

How can Creativity boost your Performance?

Application to
Pharma companies

*“The true sign of intelligence is
not knowledge but imagination”
(Albert Einstein)*

Position Paper

May 2016



Smart Pharma
Consulting

1, rue Houdart de Lamotte – 75015 Paris – France
Tel.: +33 6 11 96 33 78 – Fax: +33 1 45 57 46 59
E-mail: jmpeny@smart-pharma.com – Website: www.smart-pharma.com

“Necessity is the mother of invention”

■ **Why is creativity so important?**

■ **How to craft a creative strategy?**

■ **How to build a creativity-driven organization?**

Pharma companies are facing a paradigm shift which forces them to reinvent in a creative way their strategy, the corresponding tactics and their organization

Context – Objective – Approach

- Pharmaceutical companies must urgently **rethink creatively** their business model **to face** the **paradigm shift** that is occurring:
 - Health authorities keep on raising **barriers** regarding drug **registration** and **marketing conditions**
 - **Payers** have no choice but to put more **pressure on drug price**, including on innovative ones
 - **Healthcare professionals** tend to **reduce** their number of **interactions** and to become less and **less sensitive to promotion**
- To help pharma companies figure out how to leverage creativity to boost their performance, Smart Pharma Consulting will attempt to answer the following questions:
 - **Why is creativity so important?**
 - **How to craft a creative strategy?**
 - **How to build a creativity-driven organization?**

“We are continually faced with great opportunities, brilliantly disguised as insoluble problems” – John W. Gardner

In the business context, creativity stimulates discoveries, inventions and innovations that could potentially result in highly valuable products, services, organizations, etc.

Role of creativity in business

- Creativity is the development of ideas about products, services, organizations, business models or theories that are novel and potentially valuable
- Creativity involves the ability to break down and restructure conventional knowledge to come up with different viewpoints and insights
- Creativity can potentially lead to various discoveries, inventions and innovations

Creativity

Discovery

- Discovery consists to be the first to find or observe an existing place, substance or scientific phenomenon
- Discovery can help explain knowledge that is acquired through previous scientific evidences
- Discoveries can be accidental (e.g. penicillin by Alexander Fleming) or sought after through exploration (e.g. the molecular structure of DNA)
- Some discoveries result in invention of objects, processes or techniques

Invention

- Inventing is an act of creativity that results in new products, services, organizations, business models or theories, starting from scratch
- Inventions could be accidental (e.g. Viagra) or intentional (e.g. Mosquirix¹)
- Some inventions result from discoveries (e.g. vaccines)
- Inventions usually require a process where experimentation, “trial and error” and alternations are required in order to create the perfect invention

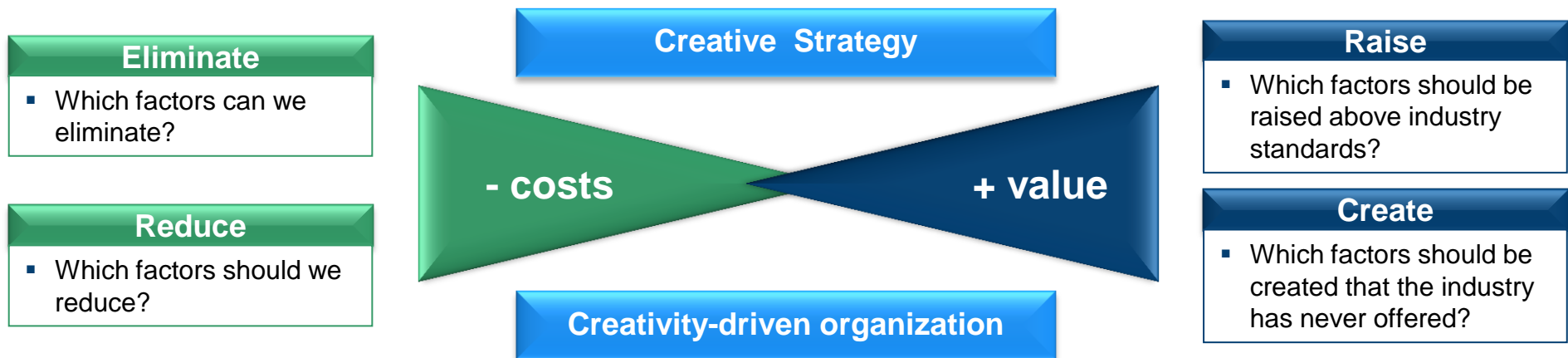
Innovation

- Innovation is to make changes in existing products, services, organizations, business models or theories in order to improve them (e.g. long-acting vs. short-acting drugs, calendar packs, etc.)
- These changes may be required to increase efficacy, reduce cost, improve convenience, etc.
- Business innovation intends to improve products, services, organizations, etc., to create more value for stakeholders

To cope with a deteriorating competitive environment, pharma companies must build a creative business model to reduce costs and/or offer better value to customers

New pharma business model

- The **new business model** that pharma companies must craft **should** simultaneously:
 - **Reduce costs** by eliminating less valuable features or services
 - **Increase customer value** (and in return company value) by offering new benefits and services
 - **Rethink the organization** so that functional and operational activities be fully aligned to support the associated strategy

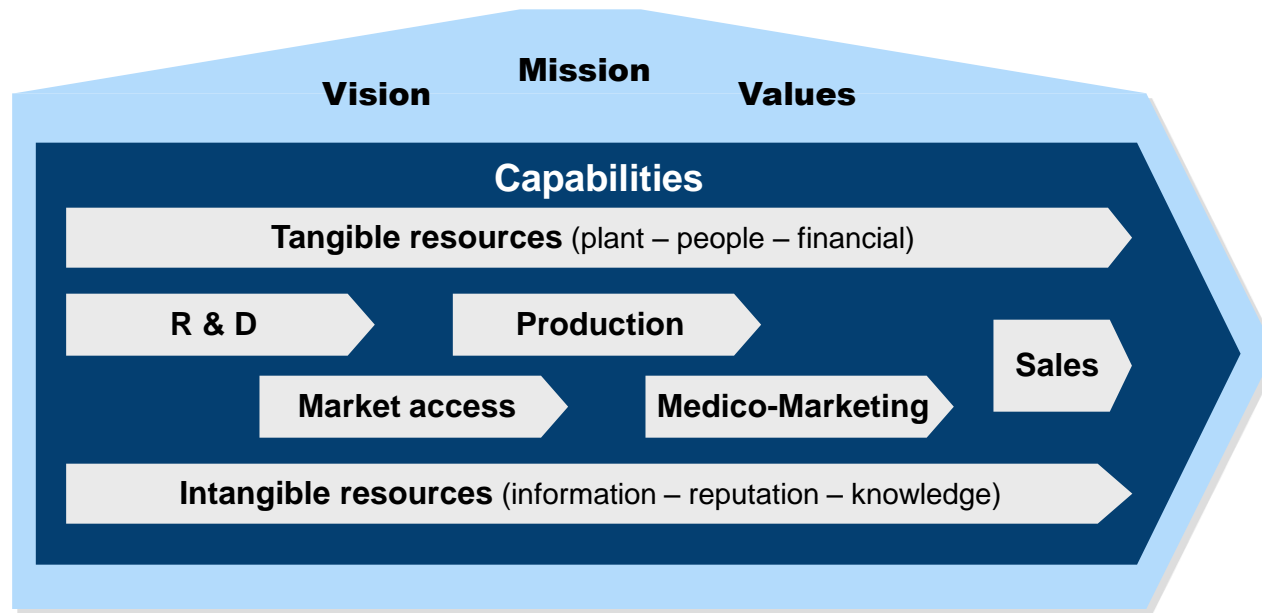


*“New business models consist in doing things differently...
... while new business strategies consist in doing different things“*

To craft a successful creative strategy, pharma companies must identify the business opportunities where they could have the strongest competitive advantage

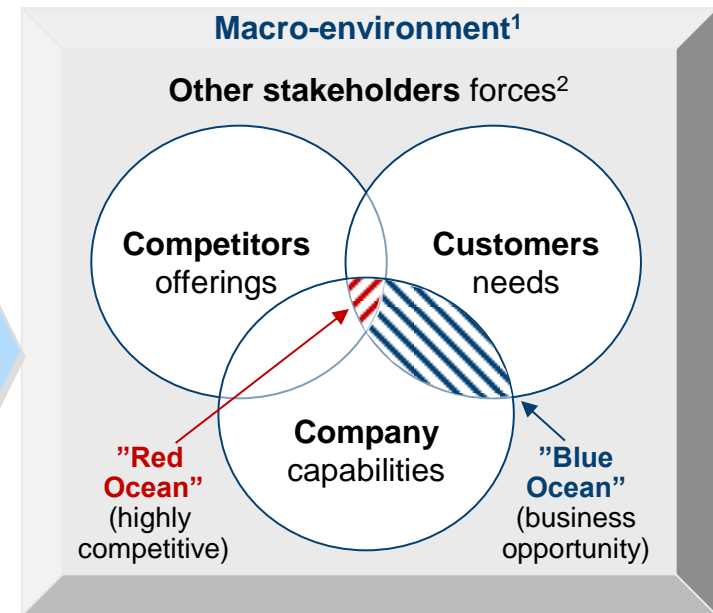
Creative strategy crafting (1/3)

Company's business model



Strengths & Weaknesses
(Competitive advantage)

Strategic segments



Opportunities & Threats
(Attractiveness & Key success factors)

Ambition & Strategic priorities

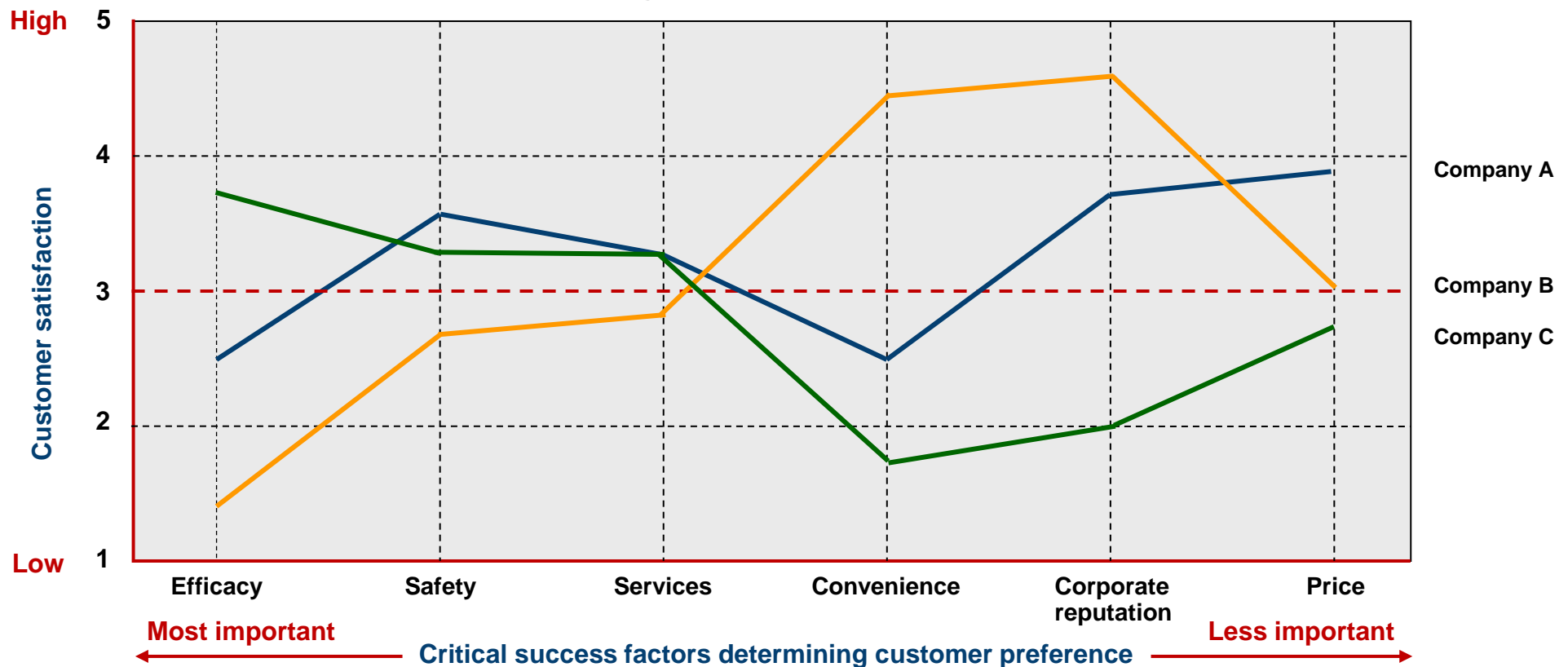
Sources: Adapted after C. Kim et R. Mauborgne 2005 - D.J. Collis , HBR April 2008, M. Porter 1985 - Smart Pharma Consulting

¹ Political / legal, economic, socio-demographic and technological factors –
² Including suppliers, new entrants, substitutes, complements

The Strategic Canvas is both a diagnostic tool to identify gaps not fully exploited by competition and a decision-aid to select which ones to fill up to meet customer needs

Creative strategy crafting (2/3)

Strategic Canvas (Value curves)



Sources: Adapted after C. Kim et R. Mauborgne 2005

“Blue Ocean” strategies, based on value innovation, consist in creating new market spaces, making the competition either “irrelevant” or weak

Creative strategy crafting (3/3)

New market space conception**Red Ocean Strategy**

1. Compete in the existing market space
2. Beat the competition
3. Exploit the existing demand
4. Make the value-cost trade off
5. Align the organization with its differentiation or low cost strategy

**Structuralist approach****Blue Ocean Strategy**

1. Create an uncontested market space
2. Make the competition irrelevant
3. Create & capture new demand
4. Break the value-cost trade off
5. Align the organization with its differentiation and low cost strategy

**Reconstructionist approach**

“Develop a strategy that structures the market and not a strategy that adjusts to the market structure”

To exploit new business opportunities, companies must develop new strategies consisting in doing different things that will be highly valued by customers

“Blue Ocean” strategic examples

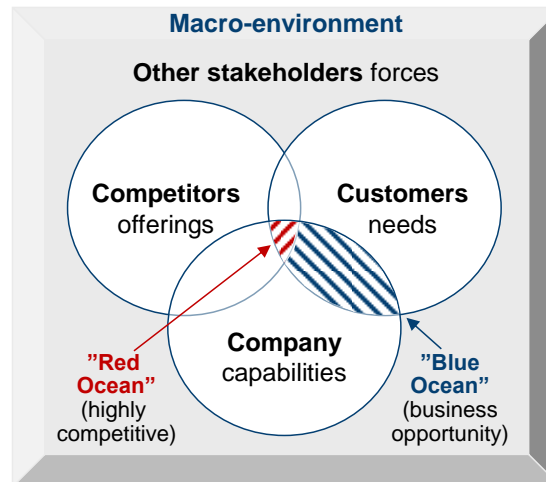
Price & Performance



Since 2009, GSK is committed to reinvest 20%¹ of profits made in LDCs² and to heavily lower drug prices³ to increase patient access and then grow on a strategic segment disregarded by most of big pharma companies

Around-the-pill services

In 2014, Merck launched a device to inject Rebif, for patients with MS⁴, which collects and stores data that can then be sent to a secure server. The system can prompt patients to a better adherence to treatment



Functional vs Emotional focus

Viagra was not positioned by Pfizer as a treatment of erectile dysfunction but as a solution to enhance patients' life style, putting the emphasis on emotional appeal



Physicians vs. Patients focus

NovoPen, the first insulin pen injector, was introduced in 1985 by Novo Nordisk, to make injection more convenient and easier for patients, improving their quality of life and their adherence to treatment



Sources: Adapted after C. Kim et R. Mauborgne 2005 , companies websites

¹ Representing a total amount of € 25.4 million reinvested in training 40,000 health workers and building infrastructures, having contributed to improve healthcare access to 11 million people over the 2009-2015 period – ² Least developed countries – ³ Prices of patented products are capped at no more than 25% of their UK or French price and as low as their manufacturing cost – ⁴ Multiple Sclerosis

The creative power of individuals is based on four key dimensions that vary significantly according to innate and acquired personality of individuals

Key traits of creative individuals

Originality

- They are able to spot underlying patterns in events
- They produce unique, novel, new, creative or innovative and unusual ideas

Flexibility

- They are able to shift from one approach to another when addressing issues
- They see relationships between seemingly disconnected elements
- They produce a large variety of ideas

Fluency

- They are able to produce many ideas
- They cope with paradoxes
- They challenge status quo
- They can mix viewpoints or perspectives

Proactivity

- They are curious
- They look beyond the first “right idea”
- They are not afraid to make mistakes
- They take risks

“Chance favors only the prepared mind” – Louis Pasteur

To free the creative power of individuals, these barriers must be lowered or removed, and a free-wheeling atmosphere generated in which all ideas are acceptable

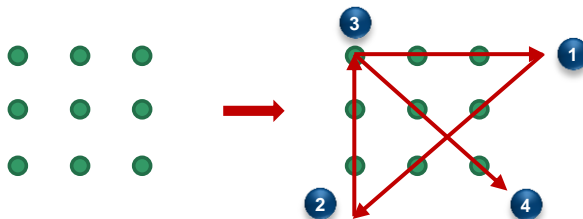
Creativity barrier removal (1/2)

Self-imposed barriers

- Self-imposed barriers are put either consciously or unconsciously
- They are difficult to recognize...
- ... but easy to remove, once they have been recognized

Illustration

Join the nine dots with four straight lines without taking the pencil off the paper

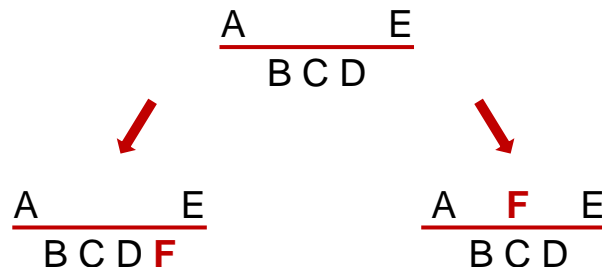


Conventional pattern

- Analytical thinking seeks to establish a conventional pattern to find one solution
- However, several patterns may exist and thus several possible solutions to address an issue

Illustration

Add F to the following letters¹:



Absence of challenge

- Tendency to go for the obvious answer which will be accepted without any question
- However, some other, and possible better solutions, may exist

Illustration

What is the capital of South Africa²?

How to enter the French generic market?
(through acquisition or from scratch by adopting an innovative business model)

How to agree on drug price with payers?
(through conventional price/volume deals or path-breaking value-based models)

To free the creative power of individuals, these barriers must be lowered or removed, and a free-wheeling atmosphere generated in which all ideas are acceptable

Creativity barrier removal (2/2)

Too quick evaluation

- This barrier is difficult to remove
- Some people tend to evaluate and reject ideas that are offbeat or new
- Thus, new or original ideas risk to be dismissed right away

Illustration

Replace the static 2-D segmentation matrix by the dynamic 3-D matrix¹

Develop innovative ideas to create “high impact interactions” between physicians and medical representatives²

Adopt the Brand Preference Mix instead of the 4 Ps of the Marketing Mix³

Fear of looking like a fool

- People do not like going against universally accepted views by fear of being wrong and laughed at
- However, a great deal of inventors have taken the risk to challenge the mainstream thought

Illustration

With his equating mass and energy as different forms of the same phenomenon $E=mc^2$, Albert Einstein broke the rules of Newtonian physics

The Polish astronomer Nicolaus Copernicus was the first astronomer to formulate a scientifically-based heliocentric cosmology that displaced the Earth from the center of the universe

“To live a creative life, we must lose our fear of being wrong” – Joseph C. Pierce

The mental attitude of individuals can be modified to stimulate the generation of new ideas by applying simple rules

Creativity stimulation: Practical rules (1/2)

Connect unrelated ideas or things

(e.g. In the 17th century, the German astronomer Johannes Kepler drew attention to the fact that tides are somehow linked to the movement of the Moon¹)

Search for new applications

(e.g. A visual analogue scale designed to assess the pain of patients may as well be used to assess patients' well-being)

See things in different ways

One thing may be seen in different ways as shown by this picture



Use metaphors

The metaphor which connects two different universes of meaning through similarities helps understand one idea by another one
(e.g. Thinking of how to catch a fish in order to find new ideas to attract more customers)

Cultivate a sense of humor

Both Albert Einstein and Leonardo da Vinci cultivated the humorous perspective
*(e.g. How deep is the ocean?
Just a stone's throw)*

"The metaphor is probably the most fertile power possessed by man" – José Ortega y Gasset

The mental attitude of individuals can be modified to stimulate the generation of new ideas by applying simple rules

Creativity stimulation: Practical rules (2/2)

Get rid of excuses

It takes more creativity to get rid of excuses than it does to come up with new ideas
(e.g. When the Spanish conquistador Hernan Cortés, arrived at Veracruz (Mexico) he burned his ships and told his men “Now you can either fight or die”. Thus, removing the possibility to give up and return to Spain)

Think ambiguously

If ambiguity causes confusion and communication problems, it can also be a powerful stimulant to imagination

Reverse viewpoints

By turning conventional logic upside down, we may generate new ideas, and thus open up our thinking
(e.g. Noting that milkmaids were generally immune to smallpox, Edward A. Jenner postulated that the pus in the blisters that milkmaids received from cowpox (a disease similar to smallpox, but much less virulent) protected them from smallpox. Then Jenner tested his hypothesis by inoculating people and proved that they were immune to smallpox). Jenner developed and generalized the vaccination technique

***“Creativity is contagious.
Pass it on” – Albert Einstein***

Be persistent

It is important to be persistent when attacking creatively a problem and to keep on searching even when you feel like giving up

Search for alternatives
(Knight's move thinking)

Replace the “either/or” statement by “How to” to find additional options
(e.g. Either you drop your price or lose your customer. The question: “How to retain the customer?” can help find new options)


Creativity-spurring checklists help open minds and explore new areas to find creative ideas by stimulating imagination

Creativity stimulation: Idea-generating techniques (1/4)

SCAMPER		
S	Substitute	<i>What could be substituted to make an improvement?</i>
C	Combine	<i>What could be combined to make something more useful?</i>
A	Adapt	<i>How could the product or service be adjusted for a better output?</i>
M	Modify	<i>What could be modified, minified or magnified?</i>
P	Put to other uses	<i>Could the product or service be used in another market?</i>
E	Eliminate	<i>What would happen if a component was removed?</i>
R	Rearrange	<i>Is there something that could be reversed or done in a different order?</i>

Kipling's Questions

The Kipling method is one of the most basic way to explore any idea or problem consisting of a list of 6 fundamental questions



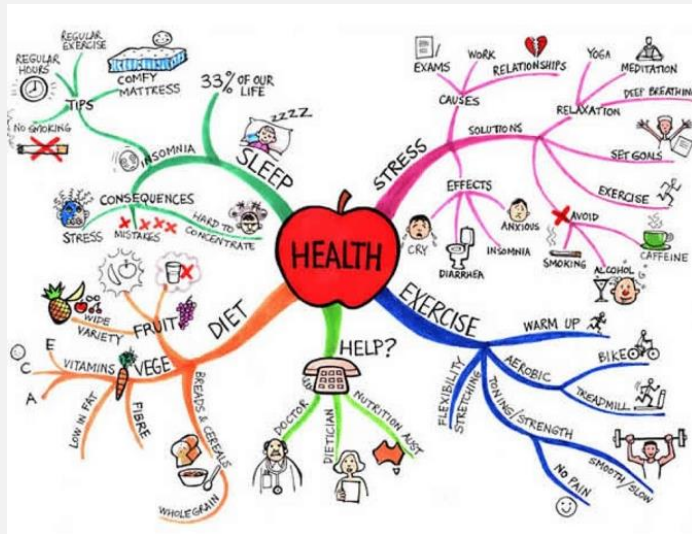
“Questions are the creative acts of intelligence” – Francis Kingdon-Ward

The mind mapping and the relevance tree enable to link thoughts without squeezing them into less natural listing or step-by-step sequence

Creativity stimulation: Idea-generating techniques (2/4)

Description

A mind map is basically a diagram that connects information around a central subject



The relevance tree

The relevance tree serves as visual illustration to help understanding and to stimulate ideas



"Creativity is the power to connect the seemingly unconnected" – William Plomer

The Brainstorming and the brainwriting are intuitive techniques that stimulate the generation of many creative ideas in a short period of time by a group of participants

Creativity stimulation: Idea-generating techniques (3/4)

Brainstorming

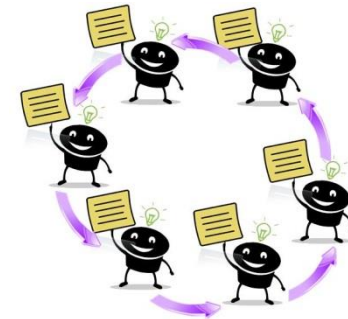
- 1 **State** and **restate** the **problem** (How to do something?)
- 2 Brainstorm (idea generation stage)



- 3 Select the **wildest** and **most foolish idea** and turn it round into some **more useful ideas**
- 4 **Evaluate the ideas** generated, **later on** by the brainstormers and/or a team of people deeply involved with the problem

Brainwriting

- 1 After the **first idea** has been **written** by one of the participants and **passed on** to another, every one **reacts** – still **through writing** – to the last idea proposed **until no more idea comes out**



- 2 Then, a **list of all the ideas** is given out to each of the participants

“The fusion of knowledge is the most creative act of the human mind” – Elwood Murray

The creativity is stimulated by “synectics” through metaphors and analogies while the “six thinking hats” approach is based on participants role playing

Creativity stimulation: Idea-generating techniques (4/4)

Synectics

“Synectics” combines elements apparently irrelevant by using **metaphors** and drawing **analogies**







The process includes 3 steps:

- **Referring:** Specific problem definition
- **Reflecting:** Imaginative manipulation of the problem, exploring alternatives, possible solutions and translations of various types
- **Reconstruction:** Reinventing or transforming with synectic trigger mechanisms

Add	Transfer	Substitute	Analogize
Subtract	Emphasize	Fragment	Hybridize
Repeat	Animate	Isolate	Disguise
Combine	Parody	Distort	Fantasize

Six thinking hats

Each participant (Thinking Hat) of the creative session has a **specific** color representing an **attitude** (role play) leading to **parallel thinking**:

-  Neutral, objective (facts and figures)
-  Emotional (intuitions, impressions, feelings)
-  Objective, negative (critical, pessimism)
-  Objective positive (optimism, exploration)
-  New ideas (creativity, lateral thinking)
-  Moderator (control, organization, facilitation)

The problem is introduced at the beginning of the meeting and then **everyone** should use **all the hats**

This method provides a **comprehensive understanding** of the **issue** but is time consuming

“You see things; and you say, ‘Why?’ But I dream things that never were; and I say, ‘Why not?’” – George Bernard Shaw

While the creative thinking enables the generation of many ideas, the latter should then be evaluated and selected through an analytical thinking process


Combination of creative and analytical processes

Creative thinking

- Creative thinking (also called lateral thinking) is:
 - Imaginative
 - Divergent
 - Giving many ideas (including those that could be viewed as wild or foolish, and those that appear not to be linked with the problem)

Analytical thinking

- Analytical thinking (also called vertical thinking) is:
 - Logical
 - Convergent
 - Giving a unique or small number of ideas
- This approach requires deep and narrow probing to identify all aspects



Analytical and creative thinking processes
are complement and equally important



Many ideas generated



Few solutions selected

“The creative process is any thinking process which solves a problem in an original and useful way” – H. Herbert Fox

The creativity at various levels of the company can be fostered by the following key recommendations

Key drivers to develop a culture of creativity

1. Provide objective

- Collaborators must have a purpose and direction for their creativity
- Guidelines and reasonable constraints will enable to ensure some control over time and cost

2. Permit more interactions

- Creative climate is stimulated if individuals take part in project and working groups
- Such interactions encourage exchange of information, flow of ideas and fresh perspectives

3. Encourage new ideas

- Throughout the company, new ideas should be encouraged
- Thus managers should be willing to listen to suggestions, and organize whenever relevant idea generation meetings

4. Tolerate failure

- Most of new ideas will prove to be impractical or useless
- It is however important to invest in experimenting with these new ideas to identify the ones which will be effective

5. Acceptance of change

- Collaborators should ideally participate in making decisions
- Issues like job security should be carefully handled when changes are planned and implemented

6. Offer recognition

- Creative individuals are most often self-motivated
- However, a monetary and/or non-monetary reward should be granted to demonstrate that creative behavior is valued

Creative companies foresee needs that customers have not yet realized and seize opportunities that competitors have not yet seen or have overlooked

Key learnings

- Creativity is a **powerful engine** to **discover**, **invent** and **innovate** in products, services, processes, concepts, etc., that **can** potentially **boost** the **performance** of companies
- **In a deleterious environment**, in which innovation is more and more costly, competition intensifies and payers keep on increasing their pressure on price, **pharma companies** should **put creativity at the top of their agenda** to simultaneously:
 - **Reduce** their **costs** and **increase** their **value proposition** to **optimize** the **performance** of their **current business**
 - **Craft innovative** “Blue Ocean” **strategies** to **create** and **develop market spaces** in which **competition** does **not yet exist** or is **still weak**
- For so doing, pharma companies should **put in place a creativity-driven organization** in which:
 - **Individual creativity** is **encouraged** and **rewarded**
 - **Group creativity** is **favored** through the introduction of a **formal creative thinking process**

“Creativity is inventing, experimenting, growing, taking risks, breaking rules, making mistakes, and having fun” – Mary Lou Cook

Core capabilities**1 Strategy**

- **Assessing the attractiveness of markets** (Hospital / retail innovative products - Vaccines - OTC - Generics)
- **Growth strategy**
 - Optimization of marketing / sales investments
 - Development of a company in the hospital market Business
 - Valuation for acquisition
 - Portfolio / franchise assessment
- **Extension of product life cycle performance**
 - Improvement mature products performance
 - Adaptation of price strategy
- **Defense strategies vs. new entrants**
- **Competitive strategies in the hospital market**
- **Strategic partnerships companies / pharmacies**

2 Management

- **Facilitation and structuring of strategic thinking for multidisciplinary product teams**
 - Key challenges identification
 - Strategic options formalization
 - Resource allocation optimization program
- **Training of marketing and market research teams to sales forecast techniques (modeling and scenarios development)**
- **Development and implementation of a "coaching program" for area managers**
 - Sales reps coaching
 - Regional action plans roll-out
- **Development and implementation of a "sales techniques program" for sales forces (STAR¹)**

¹ Sales Techniques Application for Results (training courser

**3 Organization**

- **Rethink of operational units organization**
- **Improvement of sales force effectiveness**
- **Improvement of the distribution channels covering the hospital and retail markets**
- **Development of a strategic planning process**