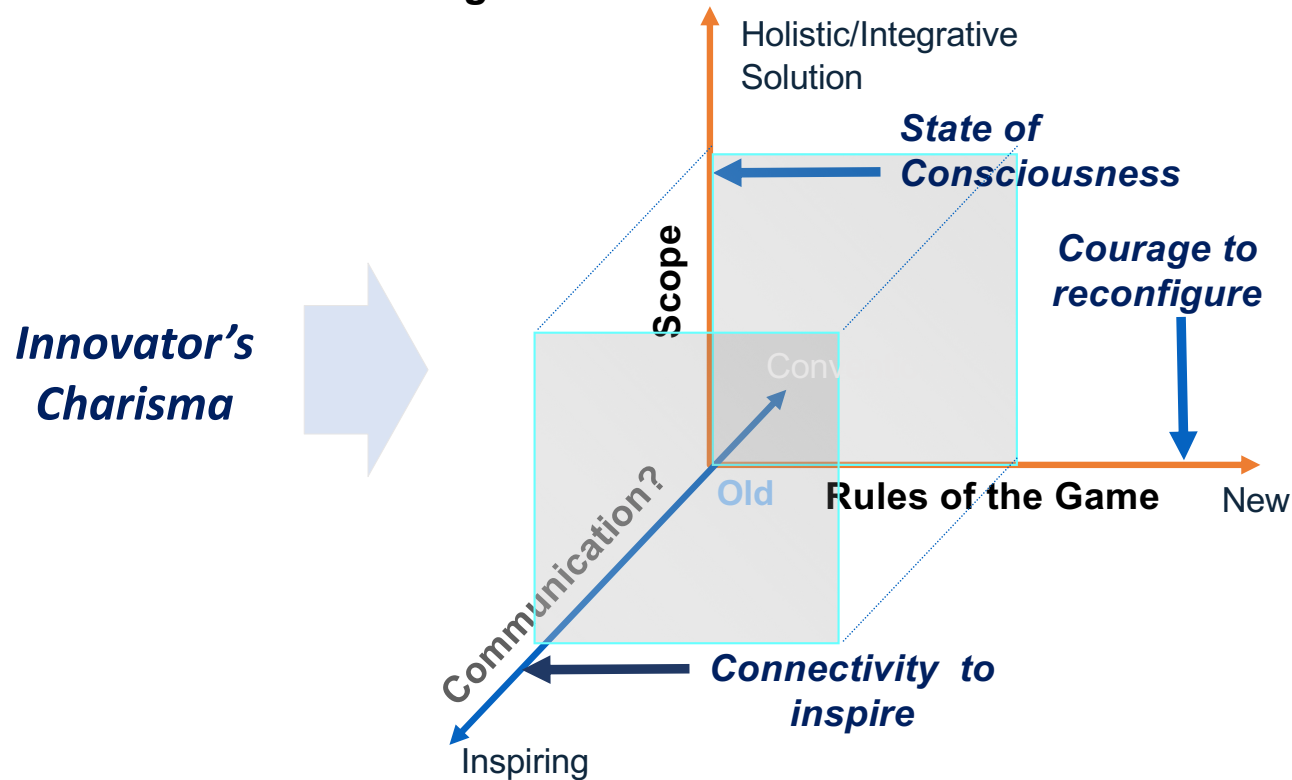
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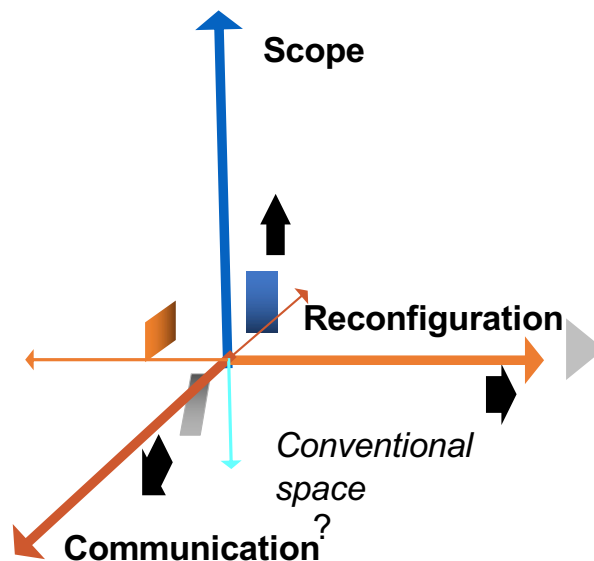
We will now examine what defines Innovation Charisma

Innovation: *The Three Strategic Vectors*



The Three Vectors and *the Fifteen rules...*

Expanding Strategic Space



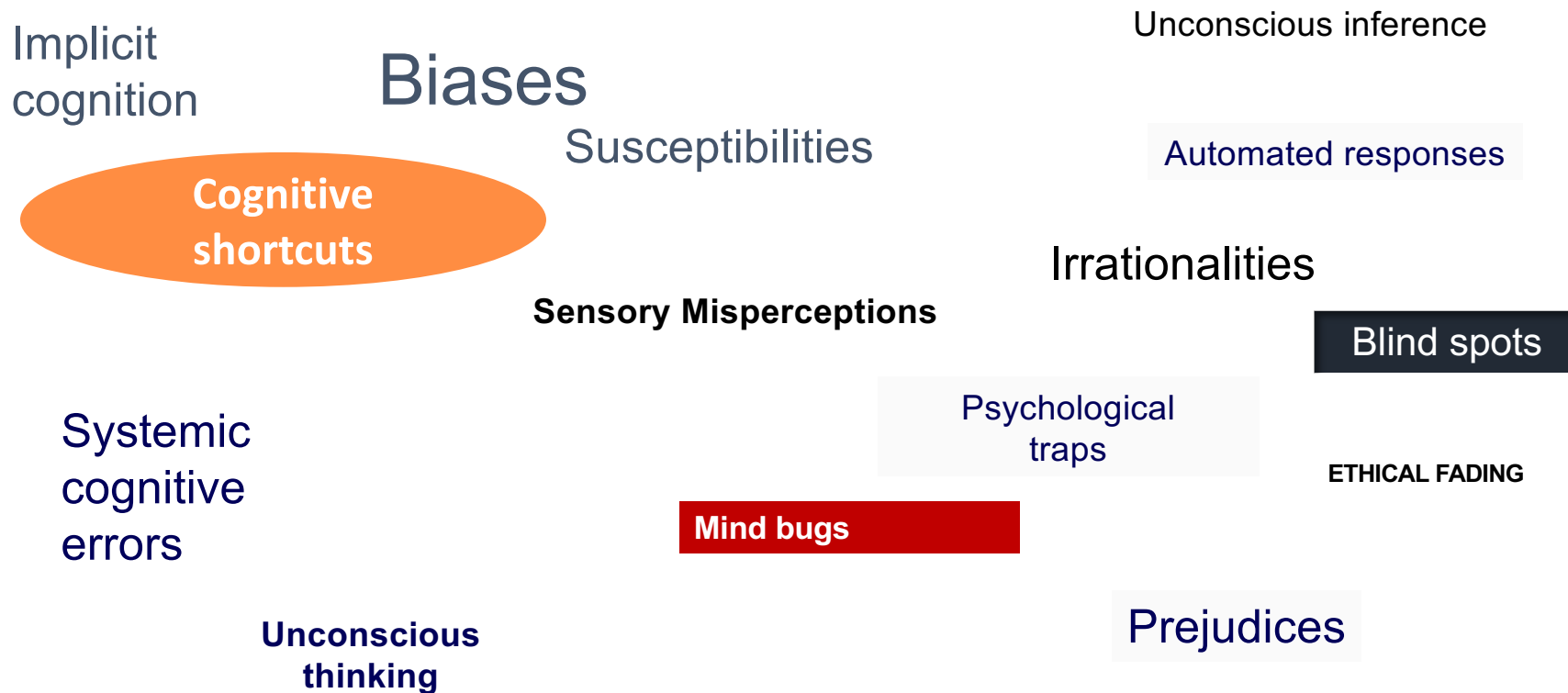
Innovation Rules: © Partha S Ghosh

1. Ensure there is sufficient distance from the area of interest
2. Engage the end user as the designer
3. **Be open to unknowns = full perspective**
4. **Cross migrate ideas to develop ideas/concepts or solutions**
5. Seek to neutralize forces that discourage ideas
6. Know thyself – *Passion, Skill & bandwidth*
7. Define your relative/competitive position
8. Stretch possibilities/options on both demand & supply sides of value creation
9. **Leverage & build on the latest networks of skills**
10. Have fall back options
11. Milestones, Metrics and rewards make innovation manageable
12. **Develop compelling story to inspire**
13. Ensure “Just in time” team work
14. Every outcome positive or negative, unexpected or not all are important data points.
15. **Experimentation is continuous to remove the next bottleneck or capture next value**

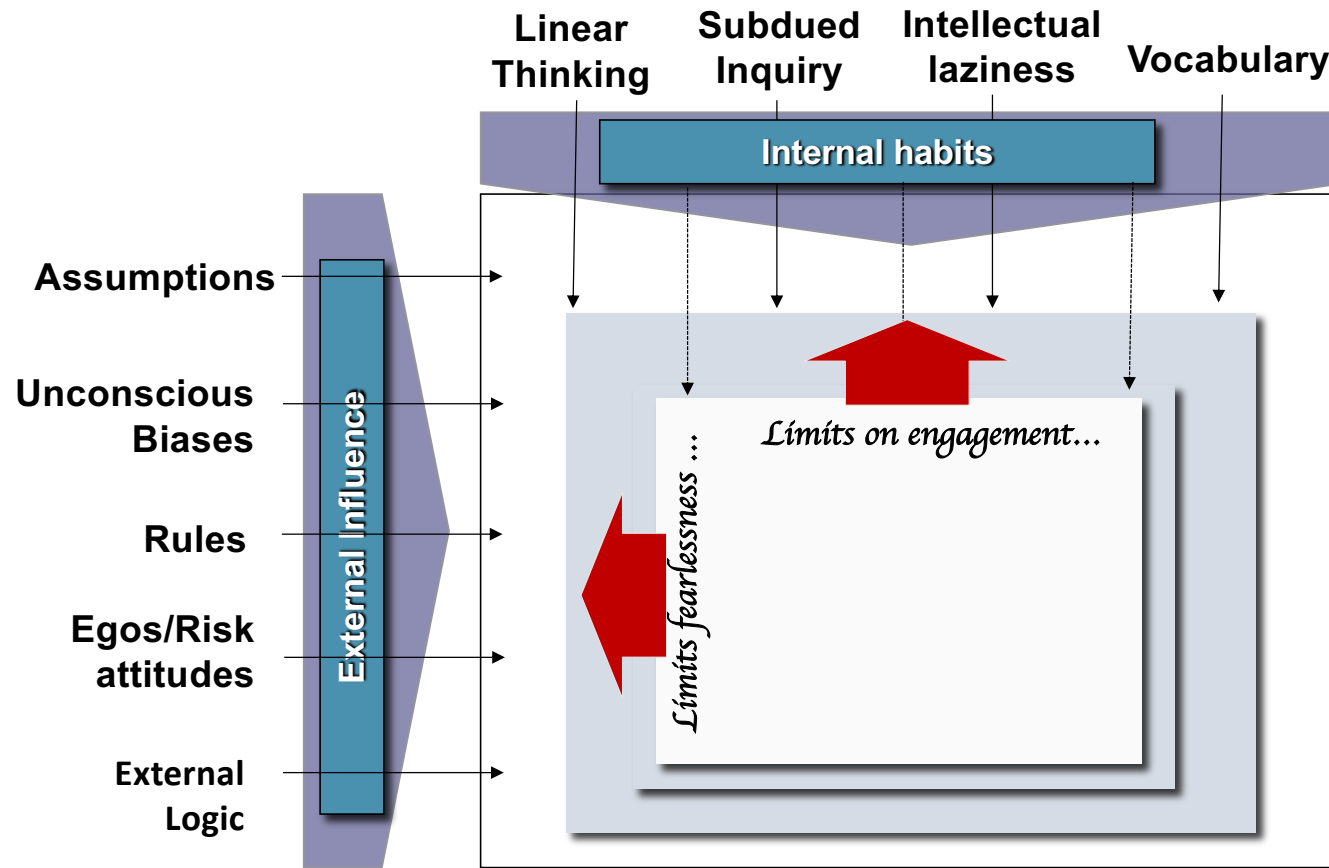
Enabling possibilities for major leaps



Often we hesitate to make the big leaps largely because of our brains have been hard-wired to make certain kinds of errors...

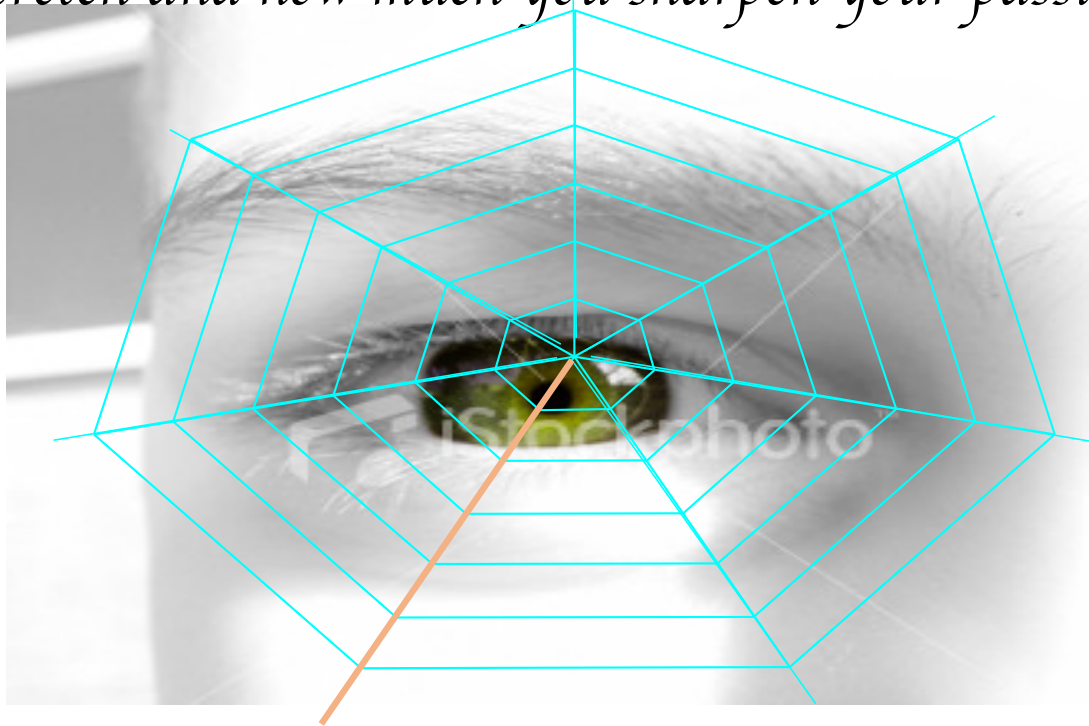


How to not be effected by Constraints and Obstacles ?



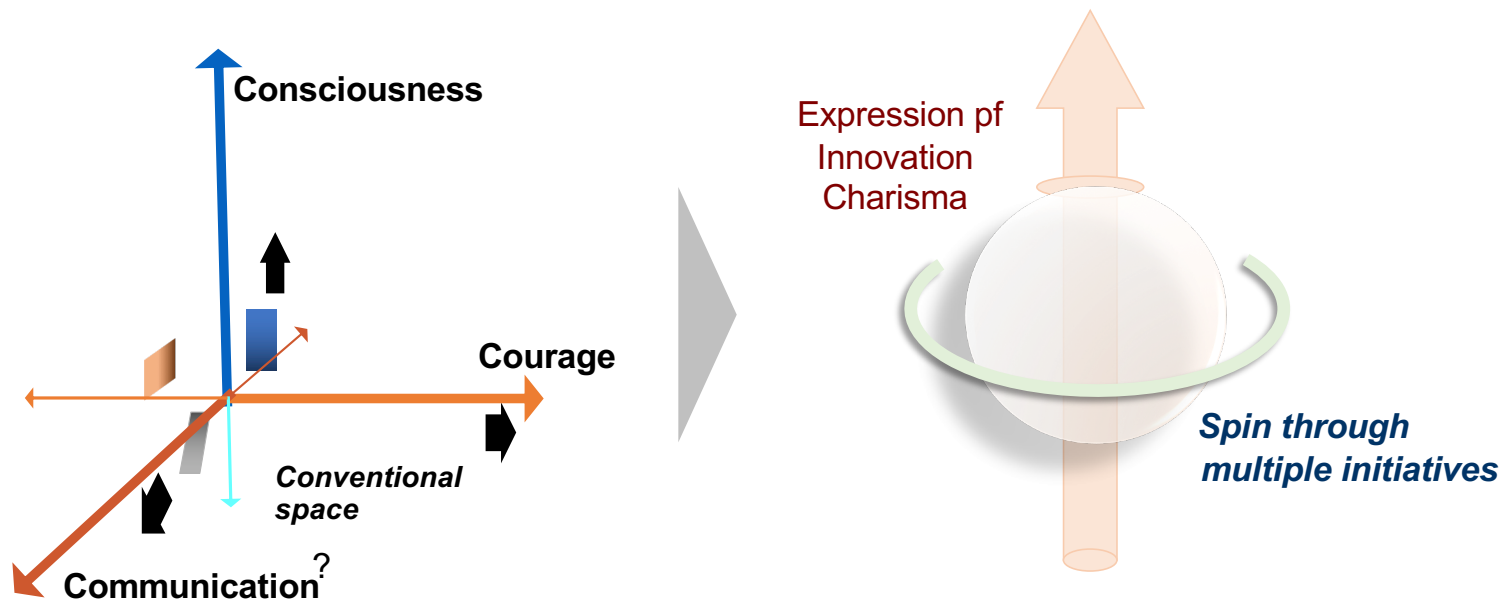
Unleashing you inner power.. through better understanding of outer world...

"How far you will go will be depend upon how far your vision could stretch and how much you sharpen your passion" Partha S Ghosh



The 3 Vectors and Innovation

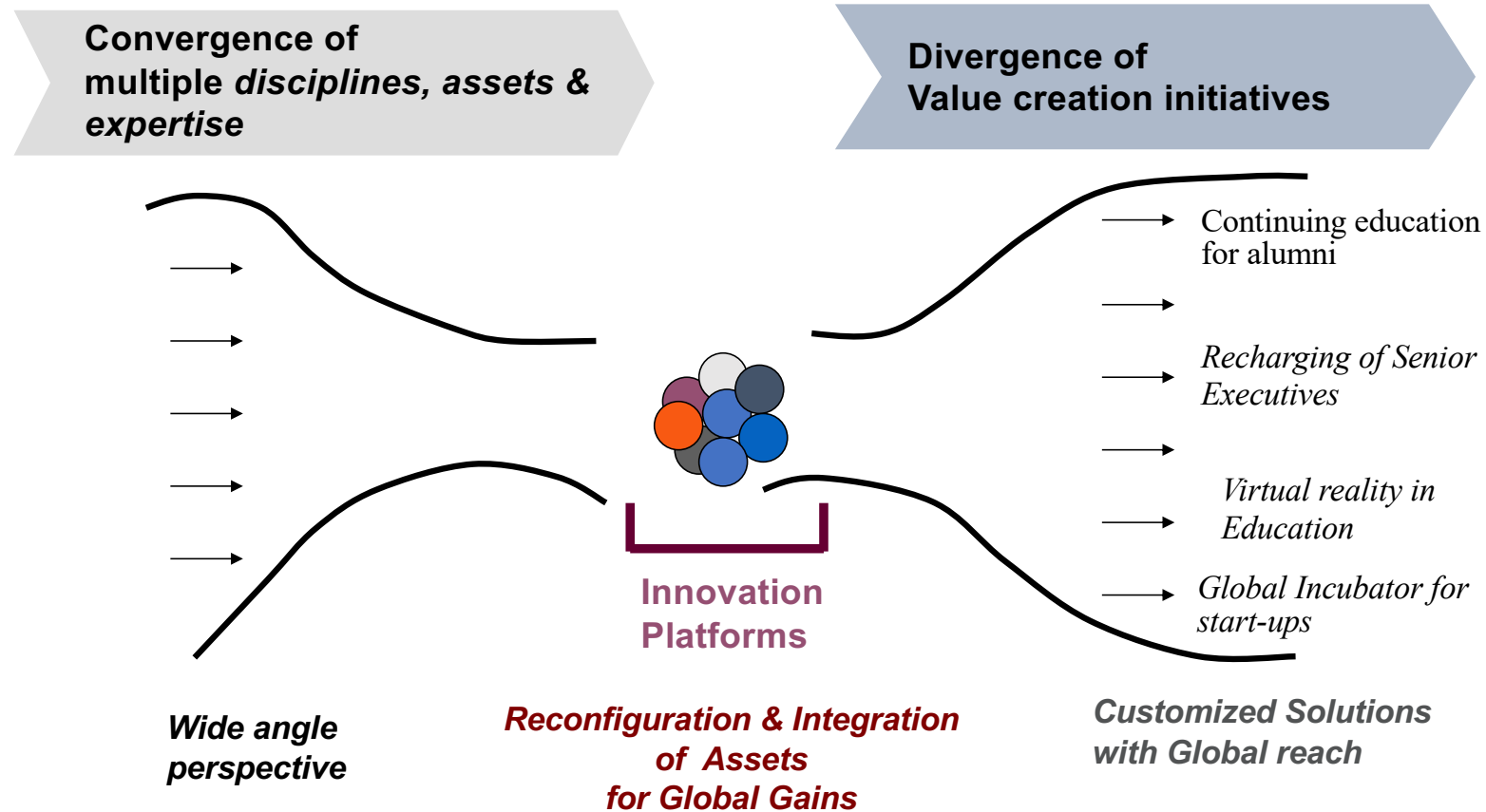
Expanding Strategic Space



Source: Partha S Ghosh Innovation Framework

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In the process innovative organizations manage flow of imagination....



Source: Partha S Ghosh Innovation Framework

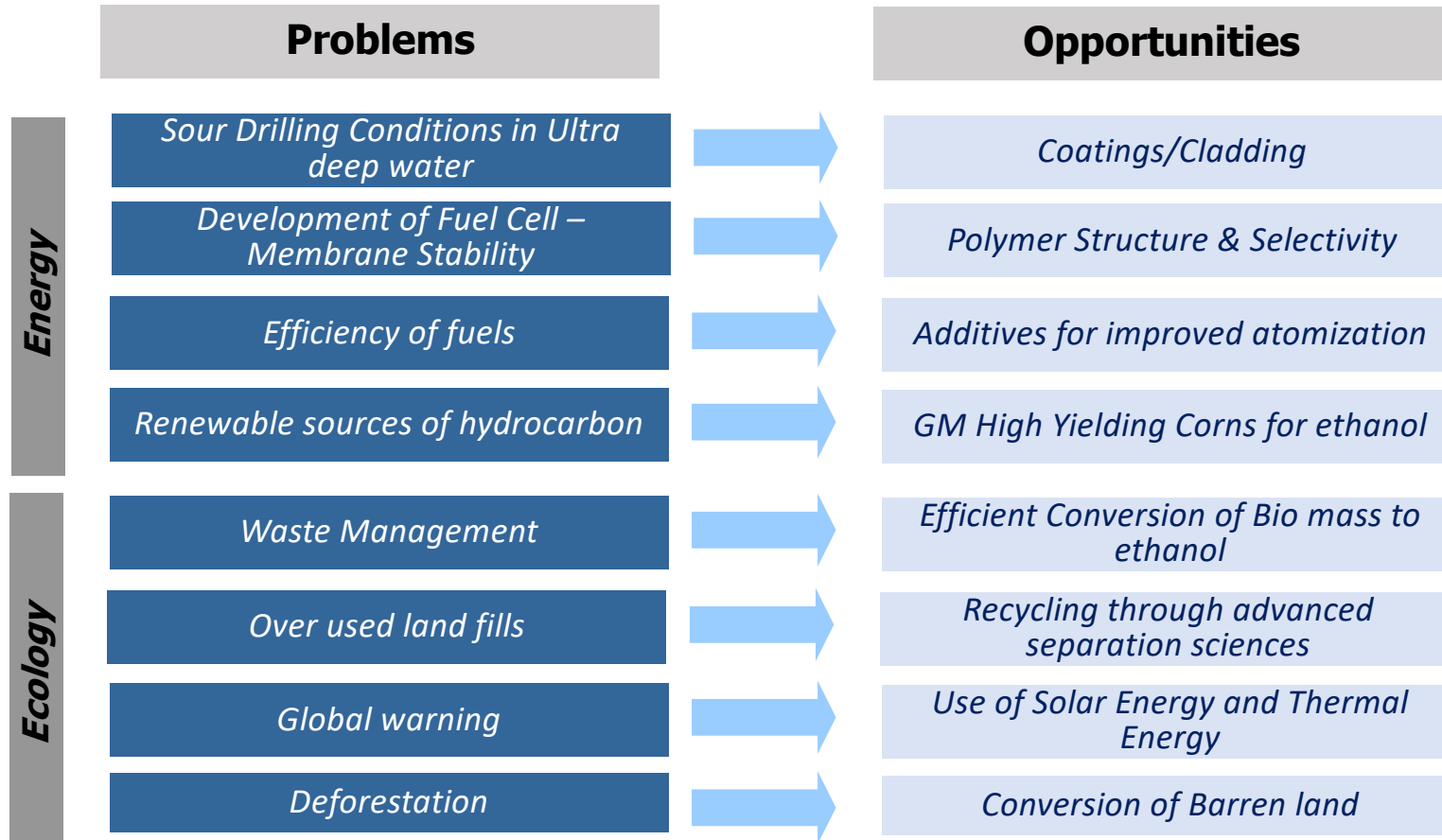
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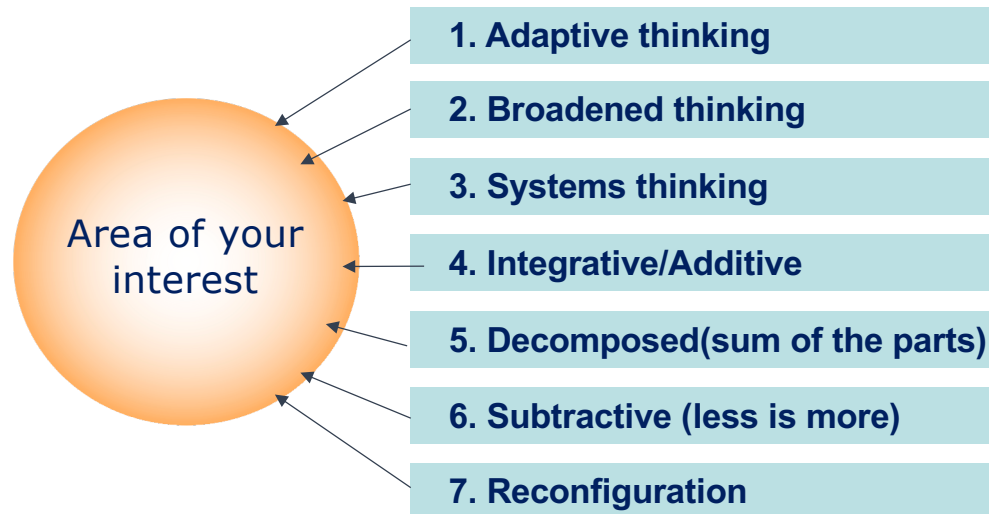
Opportunities in Energy & Ecology (Illustrative)



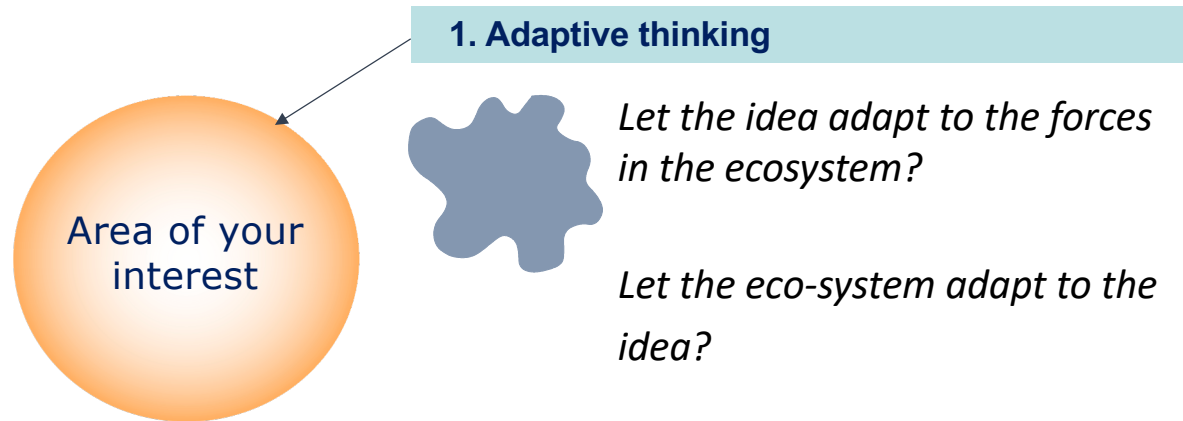
How to relate with a domain of interest to you



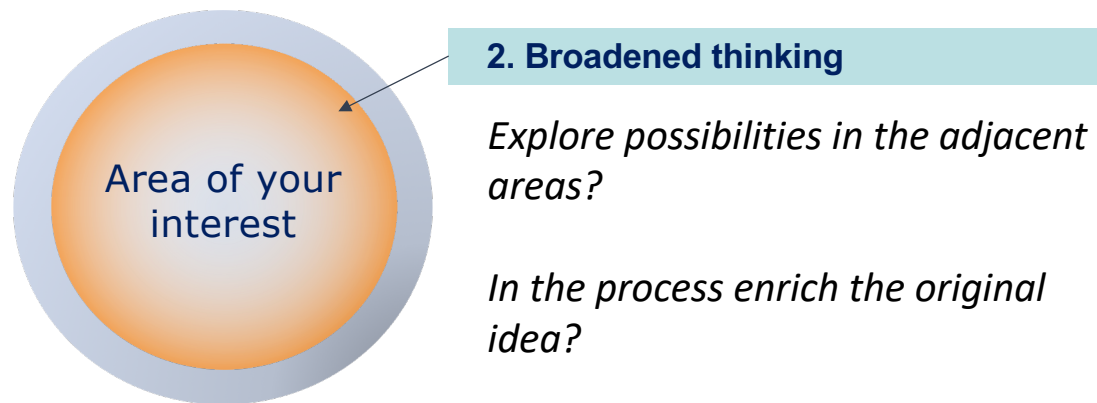
Multiple ways to engage with challenges & Opportunities to imagine possibilities



Multiple ways to engage with challenges & Opportunities to imagine possibilities

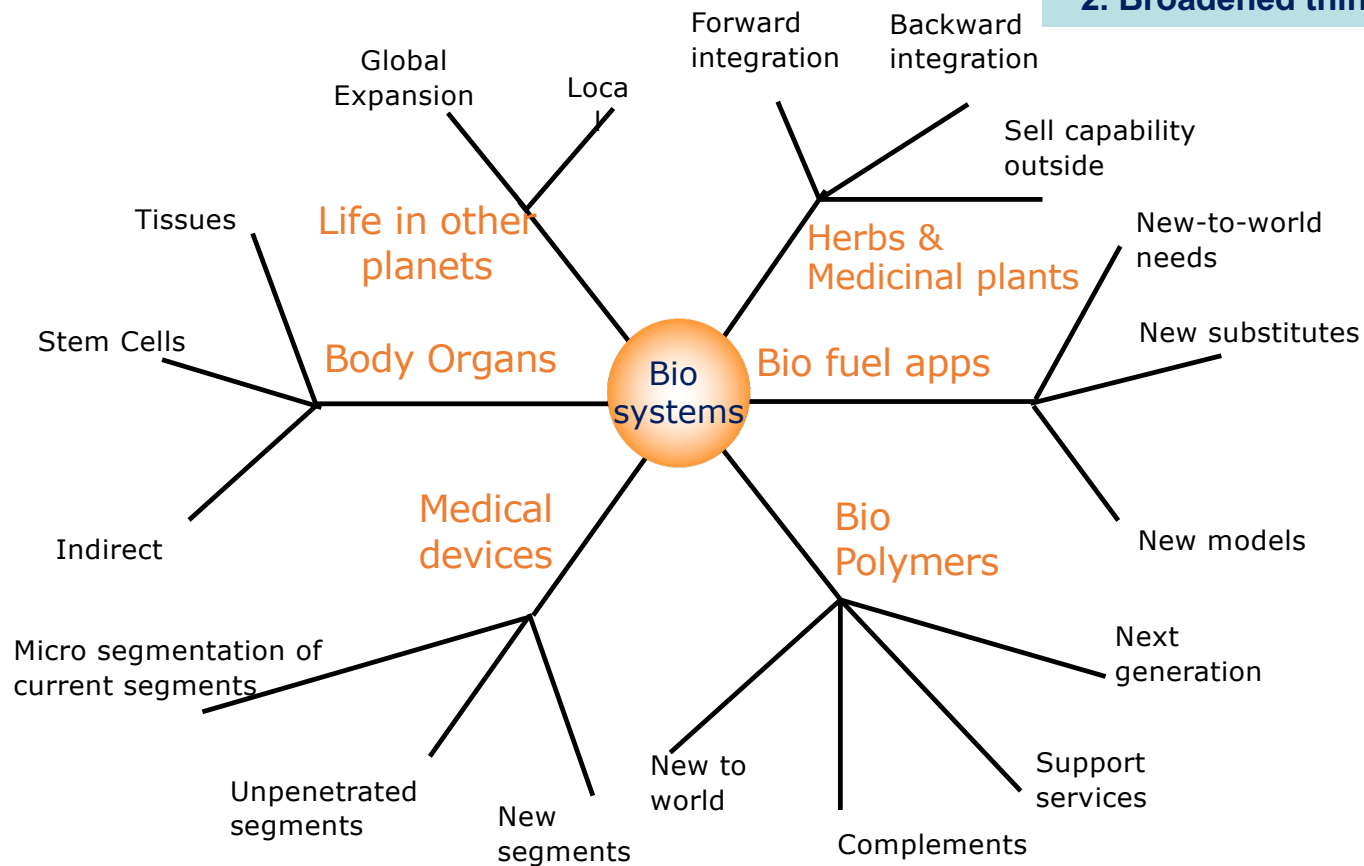


Multiple ways to engage with challenges & Opportunities to imagine possibilities

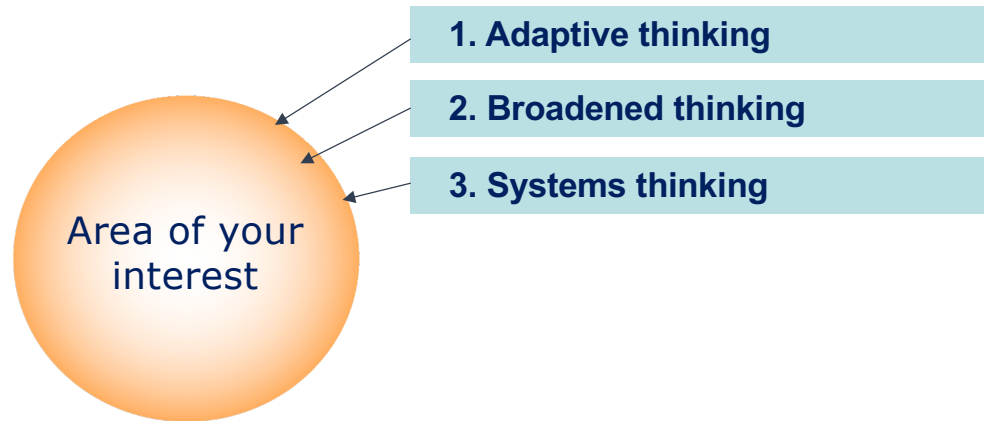


Broadened thinking: Wide angle vision is essential

2. Broadened thinking



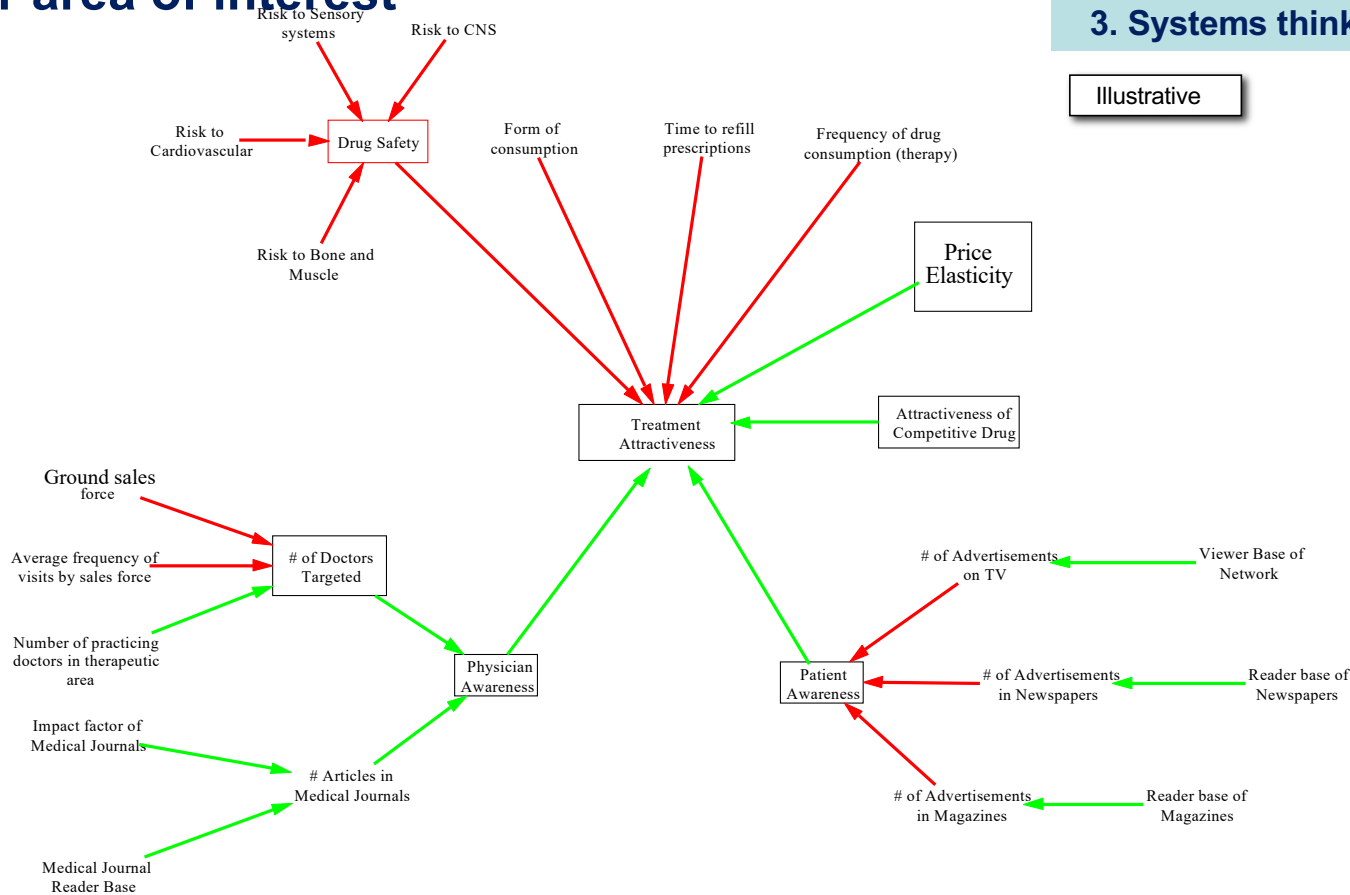
Multiple ways to engage with challenges & Opportunities to imagine possibilities



Systems thinking help you to determine how different factors might effect your area of interest

3. Systems thinking

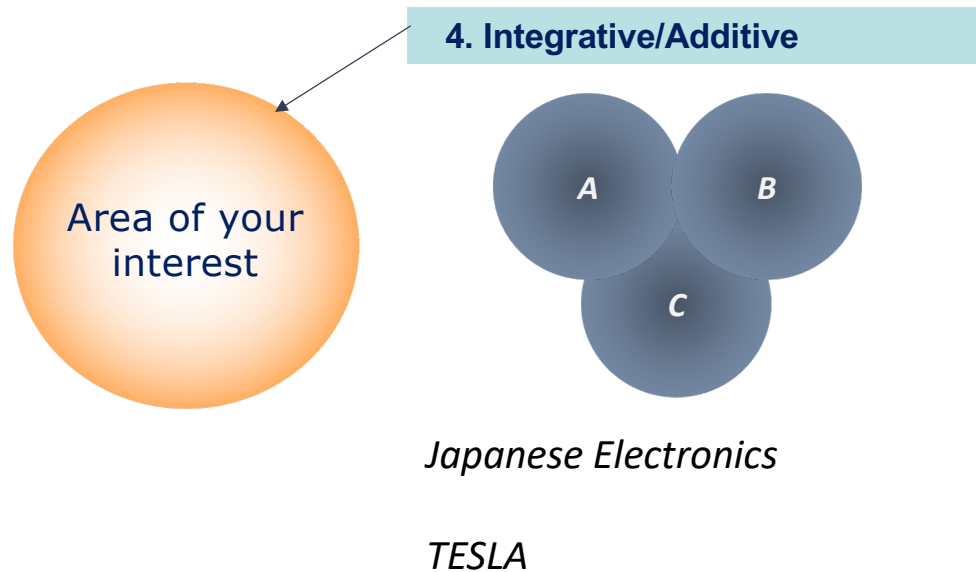
Illustrative



.... Interoperability & Uncommon connections help to open up problem solving space



Multiple ways to engage with challenges & Opportunities to imagine possibilities

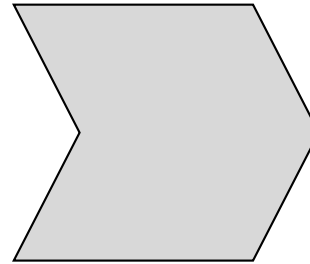


APPLE = Electric type writer + TV Tube

Experimenting to combine an electric typewriter with TV Tube... to make a statement



The first prototype



The first product

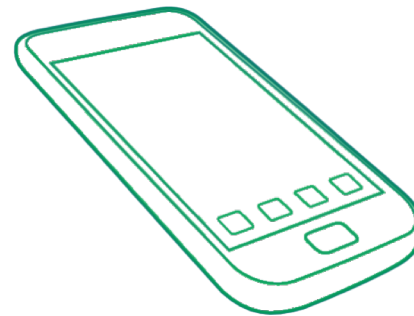


Auto and Electronics Industry are merging

Automotive Industry



Consumer Electronics Industry

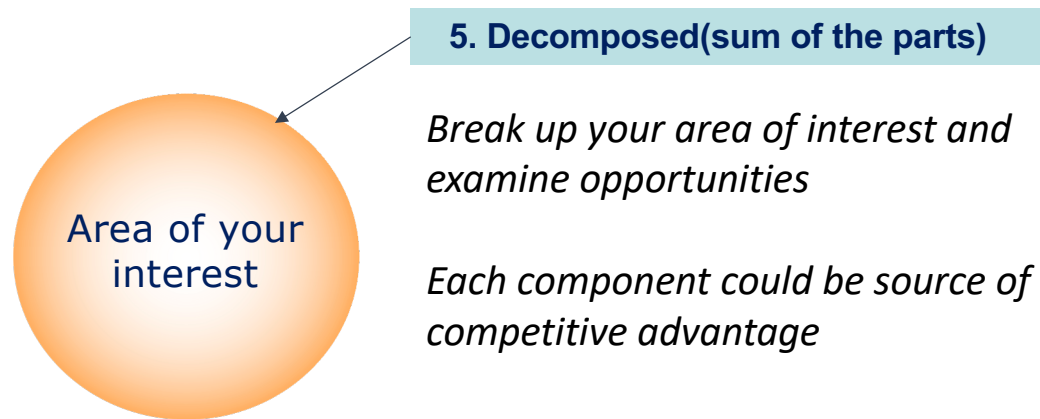


Illustrative



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Multiple ways to engage with challenges & Opportunities to imagine possibilities

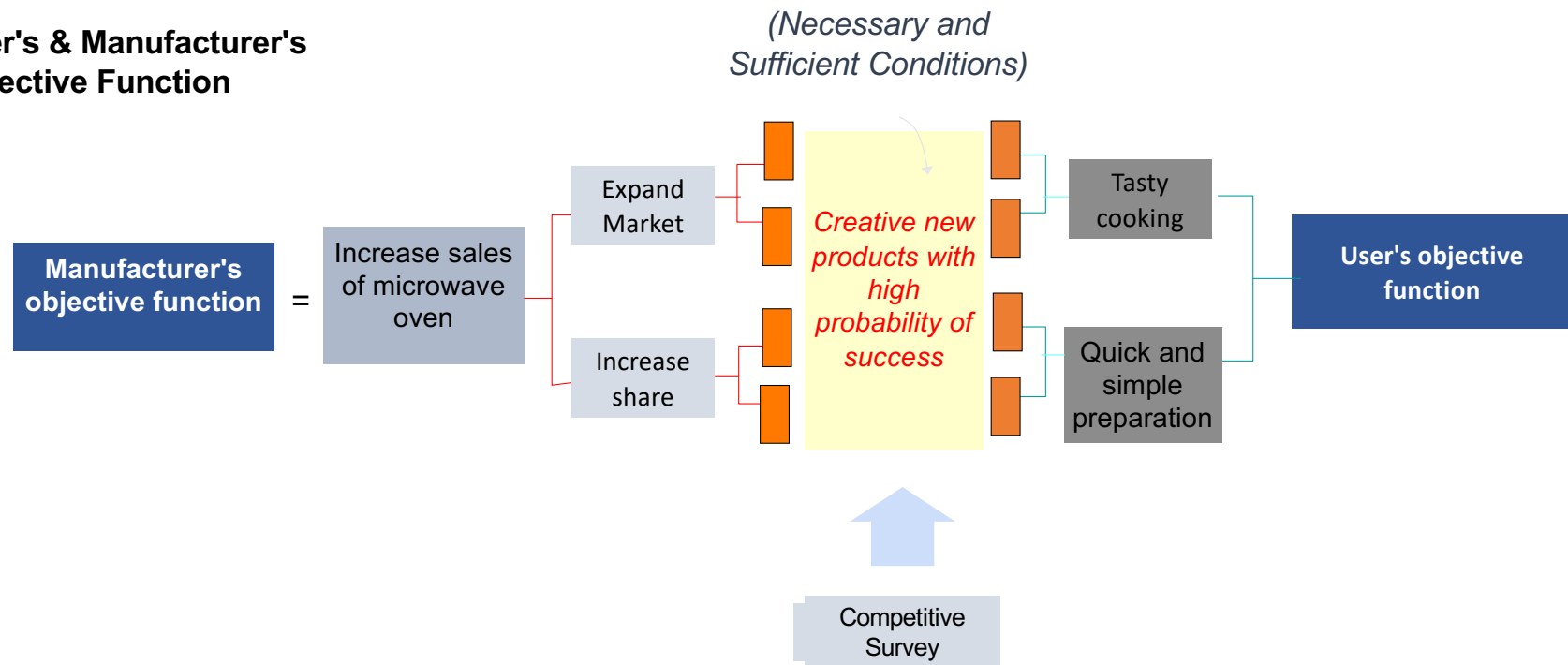


Multiple ways to engage with challenges & Opportunities to imagine possibilities: *Decomposing area of your interest*

Stretch Mind to meet Necessary & Sufficient Conditions

5. Decomposed(sum of the parts)

User's & Manufacturer's Objective Function



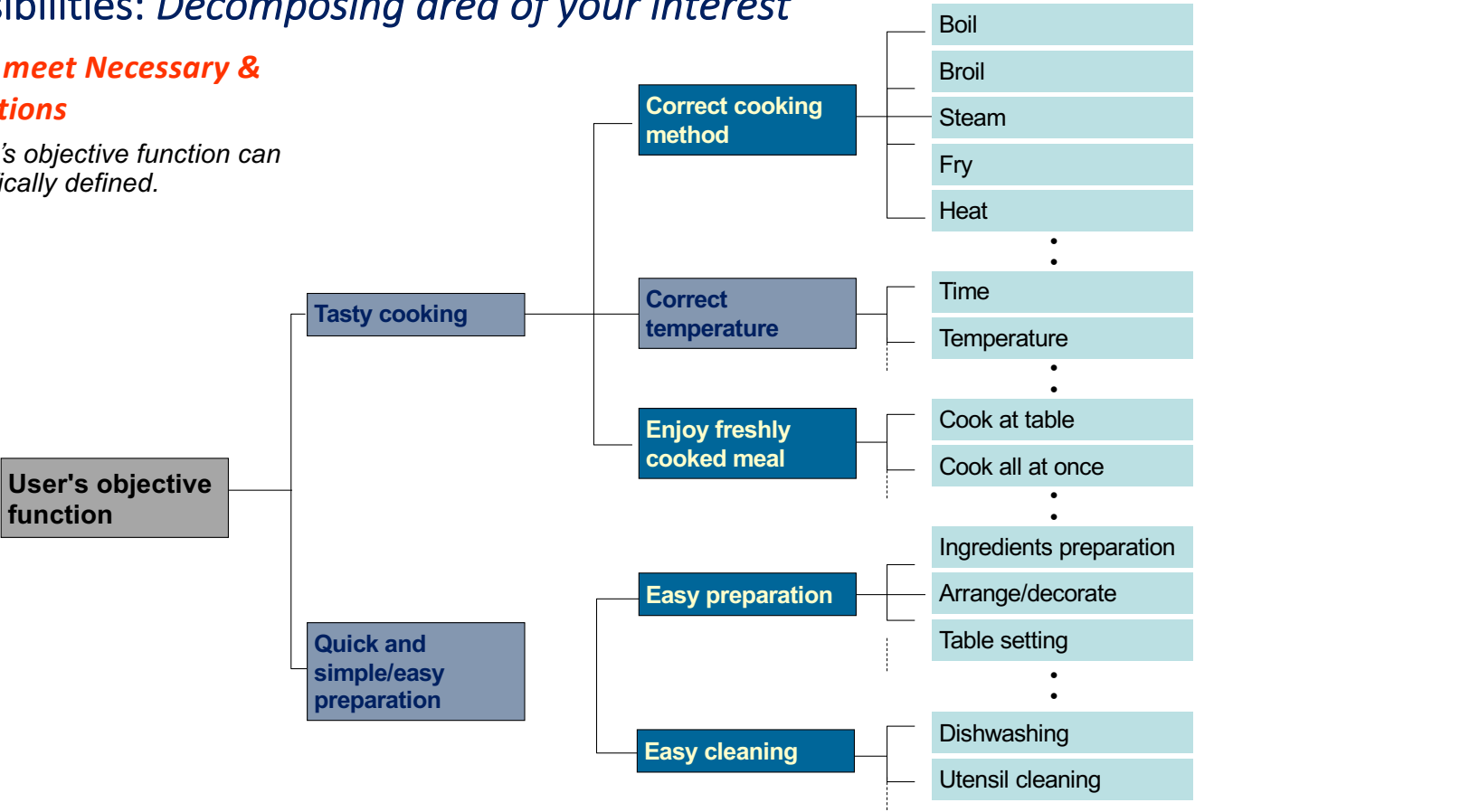


Multiple ways to engage with challenges & Opportunities to imagine possibilities: *Decomposing area of your interest*

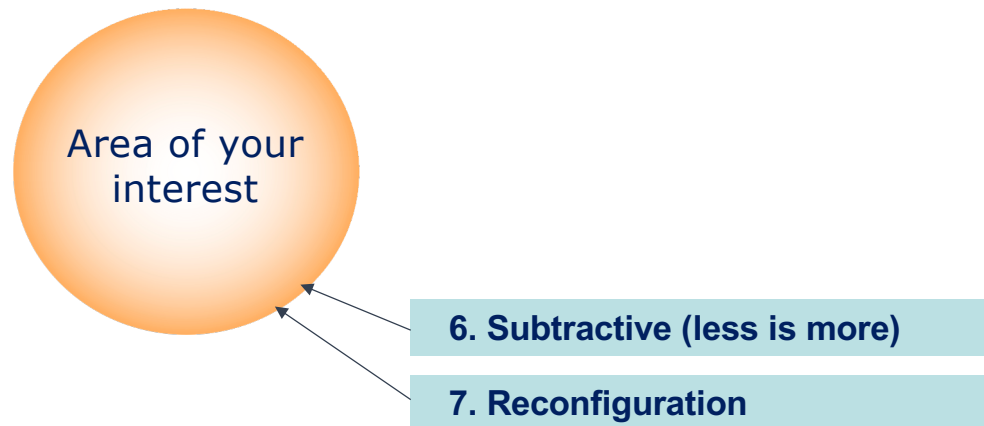
Stretch Mind to meet Necessary & Sufficient Conditions

- The user's objective function can be specifically defined.

Cultivating your Power to Imagine

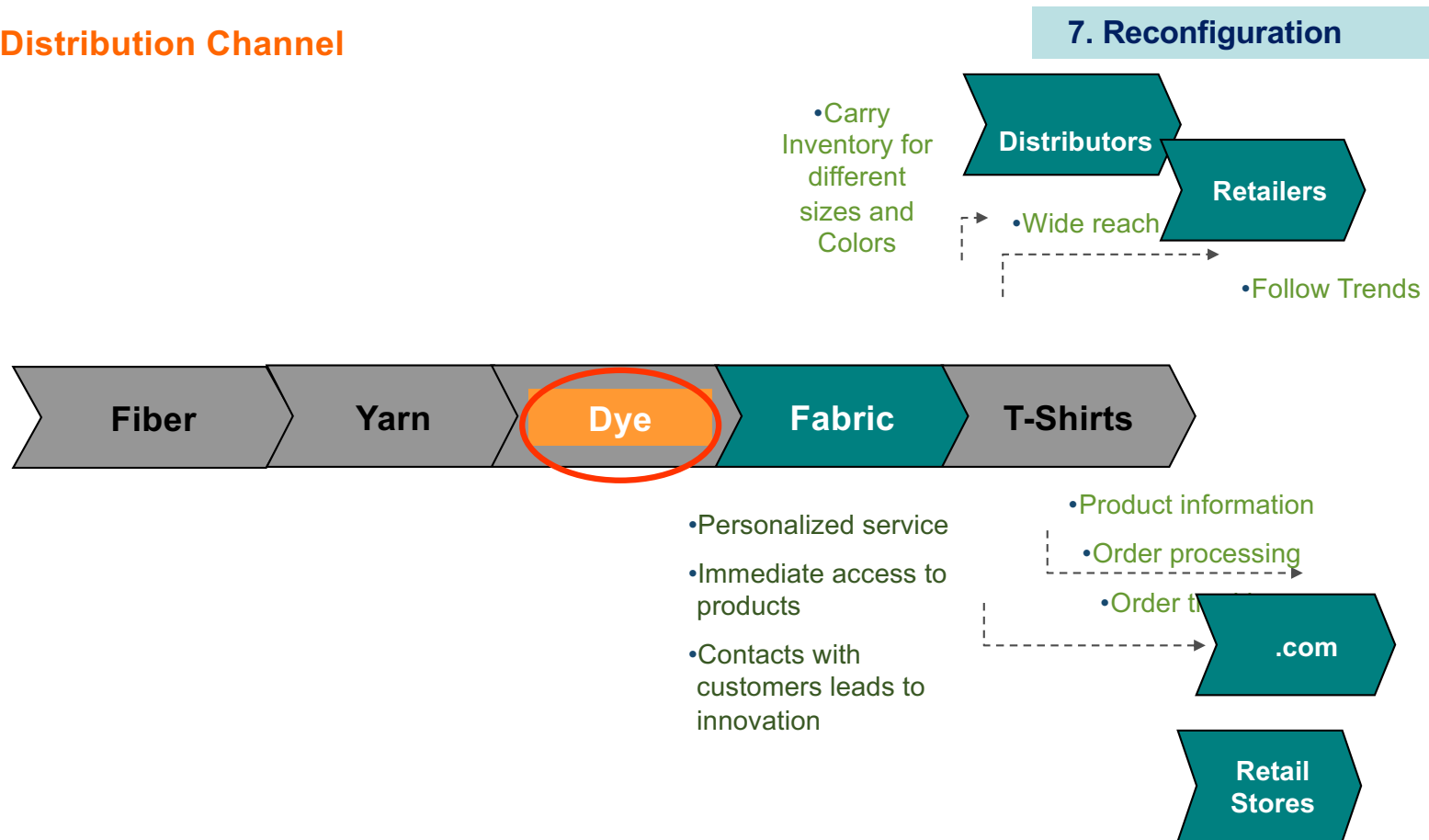


Multiple ways to engage with challenges & Opportunities to imagine possibilities



Sequencing Game: Typical Distribution Channel for T-Shirts

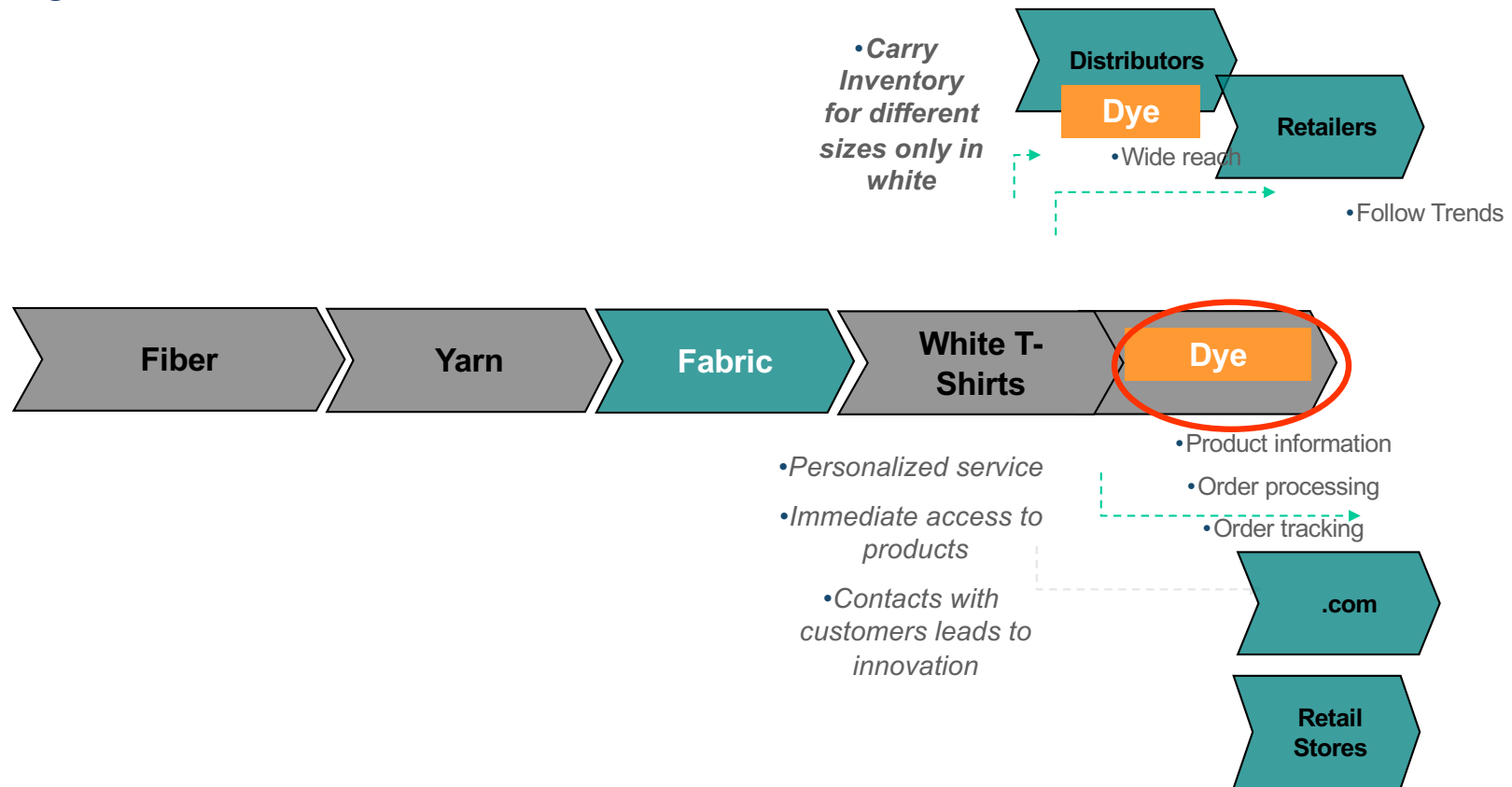
Current Distribution Channel



Benetton: Creating More Value out of the Distribution Channel

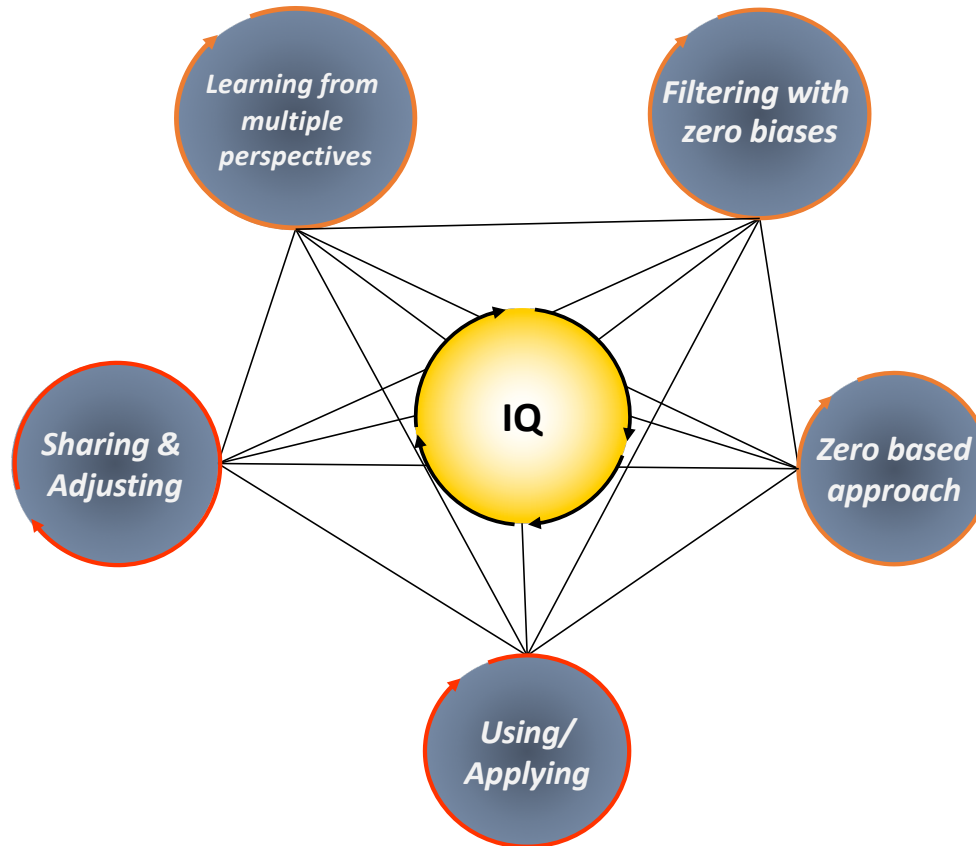
Reconfigured Distribution Channel

7. Reconfiguration

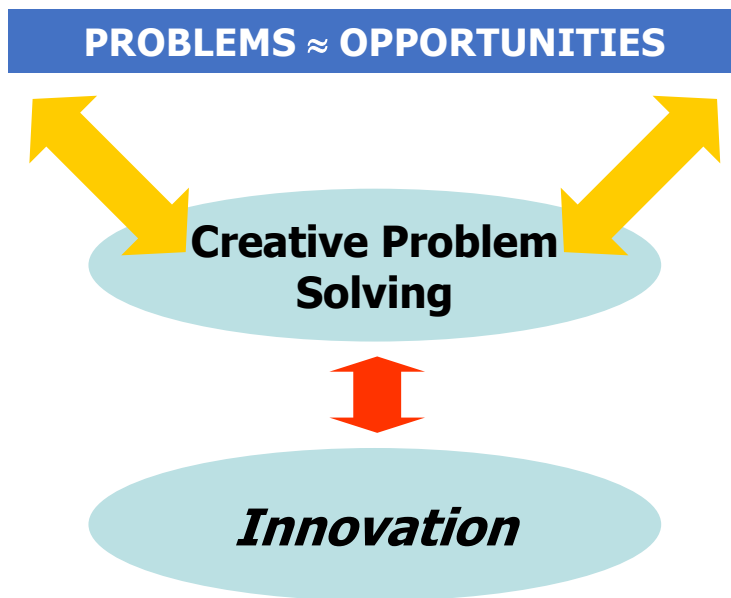


Dynamics of Social Imagination Quotient (IQ)

Essential requirement: Cultivating Imagination



Homework 3 : Please pick significant problems in your neighborhood; then please choose one and examine how you might solve the problems keeping in mind the basic theory below?



Example

Problems

Efficiency of fuels

Opportunities

Additives for improved atomization

Key questions:

Identify a few significant problems in your neighborhood that you connect with? Please list them and discuss which you wish to solve, why and how?

Examine alternative solutions?

Analyze how it could be commercialized ?