# EGOS 2019- Sub-Theme 20 Shedding Light on the Dark Sides of Creativity and Innovation

# Opening the black box of idea Evaluation: Impact of the presentation during idea pitches.

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The objective of a creative session is to generate the more ideas as possible. The principle behind such an assumption is the more ideas are generated, the more likely one can obtain strong qualitative ideas. Then, up to the Organization or to the Entrepreneur to select the best ones and to exploit them. However, idea evaluation does not only depend on its intrinsic value (originality, feasibility, relevance, see (Dean et al., 2006) but also on the context in which it is conducted and on the posture of those who present the idea. Recent research reveal that the team composition, in terms of gender, could impact the selection of ideas that have respectively been proposed by team members (Parmentier et Loarne-Lemaire, 2018; Parmentier, Szostak et Rüling, 2017). This implies that no creative idea is independent from its genitor and the way it is presented could impact its evaluation. While much research already explored the process of idea generation, little work has been done on the process by which ideas get evaluated, let alone the work on the influence of idea presentation on evaluation. Some research highlights the gender effect of the ideator (Gupta et Turban, 2012), the gender composition of the group (Parmentier, Le Loarne-Lemaire et Belkhouja, 2017), the way to present an idea (Chiaburu, Peng et Van Dyne, 2015), the experience of the ideator (Gupta et Turban, 2012) on idea evaluation. However, the evaluation of ideas still remains a black box for understanding creativity. This article therefore aims at opening this black box to understand, beyond the intrinsic value of an idea, what are the factors that influence the evaluation of this idea.

More precisely, the paper explores the dark sides of the idea evaluation and focuses on the influence of the presentation of ideas on their evaluation: The role that gender and experience of the ideator play, but also the structure of the pitch, the dynamism of the presentation, the nature and the level of language, the outfit of the ideator.

Based on the analysis of 57 idea pitches of Entrepreneurial Ideas during two start-up weekends – analysis that is conducted thanks to the QCA Method –, we show that ideas that receive the best evaluation are the best ideas in terms of newness, feasibility and relevance but the mastery of the basics of pitch presentation also has an impact on idea evaluation. In fact, the dynamism of the ideator and his / her ability to generate a singular presentation of his / her idea seem to have a strong impact on the selection of the idea by the audience. The paper seeks to contribute to identify the most favorable configurations for a good evaluation of an entrepreneurial idea in this type of innovation competition context. The contingency of these results in the analyzed contexts is discussed.

#### Theoretical framework

Creativity is the activity that consists in producing new, appropriate, useful and feasible ideas by an individual or a small group of individuals (Amabile, 1988). Its objective is to find innovative solutions by mobilizing the imagination to rethink the existing system (Ford, 1996). In the creativity, the idea can be considered as the result of an intention to act that leads to a statement integrating a new knowledge network and sometimes involving new networks of knowledge brokers (Parmentier et Loarne-Lemaire, 2018). In its journey, the idea often emerges in organizational interstices (Cohendet et Simon, 2007), is part of multiple collaborative networks (Perry-Smith et Mannucci, 2017), and creates new links between people and knowledge. The form of this idea, however, is closely linked to the context in which it emerges. It will take the form of a pitch in entrepreneurship, a 'high concept' in the film industry, or a 'breakthrough' in video games, and it will be more solution-oriented in the industry.

According to the researchers, the idea evaluation activity participates in the creative process in two ways. It is considered as part of the idea generation activity and is continuously mobilized as needed (Harvey et Kou, 2013; Lubart, 2001). Or it is a phase of the creative process in its own right (Amabile, 1988; Wallas, 1926). In both cases, it is a key activity that contributes to the performance of creative processes. The attention and amount of resources that are dedicated to the idea evaluation phase strongly influence the transformation of employee creativity into achievable ideas (Van Dijk et Van Den Ende, 2002). Creativity techniques can generate many ideas, but good ideas must also be recognized. In the creative process, the evaluation of ideas is therefore as important as the generation of ideas, however, this part of the creative process remains under-explored (Girotra, Terwiesch et Ulrich, 2010). Depending on its form and the context of dissemination, it may be difficult to assess the quality and value of an idea. For example, during creativity sessions, participants have difficulty identifying the best ideas (Putman et Paulus, 2009) and it is not systematically the best ideas for the organization that are selected by the participants (Girotra, Terwiesch et Ulrich, 2010).

Idea evaluation is a cognitive process that consists in evaluating the consequences of developing an idea according to explicit or implicit evaluation standards (Lonergan, Scott et Mumford, 2004). For example, evaluation standards, whether based on innovation or operationality, have a strong influence on the evaluation of ideas (Lonergan, Scott et Mumford, 2004). Similarly, the ideas selected are more novelty when participants are instructed to select the most creative ideas than the instruction to select the best ideas (Rietzschel, Nijstad et Stroebe, 2010). Four evaluation criteria were identified as the most relevant based on a literature review of 90 articles

describing the evaluation methods used in the field and in the research laboratory during sessions at creativity: novelty, feasibility, relevance, and idea specificity (Dean *et al.*, 2006). The novelty of an idea can be estimated from its degree of originality and its paradigm relatedness. The feasibility of an idea can be estimated from its social acceptability and its technical implementability. The relevance of an idea can be estimated from its applicability to a problem and its effectiveness in solving that problem. The specificity of an idea can be estimated from its implicational explicitness and the completeness of its description. Relevant criteria are dependent on the context of creative sessions and strategic aims. Nevertheless, when experts intuitively evaluate ideas, they unconsciously use the criteria of originality, user value and producibility (Magnusson, Netz et Wästlund, 2014). Originality, feasibility and relevance are thus the most used explicit and implicit criteria in creative sessions (Dean *et al.*, 2006; Magnusson, Netz et Wästlund, 2014). However, despite these criteria, explicit or implicit, participants in a creative session have a strong tendency to choose feasible and desirable ideas, to the detriment of originality (Rietzschel, Nijstad et Stroebe, 2010).

There would be no constant direct effect between the completeness of the idea presentation the evaluation of its quality, suggesting that the evaluation of ideas is not a rational decision based entirely on the information provided and rational evaluation criteria (Sukhov, 2018). Other criteria, not explicit, could thus influence the evaluation of ideas. Women's Ideas may be less highly rated than men's. For example, in organizations, women leaders with narcissistic personalities are perceived as less effective by their subordinates than men of the same profile in the same position (De Hoogh, Den Hartog et Nevicka, 2015). Similarly, there are differences in the evaluation of new business ideas when they are attributed to women or men (Gupta et Turban, 2012). The composition of the group presenting an idea could also influence the evaluation of ideas. So, the ideas supported by mixed teams are perceived as being less creative than ideas supported by teams that are predominantly composed of either males or females (Parmentier, Le Loarne-Lemaire et Belkhouja, 2017). The way the idea is presented would also have a significant impact on the evaluator. Thus, the way an idea are presented (constructive versus complaining form) influences the evaluation of ideas according to the degree of dogmatism of the receiver (Chiaburu, Peng et Van Dyne, 2015). The experience of the ideators also seems to influence the evaluation. For example, for the same group size, the ideas of a team that incorporates a higher average work experience of its members are better evaluated than a team with a lower average experience (Foo, 2010). As evaluation is a cognitive process (Lonergan, Scott et Mumford, 2004) that explicitly results in a note or opinion on the value of an idea, it is likely that this evaluation mobilizes both formal criteria such as novelty, feasibility and relevance but also informal and unconscious criteria related for example to the ideator and the way the idea is presented. The evaluation of ideas is still today a black box that needs to be opened to better understand the phenomena of evaluation. The ambition of this article is to explore the dark side of evaluation and to identify the informal and unconscious criteria related to the ideator and how it is presented.

# Methodology

We used qualitative comparative analysis (QCA) method to address our research question. QCA is a set theoretical methods that uses Boolean algebra and algorithms based on case studies (Fiss, 2007; Schneider et Wagemann, 2012). The QCA assesses the configurations of conditions that are necessary and sufficient to achieve a result in one case. A condition is a variable which can have only taken two values, i.e. 0 or 1. A null value is coded when the case does not meet the condition. For example, in our research, if a pitcher has a presence during his pitch, it will be assigned a value of 1 for the *presence* condition. A contrario, a pitcher does not impose presence will be coded 0. The QCA compares all cases through assessed conditions and their outcome (high pitch evaluation by the public), this method allows us to determine the most optimal configurations for the outcome of interest. In our research, QCA enables us to find the most optimal configurations of conditions which result in the selection of a pitch by an audience of potential entrepreneurs.

#### Data collection

We collected data during two start-up weekends in Grenoble and Chambéry (France) in November 2018 and February 2019. A start-up weekend is an event that brings together potential entrepreneurs whose objective is to create businesses. In 54 hours, participants learn to create company. They meet mentors, investors, cofounders and sponsors who help them get started. In the first phase of this event, participants have one minute to pitch in front of the group. It is not mandatory to pitch, only those who have an idea to present to the public do so. After, the pitch session, participants can vote for the pitches of their choice. They have  $\epsilon$ 6,000 in virtual currency, a  $\epsilon$ 3,000 bill, a  $\epsilon$ 2,000 bill and a  $\epsilon$ 1,000 bill that they can distribute over one or more projects. The projects that raise the most money are selected to continue their development during the rest of the weekend start-up. Teams are formed on each project. At the end of the event, each project pitch again to a jury of entrepreneurs, investors, sponsors and coaches. The top three projects receive a sum of money to start their businesses. All start-up

weekend of the world use the same process with a pitch session in front of the audience at the beginning, a working session for 48 hours and a pitch session in front of the jury at the end. The start-up weekend of Grenoble brings together 89 participants with 37 initial pitches and 15 selected pitches. The start-up weekend of Chambéry brings together 48 participants with 22 initial pitches and 8 selected pitches. All pitches were recorded on video except for the 7th pitch of Chambéry due to technical problems. However, this pitch was not retained by the participants at the end of the first pitch session. The soundtrack of all the pitches has been transcribed into text. We did not use only the English pitch of the sessions to preserve the consistency of the sample. All other pitches were in French language. Finally, our final sample of cases contains 57 pitches of 1 min duration.

## Measures of variables

The outcome is based on a vote of participants. The conditions are based on academic literature focusing on entrepreneurship and psychology.

#### Outcome

We use the pitch evaluations by the participants to assign a score from 0 to 100 to each pitch. The 100 scale is based on the highest score reached by a pitch, which is 33 000  $\in$  for Grenoble and 39 000  $\in$  for Chambéry. After each score is reduced to a percentage of that highest score. Pitches which have a score into the last two thirds of the sample (>32) was coded fully in (1) and pitches which do not have a score in the last two thirds ( $\leq$  33) was coded fully out (0). This level of transformation of the outcome from 0 to 1 corresponds to the level of pitch selection in the project for the weekend start-ups in Grenoble and Chambéry.

## **Conditions**

We have coded all videos with the conditions of *originality, feasibility, relevance, specificity, enunciation, presence* and *physical*. The first three conditions were assessed with a score of 1 to 5. The other conditions have been broken down into sub conditions in order to be as precise as possible in the evaluation. Each condition has been carefully described determining the criteria for justifying its presence (1) or absence (0). Each researcher first coded the videos alone. The notes were compared. If there was a discrepancy, a discussion ensued to find a common assessment. In the event of disagreement, a third researcher assessed the condition in order to obtain additional advice. In the end, there was an evaluation gap on 4.86% of the 1276

codes assigned to videos. Newness, feasibility, relevance and specificity were the four most important criteria for evaluating ideas in creativity literature (Dean *et al.*, 2006; Magnusson, Netz et Wästlund, 2014). The newness of an idea can be estimated from its degree of originality and its paradigm relatedness. The feasibility of an idea can be estimated from its social acceptability and its technical implementability (Dean *et al.*, 2006). For a pitch, relevance of an idea can be estimated from its effectiveness in solving a problem of everyday life, social or environmental.

These first three conditions were assessed on a scale of 1 to 5. Beyond the score of 3, the condition was coded at 1. The specificity of an idea can be estimated from its implicational explicitness and the completeness of its description (Dean et al., 2006). Based on the practical literature for entrepreneurs, we identified 5 sub conditions, which determine its explicitness and exhaustiveness: the explanation of the need, solution and target, the use of a story to illustrate the need or the solution, the statement of the project name. When there are more than 3 sub conditions at 1 in 5, specificity was coded at 1. We have identified 5 sub conditions for the good enunciation of a pitch based on practical literature for apprentice entrepreneurs: the absence of the use of written notes, the fluency of speech, a low level of hesitation or blockage in the flow of speech (less than 7), the correct use of grammar and respect for the time allocated. When there are more than 3 sub conditions at 1 in 5, enunciation was coded at 1. The presence is the impression that one gives in terms of one's character and manners. For a pitch, we identified 4 sub conditions based on the psychology literature: the varied and accentuated flow of the voice, a smiling person, the use of arms and space to highlight salient elements of the speech, interaction with the audience in the form of a question requiring an answer. When there are more than 3 sub conditions at 1 in 4, presence was coded at 1. Finally, we are also coded the physical aspect of the pitchers. As soon as there was a difference in corpulence, geographical origin or age in relation to the majority of participants present, we set this condition to 0.

**Table 1**: Crisp set membership calibration

Outcome	Fully in (1)	Fully out (0)		
High evaluation by participants	• The score of the evaluation by the participants must be higher than 32 out of 100	The score of the evaluation by the participants must be less than 33 out of 100		
Condition	Fully in (1)	Fully out (0)		

Newness: its degree of originality and its paradigm relatedness	The score of the evaluation by the researchers must be higher than 2 out of 5	• The score of the evaluation by the researchers must be less than 3 out of 5
<u>Feasibility</u> : its social acceptability and its technical implementability	The score of the evaluation by the researchers must be higher than 2 out of 5	• The score of the evaluation by the researchers must be less than 3 out of 5
Relevance: its effectiveness in solving a problem of everyday life (scale of 5) and the social and environmental objective of the project (scale of 5)	The score of the evaluation by the researchers must be higher than 5 out of 10	• The score of the evaluation by the researchers must be less than 6 out of 10
Specificity: need, solution target, story and project name Enunciation: no written notes, speech fluency, little hesitation or blockage, grammar and time	are required to be coded 1	<ul> <li>Below 3 required criteria, the condition was coded 0</li> <li>Below 3 required criteria, the condition was coded 0</li> </ul>
Presence: voice flow, smiling person, body use, interaction  Physic: age (above majority), corpulence (above majority), and geographical origin (not originating in the country in which the start-up weekend takes place)	are required to be coded 1	<ul> <li>Below 3 required criteria, the condition was coded 0</li> <li>None criterion is required to be coded 0</li> </ul>

 Table 2 : Truth table (39 configurations)

Config.	a	b	c	d	e	f	g	Number of cases		Cases
2	1	1	1	1	1	1	0	1	1	Phoenix
3	1	1	1	1	1	0	1	3	1	Willo, Safe Hear, Demeure
4	0	1	1	0	0	1	1	1	1	Habitus
5	0	1	0	1	1	0	0	1	0	Hogo
6	0	1	0	0	0	1	0	1	0	CRMI
7	1	1	0	0	1	0	0	2	0	Prollix, Schuss
8	0	0	0	0	0	0	1	1	0	Time to learn
9	1	0	0	1	1	0	0	2	0	Refuel, Home Stylist
10	1	0	1	0	1	1	1	1	0	Immo Etudiant
11	1	0	1	1	1	0	1	2	0	Hero Bot, Annophilia
12	1	0	1	0	1	0	1	1	0	Agriplan
13	0	1	1	1	1	0	0	1	0	Agence Web
14	1	1	1	1	1	1	1	1	0	AFD Watt

15	1	1	0	1	1	0	1	2	0	Conciergerie, Escape Gift
16	0	1	0	1	1	1	0	1	0	Randoski
17	1	1	1	0	1	0	0	1	0	La Coulisse
18	1	1	1	1	1	0	0	3	0	Les Pierres, Solal, Humus
19	0	0	1	0	0	0	0	1	0	Gaiac
20	0	1	1	1	1	1	1	3	0	Simon, Sens, Chanclas
21	0	1	0	1	1	0	1	4	0	Lokki, By by Fisc, Formation Etudiant, BAO
22	0	0	1	1	0	0	1	1	0	Eureka
23	1	1	1	0	1	1	1	1	0	Conseil Elus
24	1	1	0	1	1	1	0	1	0	Adé
25	0	1	1	0	1	0	0	2	0	Bougez Plus, Café All Around
26	1	1	0	1	1	0	0	2	0	Tably Power, Improjecteur
27	0	1	0	1	1	1	1	3	0	Mobilier C, Impact, Smart Travel
28	0	1	1	1	1	0	1	1	0	Ecolove
29	0	1	1	0	1	0	1	2	0	Talentueux, VR School
30	0	0	1	0	0	1	1	1	0	Toy
31	1	0	0	0	1	0	1	1	0	My Radio
32	1	1	0	0	1	1	1	1	0	Together
33	0	0	0	1	1	1	1	1	0	PixAI
34	0	1	0	0	0	0	1	1	0	Gasto
35	1	1	1	0	1	1	0	1	0	Tech Po
36	0	1	0	0	1	1	0	1	0	Ubyks
37	1	1	0	0	1	0	1	1	0	U Trip
38	0	1	0	1	0	0	0	1	0	Prêt à lire
39	0	0	0	1	1	1	0	1	0	Sauv Me
40	1	1	0	0	0	1	1	1	0	Pariez sur vous

<sup>\*</sup> Sufficiency inclusion score greater than 0,750

Conditions: a = newness, b = feasibility, c = relevance, d = specificity, e = enunciation, f = presence and g = physical

Our sample contains 39 configurations out of 128 possible configurations with 7 conditions. Our overall coverage rate is therefore 30.48%.

## **Results**

The first phase of the QCA analysis addresses the necessary conditions. The consistency threshold of 0.92 is adopted to select configurations associated with the outcome and the outcome's negation. Our analysis reveals no necessary conditions for a high evaluation of the pitch or a low evaluation of the pitch (see table 3).

**Table 3**: Analysis of the necessary conditions with positive conditions and positive outcomes

Conditions tested	Consistency	Coverage		
Newness	0.561	0.512		
Feasibility	0.770	0.448		
Relevance	0.560	0.511		
Specificity	0.666	0.486		
Enunciation	0.861	0.459		
Presence	0.320	0.390		
Physical	0.584	0.440		

The second phase of the QCA analysis addresses sufficient conditions. We find three configurations of sufficient conditions that lead to a good pitch evaluation (see table 4).

**Table 4**: Sufficient conditions for a high evaluation of pitches by participants

Conditions	Configurations						
Conditions	1	2	3				
Newness	•	•	$\circ$				
Feasibility	•	•	•				
Relevance	•	•	•				
Specificity	•	•	$\circ$				
Enunciation	•	•	$\circ$				
Presence	•	0	•				
Physical	$\bigcirc$	•	•				
Raw coverage	0,033	0,098	0,033				
Unique coverage	0,033	0,098	0,033				
Consistency	0,838	0,835	0,832				
Number of cases	1	3	1				
	Phoenix	Willo	Habitus				
		Safe Hear					
		Demeure					

Three configurations are sufficient to obtain a good evaluation by the participants of the startup weekends.

Configuration 1 shows a pitcher who proposes a good idea in terms of newness, feasibility and relevance with a pitch well structured, and a pitcher that masters enunciation and the presence

on the stage. However, in this case, the pitcher has a physical difference differences in comparison with the majority of the other participants.

Configuration 2 shows three pitchers who propose a good idea in terms of newness, feasibility and relevance with a pitch well structured, and a pitcher that masters enunciation. In these cases, there is no mastery of the presence on stage but the pitchers do not present any physical differences in comparison with the majority of the other participants.

Pitcher of the third configuration proposes an idea less creative (not newness), an only feasible and useful idea, and in this case the mastery of stage presence and physical compliance with the majority of other participants are sufficient to obtain a good evaluation.

#### **Discussion**

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