

Unit 4: Innovation, entrepreneurship and creativity

1. Creativity

1.1. What is creativity?

Creativity, for an entrepreneur, does not mean the act of creating something out of nothing, but the act of observing reality and generating ideas that can be useful for society.

Creativity must be understood as the generation of ideas, methods, procedures and alternatives that can solve current problems.

Innovation is the next step, to transform those ideas into something applicable, with value.



Now, is creativity innate or acquired/learned?

Creativity is innate to the human being but it is not found with the same intensity in all people. It is true that there are human beings who possess this highly enhanced quality, but we all have it and, therefore, we can develop it if we work it properly using techniques of creativity development.

1.2. Creativity development techniques

Both in individual and group techniques, the process of generating ideas cannot be subject to rational processes (more typical of the evaluation phase of ideas). Therefore, in order to use these techniques, conventionality must be left behind. The golden rule is to encourage wild thinking.

- The mind map

The mind map is an individual technique through which, starting from a key concept, we add ideas and relate them. There is no single procedure nor a specific way to do it, because its production and interpretation is very personal.

<u>WHAT IS IT FOR?</u>
<ul style="list-style-type: none">• Stimulate creativity• Understand problems.• Visualize relationships.• Memorize more easily.• Sort the ideas.

- Brainstorming

It is a group technique to generate ideas.

The group, around a blackboard and starting from an initial situation, launches proposals that are written down.

Once finished, we can evaluate the most attractive alternatives.

<u>ARE THERE ANY RULES?</u>
<ul style="list-style-type: none">• No criticism• Any idea is good• All proposals are noted down• The more ideas, the better

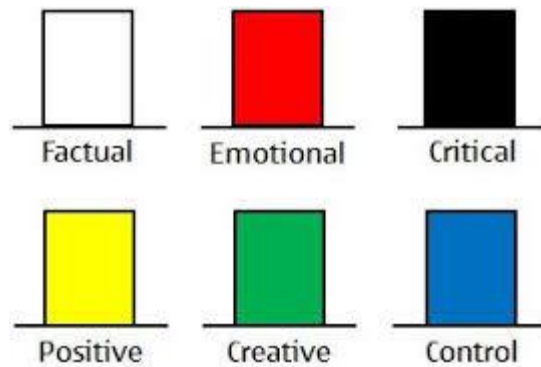
- Brainwriting

It is a variant of brainstorming. Instead of "singing" the proposals out loud, they are made on paper. It is useful when group members have difficulty talking in a group, they do not know each other or are not in the same room.

- The six hats

Group technique that addresses the problem from various perspectives (objective, emotional, critical, positive, creative and global). It enriches and encourages debate. Very appropriate for decision making.

In each round, each member of the group puts on a hat and proposes, argues and defends something depending on the vision related to each hat.



Activities

- A. Search on Google and view the video "How to make a mind map".
- B. Create a mind map where the starting point is: "My values".
- C. Imagine that you are a creative team. A popular cookie manufacturer for teenagers hires you to make a television ad. As a first step, brainstorm to establish the basic points of the television ad. Your teacher will write down the proposals on the board.

2. Incremental innovation and radical innovation

2.1. Incremental innovation

We talk about incremental innovation when we attend processes that involve small changes or improvements in the products we consume.

Therefore, we are not facing a revolutionary idea that changes the technological paradigm or that alters power relations between economic sectors. We are, more truly, before a development of the product that makes it more attractive to the consumer.

Incremental innovation is the most frequent process and we can find numerous examples of it in the market, since it usually involves adding or replacing elements of the product or service.

Examples of incremental innovation	
<ul style="list-style-type: none"> • Sliced bread without crust. • Hybrid cars. • Anti-cholesterol dairy products 	<ul style="list-style-type: none"> • O.O Beer. • Conditioning shampoo. • Xenon headlights.

2.2. Radical innovation

The processes of radical innovation are less common and more extensive over time. The invention of the wheel, the appearance of the computer or the steam engine could well be radical innovations. These meet the following principles:

- It involves an integral revolution: it is not an improvement but the creation of a new product or service with a great impact on the uses and customs of society.
- They involve important technological changes: their appearance involves a profound change in technology and in the product-resource ratio; that is, it alters the way in which resources are combined to produce goods and services.
- Alter the existing equilibrium between economic sectors: since the creation of these new products or processes turns old ones into obsolete ones and motivates the disappearance of industries and the creation of new ones.

Radical innovation, of course, implies more risk and introduces greater uncertainty because companies start from scratch, but if they succeed, they will temporarily enjoy a monopolistic situation that will allow them to obtain greater benefits. In other words, they will be reference of the sector and pioneers in the change.

Radical innovation examples	Current examples
<ul style="list-style-type: none"> • Wheel. • Incandescent lamp. • Penicillin. 	<ul style="list-style-type: none"> • Internet. • 3D printer. • Smartphone.

<ul style="list-style-type: none"> • Steam machine. • Computer 	<ul style="list-style-type: none"> • Organic chip. • Electric car
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Radical innovations lead to sudden changes and incremental innovations keep the process of change alive.

However, in both the process of "creative destruction" coined by Schumpeter is present, and they both assume that new techniques replace the obsolete ones.

3. Ideas to create goods and services

3.1. The great ideas in History

Think of the great inventions of humanity such as the wheel, the plow, the steam engine, the printing press, the combustion engine, the penicillin, the transistor, the incandescent lamp, the typewriter, the tyre, the sewing machine, the microwave, the television set, the computer, the Internet, etc.

All these inventions will be useful for verifying that their application to daily life has improved, in most cases, people's standard of living.

However, when dealing with the generation of new ideas, having the great inventions in history as a reference can mean, more than a help, a barrier. Ideas such as those we have just described are not frequent and, therefore, will hinder our own process of idea creation if we try to take them as a reference.

3.2. Necessity as a source of ideas

The best way to approach the generation of ideas is to focus on the needs of the population.

The entrepreneur is able to detect needs that are not covered or that, even if they are not perceived yet, he has to make them be seen. This detection of needs can be, as we have seen in the first section of the unit, innate or it can be trained through techniques of creativity development.

Restlessness, observation and work are fundamental variables when it comes to detecting needs. Do not aspire to have great ideas, but the best results can be obtained outlining hidden needs that the great advances generate by themselves.

Necesidad	Ejemplos actuales
Concealed	In the decade of the 90s, the majority of students hung pictures of their excursions, parties and meetings to share with their friends on the wall of their rooms. In 2004, Facebook was born, which uses the Internet (a great idea) and digital cameras (another great idea) to continue doing the same but faster, with more people and better. People simply needed it and Zuckerberg brought that hidden need to the surface.
Existing and not covered	In 1988, a fizzy drink called Kola Real began to be sold in Peru. Its entrepreneurs took advantage of the fact that large companies such as Coca Cola withdrew from distribution in conflictive areas of the country. The Añaños family covered an unmet need and today it is one of the leading soft drink manufacturers in Latin America.

Remember that human needs are unlimited and, therefore, marketing techniques, rather than focused on creating them, are aimed at finding them and making them visible.

3.3. How to detect the needs?

The detection of needs varies depending on the nature of this, as we have seen in the previous section.

- Sometimes we face needs that the public is manifesting directly and that, for some reason, they cannot satisfy.

The role of the entrepreneur in these cases is to devise the way to satisfy it by managing a difficult environment. It requires, therefore, ability to survive where the big ones have not been able to do it.

- On other occasions, people have not been able to express their needs yet but they exist and once the entrepreneur offers a solution, it will be accepted by the market (Facebook).

In many of these cases, it is the entrepreneur himself who, due to his concerns, perceives before the rest of the people, this need in his own person and he also has the other necessary attitudes to carry out the venture.

In other cases, the entrepreneur has a high degree of empathy (innate or trained) and it is this ability to put oneself in the place of others that makes previous concealed needs arise.

Activity

Get into groups and carry out the search of the idea with which you will develop your business plan. You must make a document in text editor in which you explain what the idea is, how you have chosen it and which ideas you discarded before.