

The Recognition of Novelty in Entrepreneurship Education

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ABSTRACT

In a global world with open knowledge in the extension process, bringing a new idea is a key to economic development, especially when it becomes a real opportunity market. Thus, bringing a new idea is a myth for academic researchers, and recognising and appreciating the actual value of an idea is more ambiguous and depends on the ability of the human brain to avoid prejudice against something they do not know and understand in a limited time. This paper seeks to identify criteria used in evaluating new idea value in business. The potential actors implicated in this process are investors and coach members of the committee project evaluation.

Keywords: Idea evaluation, Process recognition, Start-up, Entrepreneurship education, Opportunity recognition, Investor, New idea, R&D

INTRODUCTION

This paper reflects on the concept of recognition of novelty in the context of entrepreneurship education. Firstly, we will present the “*recognition*”, the “*novelty*” and the path of thought until the idea qualifies as innovative. Then we will explain the relationship between the recognition of the novelty and its relationship, on the one hand, to the entrepreneur and, on the other hand, to the teaching of entrepreneurship. The choice of the subject is not due to chance because the evolution of entrepreneurship learning implies new innovative teaching practices (Dif et al., 2019; Mwasalwiba, 2010), which should be adapted to the specificity of the training itself. Finally, we open the debate on this problem which neglects the importance of underestimating an idea which can evolve the world because of wrong evaluation of the concept’s potential.

RECOGNITION AND NOVELTY GENERATION

The concept of recognition is initially taken from Aristotle’s poetics, “*Anagnorisis*”, an ancient Greek that means a change from ignorance to knowledge. From this definition, recognition is a critical process of changing truth from ignorance to knowledge by simplifying or explaining an unexpected problem and trying to solve it. This unexpected discovery produces a change in the context of the play, changing the feeling and behaviour of the character by making a critical discovery.

According to the dictionary definition, “*it is an act of identification of something as having been previously seen, heard, and known*”. This perception of being previously known is related to the human memory about an event, an image, a sound, a product or an idea that produces an appreciation of something. Related to novelty, recognition becomes the process of detecting new opportunities and new ideas by the audience responsible for evaluating and selecting the value-added, the degree and the need for novelty for the market and stakeholders. Recognition can be at the idea generation or “ideation” stage as a stimulus for researchers in the R&D department.

Thus, recognition is a human assessment that combines memories of the audience and their ability to be attracted by this novelty. In addition, recognition is related to the experience of the audience, who might be “experts, coaches, investors”, and it has an intangible character which depends on the attraction of the mind, the response to a customer’s problem needs and bringing a solution for it. In this context, Trapido (2015) define *recognition* as an appreciation of novelty and the ability of the audiences that appreciate it to be familiar with novelty and its value. Interested in the process of novelty and its recognition, he put the identities of the audience as a central element in appreciating the value of the new knowledge. Recognition is the ability to understand in a complicated situation that a non-identified problem needs to be resolved with a non-identified solution.

According to researchers interested in human behaviour recognition (*visual, speech and memory*) (Furui, 2007; Magnussen, 2001; Shi, 2021), recognition is a process that attracts the cognitive functions that involve brain tasks on a specific subject, which can be the knowledge, the feeling about someone or something having a perception, thinking or experience before (Shi, 2021). Since the object of recognition is non-common for the audience and has a novel character, it requires highly novel knowledge to earn the audience’s recognition (Trapido, 2015). Schank and Abelson (1995) present a model of knowledge and memory based on three factors:

- a) Human knowledge is constructed on past experiences.
- b) New experiences are recognised in terms of previous ones.
- c) The content depends on the communication style and impacts the recognition of the memories.

As was said before, recognition of novelty is not distant from the evidence that new experiences are assimilated to what memory indexes in experience convergence. However, in the model of knowledge and memory, the human brain indexes prior experience, and when those are cleverly memorised, the mind calls it to help us understand the current situation. This might explain how the audience’s prior experiences automatically affect their decision to accept or reject an idea that was seen before.

Novelty is everywhere, but no one notices it. The fact that it attracts our attention is related to how much we focus on the solution rather than the problem. Sometimes we need help finding a new idea, especially when remembering that the best idea never returns when it is gone. Ideation is an ambiguous process that complicates the idea’s generation and the idea itself.

It is a cognitive schema combining imagination and creativity related to a particular field. First, imagination is the border of what we can see behind the problem, and creativity is how we can bring a solution differently and efficiently. Creativity is the art of seeing beauty everywhere, mixing the colour and texture of natural material into challenging dark unlighted situations that make us embarrassed and sad. This special touch can bring us happiness and make us feel like we have a new way to discover beauty.

In the technical field, it is also a question of happiness; it is a self-conviction that we succeed in attracting the attention of our stakeholders by creating a beautiful thing and more sophisticated than what we know or what the other are doing. It is also positive energy that makes the customer more satisfied with the product idea and the concept. It seems to be a psychological situation more than a technical one; yes, how the brain is affected by intelligent emotions that enhance it to produce the best, discover more options, and try to push into the other side, not the dark, the lighted one. This balance is the principal characteristic of fully inspirited innovators. They can try to correct their vision of the problem without being affected emotionally; they are prepared to fail and enjoy the time they spend thinking about the solution. This learning approach is habitual for those skilled from their child; we call them genius or novice. Indeed, they can generate more scenario' probabilities of a solution; there is a plan B behind every plan A. Innovators are flexible and prepared to face failure; they avoid being in the trap of the dark side of the problem. Innovators differentiate their sources of inspiration and their way of perceiving and detecting novelty; this trick is the most common in an idea generation process of a design problem.

During idea generation, novice and expert designers vary their sources to get inspired and increase the degree of novelty (Gonçalves et al., 2011). Individual or collaborative ideation faces the exact condition of being able to go further than the boundaries of limited knowledge. Moreover, the puzzle is completed by the last piece, which is the most difficult to discover or recognise because of the enormous information surrounding the problem. It dilutes the direction of the innovator to find it. Thus, collecting more information and mastering more knowledge can affect the quality of the idea-generation process if the innovator is unexperimented in novelty or does not have previous innovation experience. The idea generation process is non-controlled in terms of fluidity or speed. It depends on the brain that produces the idea and its ability to control or not cognitive reflection. The lifecycle of the generation process can differ from one person to another. It is a history and an accumulation of experience that can lead him to expertise but not to novelty.

Sometimes it is difficult to explain an idea because it is not as mature as we think it is or incomplete in our brain; it is still a thought in the generation process. In this case, the idea does not achieve its goal to be in the right time, or the innovator is excited to share his thought more than he should. Probably, this error leads him to regret losing his novel idea, especially if the receptor of the idea is more experienced and flexible in his ideation process generation, even if he is not creative at all. That is why we should keep something for ourselves until we are sure of mastering all dimensions of the idea. Ethical behaviour protects your idea from being matured not inside your brain but

in the receptor brain. Thus, the receptor develops the initial idea because of his skills in the field or experiences more than the owner or because he pays more attention to recognising the value of the novelty.

As we know, an innovative idea has a limited temporal and unique existence. However, the exception is that for some technologies field, it can be incremental or destructive of the actual knowledge as a revolutionary of the industry.

In individual ideation, sharing incomplete idea generation is a high risk of being hacked. It is also a high risk in collaborative ideation when the team have no ethical beliefs. Nevertheless, it can be a positive challenge when the team works together to create a novel idea through co-creation and synergy of efforts. The team developed, adjusted and purified the idea until it became more attractive to the customer. Novel ideas are fundamental ideas that deserve to be published than the others. In the academic field, novelty is the real catalyse of vision and perception of the evolution of each field. Bringing a novel idea is the ability to analyse this evolution and perceive the gaps. In generating new ideas, we have to write or draw them while our brain is working on them. Repeating this action of writing or drawing without comparing each version can enhance our imagination, but *what if we do not notice any evolution of novelty?* The response to this question is that we are wrong from the beginning and should change our perception. Changing some details or ingredients or how we understand the problem's initial question can produce excellent results.

An idea must be written, or it went without being able to remember it; it is a thought of a temporal observation for a specific moment in which the brain attempts a higher concentration level. That is why it is difficult to find it again or to remember it. The idea disappears if you do not write it or give more detail by simplifying it. Sometimes it is difficult to explain it since it is thought and non-completed, or there is a missing part in the idea's conception. The observation that caught our attention was then labelled as a thought, resulting in something meaningful or beautiful.

NOVELTY AND ENTREPRENEURSHIP EDUCATION

The literature review on opportunity recognition links it to the entrepreneurial discovery process and puts the entrepreneur at the core of this process. Thus, recognition is related to the entrepreneur's action to find a new way of creating and responding to the customer's needs. Consequently, recognition is a process related to the human ability to find knowledge and to create, detect, explore and transform it into an actual commercial need. This concept only explains how the entrepreneur can find new opportunities. Still, it needs to explain the ability to be evaluated by other actors in a position to recognise the opportunity shown as an idea by the entrepreneur. Shane (2003) distinguishes people who discover opportunity from others who do not, using access to information and cognitive capabilities as the central element of comparison. Shane was interested in the recognition as an entrepreneurial discovery process detecting new opportunities. Recognising opportunities is finding information about a possible opportunity and being able to analyse,

explore and develop it. Moreover, life experience and its variation is a cognitive dimension of recognition and gives preferential access to knowledge and increases the entrepreneur's ability to discover and recognise opportunities. The variation of experience provides new information helping in the process of discovery. As Shane (2003) explains, exploring entrepreneurial opportunity is a cognitive intelligence that provides the ability to detect and recognise the missing element of the puzzle.

"Discovery of opportunities is often like solving puzzles because a new piece of information is often the missing element necessary to see that an opportunity is present." (S. A. Shane, 2003, p. 47)

"Entrepreneurial process begins when alert individuals discover these opportunities and formulate conjectures about how to pursue them, including the development of the product or service that will be provided to customers." (S. A. Shane, 2003, p. 250, 251)

Opportunity recognition is a socio-cognitive process based on the entrepreneur's exploration of field research (de Koning, 2003); in this process of collecting, memorising and analysing information, the entrepreneur recognises new opportunities related to his social context and his ability and expertise to combine opportunity detection and novelty development. Most researchers on entrepreneurship education were inspired by the analysis of entrepreneur life and their expertise in venture creation. Researchers interested in this field are still developing new pedagogical practices that simplify the venture creation experience for the student.

Weng et al. (2022) designed the 5E model on the life learning cycle of entrepreneurship and creativity. This model includes five stages entrepreneurs follow in detecting and recognising opportunity: Engage-Explore-Explain-Elaborate and Evaluate. Tested on a sample of entrepreneurs, the authors applied the 5E model in entrepreneurship education. They found creative activity can enhance students' entrepreneurial competencies by resolving real problems with novel ideas. Thus, entrepreneurship education must use innovative practices to transfer creative competencies to students. *Opportunity evaluation* is an entrepreneurial competence related to the individual agent rather than the collective. According to Healey et al. (2021), evaluating opportunity in the case of the entrepreneurial field is expanding. However, it is still an unknown area for the way that leads teams in the evaluation of opportunity. Thus, this research gap led Healey et al. (2021) to build a conceptual model of agent based on the modelling of entrepreneurial processes, applied to understand how entrepreneurial teams are forming and to deepen the recognition of opportunity evaluation as a collective process.

Furthermore, analysing relevant research on new business opportunities highlights the links between opportunity detection and its recognition (Ardichvili et al., 2003; Baron & Ensley, 2006; Baron & Ward, 2004; Busenitz & Barney, 1997; Corbett, 2005; Davidsson, 2015; Dew et al., 2009; Dimov, 2007; Eckhardt & Shane, 2003; J. Fiet, 2007; Gaglio, 2004; Gaglio & Katz, 2001; Grégoire et al., 2010; Grégoire & Shepherd, 2012; Kaish & Gilad, 1991; Keh et al., 2002; McMullen & Shepherd, 2006; Mitchell & Shepherd, 2010; Ozgen & Baron, 2007; S. Shane & Venkataraman, 2000; Shepherd

et al., 2007; Short et al., 2010; Tang et al., 2009, 2012; Ucbasaran et al., 2003, 2008, 2010).

An entrepreneur who makes discoveries, searches for information, continuously exploits novel ideas and creates new wealth; earns profit from identifying accidental opportunities (J. O. Fiet, 2007). Additionally, based on the explanation given by Fiet (2007) on how entrepreneurs identify discoveries, we suppose that it is still unclear to teach student entrepreneurs how to make a discovery and how to enable them to be more alert or to use cognitive decision rules to increase their ability to find a novel discovery.

Applied to entrepreneurship education, “*novelty recognition*” or “*opportunity recognition*” could be an effective tool in evaluating the real potential of a novel idea provided by a student entrepreneur or a team of student entrepreneurs. As described previously, it is clear that business opportunity evaluation depends on the student’s ability to describe, analyse, explore, perceive and detect a potential idea that brings value added to the customer. Kim & Horri (2015) demonstrated in a research study that only 50% of participants in training on idea generation had remarkable abilities to generate novel ideas because of their potential and special skills shown during the training despite of their intelligence, their cognitive schema process, and their task categorization performance, before the beginning of the idea generation task.

Based on a study of a novel idea, in a local competition, 115 Algerian students competed to win the start-up competition. The conditions to enrol at the competition were to have an original idea, create a Facebook page, and promote the project to win more followers. The tasks were accessible to all participants, they succeeded in the first step, and the second step was to enrol on the survey link and to present the idea of the project in a few lines. The students needed to express their ideas correctly, and few of them were contacted to the third step, the interview with a comity member. The point is now in the capacity of those in charge of assessing the originality of this opportunity at the end of the training program. This study leads us to understand how the judge member comity could know the brilliant ideas that will succeed as an actual venture creation. After receiving the descriptive technical idea of all participants and driving direct interviews with selected ones, the comity member decided to reward five students. The judges selected projects based on the novelty criteria, the product, the customer segment, and other subjective norms. After one year, we analysed the 115 project ideas and discovered that only the winners succeeded in starting a venture, except the first one. The problem was the ability of the four winners to realise their novel ideas project and fund them. In contrast, the result of the study recorded a high rate of start-ups created by the owner of rejected ideas. Despite losing the local start-up competition, they succeeded in starting a venture. Their discoveries brought value to the customer; the rejected ideas responded to a real need, and now they contribute to the local entrepreneurial ecosystem. Although jury members confirm using a selection of objective criteria, such as “*clarity*” of the concept developed by the idea project, “*usability*” of the final need, the “*stability*” over time of the consumer demand, the “*scalability*” of the product and its prototype, the “*acceptability*” by the customer and

finally its “*profitability*”. It is still demonstrated that the evaluation method of novelty depends on subjective judgements for the rating (Kim & Horii, 2015).

CONCLUSION

From the previous literature review, there is no universal standardised method of novelty evaluation that could avoid the subjectivity of the evaluator and its recognition attraction of novelty to judge the value added of the opportunity detected. Through this article, a deepening and a valuation of the novelty remains to be followed, notably the subjective aspect of the evaluator, who makes a judgment which, to the detriment of opportunity, has a detrimental effect on entrepreneurship training.

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