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J Innov Entrep (2021) 10:45
https://doi.org/10.1186/s13731-021-00180-6

Journal of Innovation and Entrepreneurship

RESEARCH Open Access

The disruptive triad and entrepreneurship: a theoretical model

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Abstract

The main objective of this study is to propose a theoretical model to understand the importance of disruption—in three of its dimensions, thinking, creativity, and innovation—developed and applied in the thinking and exercise of entrepreneurship and, at the same time, highlight the relationship of the disruption with competitiveness. Being competitive is one of the most demanding goals that entrepreneurs can and should set themselves; however, unlike established or traditional companies, usually the entrepreneur cannot promote competitiveness in the same way that they do. Taking these into account, it is necessary to use unconventional tools, or a different perspective methodology, for promoting creativity and innovation beyond the entrepreneurial activity itself. Through a qualitative methodology, with an emphasis on documentary research and inferential and deductive reasoning, a theoretical model is proposed. The model seeks to illustrate how disruptive currents can help entrepreneurs to be more competitive and, at the same time, boost their entrepreneurial spirit.

Keywords: Competitiveness, Creativity, Disruption, Innovation, Thinking, Entrepreneurship

Introduction

Entrepreneurships require attention, planning and care, good practices and careful decision-making, in addition, talking about entrepreneurship is talking about changes, transformation, innovation and risks, all the aforementioned are part of the indispensable ingredients to observe an entrepreneurship as a competitive business.

Entrepreneurships are very important in any economy, Fazio (2010), states that entrepreneurship represents "a fundamental piece of the puzzle in unpacking the competition–innovation relationship" (p. 29), and this is one of the responses that contemporary society offers to the contraction of the economy—as Kritikos (2014) points out—offering a way out of economic difficulties and unemployment.

For his part, Kritikos (2014), explains that entrepreneurs:

> *(…) stimulate employment growth by generating new jobs when they enter the market. (...) There is a direct employment effect from new businesses that arises from the new jobs being created. Following this initial phase, there is usually a stagnation phase or even a downturn as new businesses gain market share from existing firms that are*

unable to compete and as some new entrants fail (Kritikos, 2014, p. 3).

But the main idea is not to fail. All the aims have to be oriented to stay in the market; even more, they have to be enough visionary to anticipate changes, see importunities and turn the business as much competitive it can be.

One way to boost the competitiveness of entrepreneurships could be found in the disruptive currents that—apparently—are gaining importance again in the economic and business endeavours, especially those associated with how entrepreneurs thing, innovate and create new ways to produce or serve, and/or rise a business or change the understanding of one, all these aspects could lead to have a functional or virtual structure oriented to improve or feed the competitiveness of the business if they can be appropriately combined and operated.

Other way to boost the competitiveness of entrepreneurships could be related with no traditional tool as creative destruction, this one added to value creation and positive impact could be seen as part of a model designed to facilitate the comprehension of how disruptions currents can improve competitiveness.

Throughout the content, the aforementioned topics will be explored and related, such as disruptive thinking, disruptive innovation, and disruptive creativity, in a sectioned way, to give shape to the elements that will make up the disruptive triad model—proposed in this document—and that will serve as sustenance for itself, which includes concepts such as creative destruction, the creative economy, and technology, among others.

With this study, the researchers expect to respond to the following questions: how can disruption be related to competitiveness? What elements make up that relationship? How would entrepreneurship be involved in it?

However, the idea of this study is not to address issues such as competitiveness of entrepreneurship in a traditional way, that is why this study chase to document the bases of the theoretical model of the disruptive triad, as a proposed model to facilitate the understanding of the impact of disruption on entrepreneurship competitiveness and, at the same time, to illustrate its possible scopes.

This document has been structured as follows: (i) introduction: this includes a review of the literature, the rationale of the study, and the explanation of the methodology; (ii) the result and discussion on the proposed theoretical model of the disruptive triad, and (iii) the conclusions of the study.

After the conclusions, the managerial implications of the study have been established, as well as the corresponding references have been listed.

Review of literature

Taking into account that the disruptive triad model that is proposed in this study arises from the interrelation, connection, and impact that various associated concepts have with the innovation, thinking, and creativity, as well as competitiveness and entrepreneurship, below each of them will be explored.

Thinking and types of thinking

According to De Vega (1990), thinking is a "non-routine mental activity that requires effort. It happens whenever we are faced with a situation or task in which we feel inclined to find a goal or objective, although there is uncertainty about how to do it". (p. 439).

De Vega (1990), also states that “thinking implies a global activity of the cognitive system, with the intervention of memory mechanisms, attention, representations or understanding processes; but it is not reducible to these” (idem).

Finally, De Vega (1990) concludes by stating that thinking “is a high-level mental process that is based on more basic processes but includes additional functional elements, such as strategies, rules and heuristics" (p. 439).

For Kantor (1924–26), cited by Segovia (2000), the think consists of:

> *(...) The manifest and implicit manipulation of things and situations as preliminary processes frequently directed to practically other immediate activities (...) [that] are anticipatory (...) or instrumental actions that make the way or provide the details for an activity or adjustment that will follow at an appropriate time. (Segovia, 2000, p. 28)*

Segovia (2000), also quotes Ribes (1990), explaining that he “agrees with Kantor that thinking, as a concept, does not refer to a special kind of behaviour, but rather to a special kind of relationship of which conduct participates” (idem).

Izquierdo (2006), cited by Jara (2012), affirms that thinking:

> *(...) is a particular gift of the human being and its origin is given by sensory intervention and reason (...) reasoning, logical inference and demonstration are thinking skills to immediately reflect reality, problems and needs of the subject (...). According to formal logic, the structure of thought is composed of the following way: concept, judgment, reasoning and demonstration. (Jara, 2012, p. 55).*

For all the above, it is understood that thinking, regardless of its immaterial condition, can be understood and conceptualized and, at the same time, be oriented to understand reality, solve problems or make judgments and that, in addition, it influences behaviour.

As it can be conceptualized, thinking is also susceptible to being typified, this typification helps to understand the cognitive process that is going through, when thinking or guiding thought, and facilitates the understanding of the result of said action.

Although disruptive thinking has not been included, in Tables 1, 2 and 3, shown in the following pages, because it will be explored and conceptualized independently, it has been considered prudent to list and briefly explain some of the existing types of thoughts, all with the purpose of providing documentary support when speaking, later, of a special type of thinking and the relevance it can have in an economic activity, such as those carried out by entrepreneurships and how this can influence in the way in which these are seen, understood and developed and, in turn, inspire changes and/or reorientations in relation to it.

Table 1 shows what it should be understood for logical thinking and how it is divided in three types of thinking. Under the understanding of managerial thinking, it can be quickly identifying how these three types of thinking are present when a leader is managing, directing and controlling an entrepreneurship, or are within the desired competencies of who will take charge of it.

Briceño, cited by Zavarce et al. (2009), refers to “managerial thinking” as the action of:

Table 1 Logical thinking: main features. Multiple sources. Elaborated by Félix Socorro. May 2020

Logical thinking	For Cohen (1977), cited by Menéndez (2009), "the logical processes of thought constitute symbolic activities of information processing, which are revealed in the resolution of problems (logical or of other types)". (p. 32) Logical thinking can be of three types: deductive, inductive and analogous	Deductive	Dávila Newman (2006), explains that this thought serves "to organize known facts and draw conclusions, which is achieved through a series of statements that are called syllogisms, they comprise three elements: a) the major premise, b) the minor premise and c) the conclusion" (p. 184)
		Inductive	According to Bacon, cited by Dávila Newman (2006), it is based on observations about particular phenomena of a class, and then, from them, inferences are made about the entire class. (p. 186)
		Analogous	According to Holyoak et al. (2001) cited by Benites and Robayo (2015). it is "nothing more than one of the mechanisms that are in our tendency to look for patterns of similarity between objects, situations, events and domains to be able to relate what is new with what is already we know". (p. 32)

Table 2 Creative thinking. Multiple sources. Elaborated by Félix Socorro. May 2020

Creative thinking	According to Mednick (1964), cited by Serrano (2004), creative thinking consists of "the formation of new combinations of associative elements. The more remote these combinations are, the more creative the process or the solution" (p. 5) This thinking is divided in two types	Structural connection	According to Finke et al. (1995), cited by Carabús (2004), it is based on the relationship between previous ideas and current creative ideas. (p. 127)
		Imaginative divergence	According to Finke et al. (1995), cited by Carabús (2004), it is "associated with divergent thinking, based on all those inspiring ideas and lead to open the range of possible responses through meaningful explorations" (p. 127)

> *(...) rethink the prevailing ideas in the field of Administrative and Management Sciences, in relation to the conduction and / or management of organizations (...) so that in recognition of the transformation signals that come from an increasingly confusing environment, diffuse and changing, the need to rethink the ways of being, thinking and acting of management is valued. (Zavarce et al., 2009, p. 189)*

The same authors assure that all of this is aimed at:

> *(...) walk the path towards organizational strategic transformation, and conceive organizational typologies that promote agile structures that are flexible enough to produce adaptation when circumstances require it (idem).*

This is why creative thinking and managerial thinking, as well as logical thinking are essential to see, understand and conceptualize not only the strategies, but also everything that is related to the proper execution of them.

Table 3 Other types of thinking. Multiple sources. Elaborated by Félix Socorro. May 2020

Analytical	Villa and Poblete (2007), cited by Valdeón (2009), explain that it is "the mental behaviour that allows distinguishing and separating the parts of a whole until getting to know its principles or elements. Analytical thinking is the thinking of detail, precision, enumeration and difference". (p. 327)
Instinctive	Evans (2006), cited by Talanquer (2010), points out that it is the type of thinking that tends "to contextualize problems by making use of previous knowledge, or implicit assumptions about the properties and behaviour of the system of interest, which are activated by the specific features and goals of the task with which we are faced". (p. 167)
Reflexive	John Dewey (1909), cited by León (2014), defined reflective thinking as "the active, persistent, and careful consideration of a belief or supposed form of knowledge in light of the bases that support it and the consequent conclusions to which it tends" (p. 164)
Systemic	For Gómez (2017) this type of thinking "consists of approaching reality considering it as a whole, that is, the elements, the relationships and the environment in which they are found" (p. 17)
Critical	It is self-directed, self-disciplined, self-regulating, and self-correcting. It involves submitting to rigorous standards of excellence and conscious mastery of its use. It involves effective communication and problem-solving skills and a commitment to overcome the natural self-centeredness and sociocentricity of the human being. (Paul & Elder, 2003, p. 4)
Deliberative	Deliberative thinking is the way of thinking that is most closely linked to decision-making or, as they say, to decision-making. The uniqueness of this thought resides, (…) in the crucial incorporation of values, criteria, principles, norms, etc. (Moya et al., n.d., p. 18)
Interrogative	Merleau-Ponty, cited by Waldenfels (1993), explains that "it refers to that type of thinking that assumes that all questions, in fact, could be overcome by questioning the essence of what we experience". (p. 4)
Practical	(…) implies intuition, that is, the tacit dimension of knowledge that combines in a task, in a close way, competent performance with expert observation; mastery of systems, schemes and procedures with specific aspects of tasks such as values, motives, reasons, means, ends and symbolic and work instruments. (Servín, 2012, p. 41)
Social	According to Vacarezza (2012), social thinking "is based on the analysis of elements in the social sphere, in which questions are raised and criticisms are made that help in the search for solutions to them" (p. 2)

Table 2 shows the creative thinking and its two variants, and at the same time, these two can be seen as expression of it. Creative thinking, through structural connection and imaginative divergence, offers, in theory, the cognitive bases for the generation of innovative ideas, typical and necessary for entrepreneurship. No entrepreneurship could be considered as such in the absence of innovation, innovation does not take place in environments that lack creativity or that limit creative thinking.

Finally, Table 3 shows nine types of thinking that are present, in various combinations, when an entrepreneur (or more than one) starts his/her business. For example, deliberative thinking is typical of the entrepreneur who is responsible for leading the destiny of a company. This type of thinking requires the use of practical thinking as well as the use of social and reflective thinking.

Although there is also rambling thinking and functional or mechanical thinking, these are not considered at all significant when establishing the type of discerning that should be the object of interest and care by the entrepreneur when he/she is interested in increasing the competitiveness of his/her business.

All of the above suggests the existence of different types of thinking in the economic and administrative sphere of entrepreneurships (as in other scenarios), regardless of the size of the business; which can determine, according to its use, rationality and feasibility, its actions in the market in which it operates or the market niche that it may create, explore or expand.

To these 16 types of thinking must be added one more: disruptive thinking.

Disruptive thinking

If the Merriam-Webster dictionary (2020a, b) is consulted, it may be found that the word "disruptive" comes from "disruption" which literally means "a break or interruption in the normal course or continuation of some activity, process, etc."

In his book "Disrupt: Think the unthinkable to spark transformation in your business", Williams (2011), exhorts to think differently about the way we understand and conceive business, explaining that differentiation is not the key to the sustainability of it.

For Williams (2011), disruptive thinking is about a way of thinking that constantly surprises the market with unexpected and emotional solutions. He observes it as a way of thinking oriented to the development of unconventional strategies that forces the competition to fight for catching up.

It can be said, then, that disruptive thinking is nothing other than the action of breaking traditional schemes, through the proposal of new paradigms, to generate changes that create value and place what has been transformed at a higher, better level and different from the one he usually occupied.

This is of significant importance for entrepreneurship because it invites them to explore techniques, scenarios, technologies and tools that, traditionally, have not been used in the sector in which they work and that, if they do, could experience a leap within it, large enough to be perceived by its customers, giving it an advantage over similar businesses that maintain their operation under traditional schemes even being considered as undertakings.

In other words, Williams (2011), exhorts to innovate, but not under the paradigms that have been incorrectly associated with that word, so it is necessary to clarify what is to be understood by innovation.

Innovation

In the New Enterprises course taught by the Massachusetts Institute of Technology (MIT) for entrepreneurs, there is a section dedicated to innovation, dictated by Professor Aulet (2013), in that section the following equation proposed by Edward Roberts is explained:

$$\textbf{INNOVATION} = \textbf{INVENTION} * \textbf{COMMERCIALIZATION}$$

Aulet (2013), points out four important aspects of this equation:

1. Innovation is not the same as invention.
2. Innovation adds value, making things better, cheap and/or fast.
3. Invention without commercialization is not innovation and commercialization without invention is not innovation.
4. The invention is an idea and ideas without commercialization do not add value.

Based on the above, it can be said that, when Williams (2011) exhorts entrepreneurs to make use of innovation, he does not refer to the creation, search and hunting of ideas, but to the commercialization of existing ones and, to the extent possible, of new ideas.

The above coincides with what was expressed by Peter Drucker, cited by Barba (2011), when he pointed out that "innovation is the act that endows resources with new capacities to generate wealth. So, innovation, in a business context, must be profitable. Profitability is the only decisive indicator for an innovative company" (p. 21).

However, what was stated by both Aulet (2013), and Peter Drucker, the latter cited by Barba (2011), does not seem to include disruption in their conceptualization, although it does not exclude it either, and could be associated with what is traditionally has been doing in relation to innovation. In this case, what should be understood by disruptive innovation?

Disruptive innovation

Innovative thinking is very important in the entrepreneurial field and any other field as well, because, as Mockler (2005), explains, through it, we can learn how to understand a specific situation and give it an answer.

Regarding disruptive innovation, its origin dates back to the publication by Bower and Christensen (1995), in the Harvard Business Review magazine entitled "Disruptive Technologies: Catching the Wave", whose content was especially aimed at highlighting the changes that the technological revolution were introducing companies and the importance of being attentive and aware of them, from a managerial perspective.

Bower and Christensen (1995) stated:

> *Research shows that most well-run and established companies are constantly (…) developing and commercializing new technologies, from incremental improvements to radically new approaches, as long as those technologies meet the next-generation performance needs of their customers (Bower & Christensen, 1995, p. 2).*

The previous conclusion, reached by Bower and Christensen (1995), apparently ended up being what inspired Clayton M. Christensen and two other collaborators, in December 2015, to conceptualize disruptive innovation, in a new article titled "What is disruptive innovation" and what will be discussed in next pages.

However, for Bower and Christensen (1995), technology was making companies explore new ways of doing things and they observed that those that had seen beyond the existing paradigms, even breaking those paradigms, had a greater prospect of success.

Twenty years later, Christensen et al. (2015) in the aforementioned article "What is disruptive innovation" explain that:

> *"Disruption" describes a process by which a smaller company with fewer resources can successfully challenge established companies. Specifically, as (…) they focus on improving their products and services for their most demanding customers (and usually the most profitable), they exceed the needs of some segments and ignore the needs of others. (Christensen et al., 2015, p. 2).*

At this point, it should be noted that the authors' statement, when referring to "a smaller company" makes direct reference to the absence of extensive structures, protocols and bureaucracy, characteristics of entrepreneurships, so trying something new is, when seem easier and more natural than in large business equipped with all this.

Christensen et al. (2015) also explain that "disruptive innovations originate in low-end footholds or new markets" (p. 2).

This is reminiscent of the phrase expressed by the futurologist Barker (1989) in his video "Paradigms: The business of discovering the future", when he states that "if they want to find new paradigms [new ways of doing things] in their fields, they must look beyond from the centre to the periphery, because almost always the new rules are written on the margins" (from minute 31,04 to minute 31,12).

In this reference, the margins would be related to the low range or the new markets.

Now, since disruption is understood as a rupture, the term could also be rationed with what was expressed by Schumpeter, cited by Segura (2006), when he explained that "what innovation destroys—"companies, individual positions, ways of life, cultural values and ideals"—it is (…) the "necessary complement" for the emergence of new and better forms for all social sectors" (p. 13).

Regarding that claim, it is enough to observe how market behaviour patterns have changed in different economic sectors, for example, in communications, and how customers have changed, thanks to the introduction of new technologies.

Feder (2017) explains that two "effects of disruptive innovations are implicitly described in the literature: crowding-out; and substitution effect" (p. 7). According to him, the effect "is positive when the factor endowment is coherent with the disruption innovation, i.e., when the innovation improves the productivity of the most abundant factor (…); when factor endowment is incoherent with disruption innovation, the crowding-out effect is negative" (ídem).

Therefore, through the use of new technologies, new ways of doing things can be created and therefore obviate, forget and even "destroy" the way they have been done.

And it is precisely the word "destruction" that leads us to explore the latest concept of the disruptive triad proposal, and it is to which disruptive creativity refers; notwithstanding, the existence of incremental innovation.

Disruptive creativity

Before talking about disruptive creativity, it is important to mention creative destruction, a topic that has prompted an important discussion between capitalists and socialists and that, in a direct way, is related to the aforementioned topic.

Montoya (2012) assures that Joseph Alois Schumpeter (1883–1950) was not precisely the first to speak of "creative destruction", but that, without a doubt, he was the person who was in charge of popularizing it.

Montoya (2012) declares that for Schumpeter's creative destruction was essential for capitalism and that every company belonging to that economic system had to make use of it to stay in the market. And Montoya (2012), explains that "over the years, it has become the fundamental characteristic of the development of economies and a key determinant of opportunities in international markets" (p. 213).

For their part, Quesada and Flores (2015), point out that, for Schumpeter, creative destruction:

> *(…) refers to the incessant product and the process innovation mechanism through which new production units replace obsolete ones. This restructuring process perme-*

> *ates the main aspects of macroeconomic performance, not only long-term growth, but also economic fluctuations, structural adjustment and the operation of market factors. (Quesada & Flores, 2015, p. 44)*

From all of the above, it can be inferred that the common is and must be constantly replaced by the new to give way to innovation in all its aspects, thus promoting changes in all sectors to promote market growth and the development of the nation.

Now, in the publication made by the World Economic Forum, in February 2018, in collaboration with McKinsey & Company, entitled "Creative Disruption: The impact of emerging technologies on the creative economy", mention is made of the concept of "creative disruption", oriented specifically to the changes that the economy is undergoing due to technological advances, being directly related to what was proposed by Bower and Christensen (1995), but adjusted to the present, 23 years later.

According to the World Economic Forum and McKinsey & Company (2018), creative disruption is nothing other than the impact of emerging technologies (artificial intelligence, augmented reality, virtual reality and blockchain) in the creative economy.

As can be seen, what was expressed by Bower and Christensen (1995) is repeated, but relating it to the term "creative economy". But, what is the creative economy?

According to the special report on the creative economy published by the United Nations Development Program in 2013, the term creative economy "was popularized in 2001 by the British writer and media manager John Howkins" (p. 20), and it refers to:

> *The notion [which not] only encompasses cultural goods and services, but also toys and games, as well as the entire scope of "research and development" (R&D). Thus, even as it recognizes cultural activities and processes as the core of a powerful new economy, it also deals with creative manifestations in areas that would not be regarded as "cultural" (PNUD, 2014, p. 20)*

For its part, the publication of Activa (2011), explains that the creative economy is one "that has its origin in individual creativity, skills and talent, and that seek well-being and the creation of products, projects or jobs through of the generation and exploitation of intellectual property" (p. 1), and that is why it is mainly related to technological development.

Among the aspects highlighted in the article "Creative Disruption: The impact of emerging technologies on the creative economy", the following statements taken from the executive summary can be highlighted:

- Artificial intelligence (AI) is changing the value chains for creative content from start to finish, which is having positive and negative impacts on society (p. 3)
- Augmented and virtual reality (AR/VR) can transform [the way of] storytelling and the way content is experienced, but the business incentives to do so may not entirely match individual well-being (idem).
- The creative economy and the economic platform are convergent, redefining the relationship between creators, publishers and technology companies, presenting difficult governance problems (idem).
- Blockchain is the least advanced of all technologies: and although it promises to be relevant to the creative economy, it requires further development (idem).

Once the terms "creative disruption" and "creative economy" are understood, it is easier to relate them to entrepreneurships, which make use of their ability to understand and exploit the needs of customers, through knowledge of their behaviours and cultural aspects and increasingly they appropriate the technologies that facilitate the commercialization of goods and services through technological channels that do not require expensive facilities or large spaces, which allows directing their income to investment in what is most profitable without incur in the expenses that their predecessors experienced before the arrival of the technological advances that exist today.

By being able to invest in technology, they can increase their productivity, access an increasingly interconnected world and thereby demonstrate that breaking traditional schemes, creating new markets and taking care of them, the action of going one step ahead of the competition and focusing their efforts on the creation or development of new paradigms can make them more competitive.

However, it is important to understand that the use of the technologies to which innovation and disruptive creativity refer, should not necessarily be limited to artificial intelligence, augmented reality, virtual reality and blockchain. Etymologically speaking, the word technology means "study of technique"; the Merriam-Webster Dictionary (2020a, 2020b) defines it as "the practical application of knowledge especially in a particular area", and as "a capability given by the practical application of knowledge".

Zavarse et al. (2009) explain that "the concept of technology has evolved, and no longer only refers to machines and equipment, but to all the know-how, information, knowledge and decisions necessary to maintain a competitive company". (p. 198).

It can be inferred, then, any technique, information, knowledge or theory that is studied, improved and/or perfected, by a company, person or entity, for the benefit of the practical use that it provides, through disruption, falls within the parameters of the concepts explained above.

Competitiveness

If disruptive thinking provides those who manage the company with the vision necessary to see beyond the existing limits in the market and explore new and radical ways of doing things, if disruptive innovation proposes that these changes must be constant and oriented towards the new generations and creative disruption lead to exploring and exploiting the creative economy, by analogy, the result of the conscious and rational combination of them would have to lead to a strengthening or competitive positioning for those who make use of this three aspects.

It should be remembered that for Michael Porter, cited by Suñol (2006), competitiveness is: "the ability to sustain and increase participation in international markets, with a parallel rise in the standard of living of the population. The only solid way to achieve this is based on increasing productivity". (p. 181). Adding, later that Porter assured that "it is the firms, not the nations, that compete in international markets". (p. 182).

It is also important to note that for authors of the Economic Commission for Latin America and the Caribbean or CEPAL—by its acronym in Spanish—cited by Suñol (2006), competitiveness refers to the "ability to increase, or at least sustain, participation in international markets with a simultaneous rise in the standard of living of the population" (p. 182).

The fact is that, at present, information and communication technologies facilitate an international presence and foray into international markets, so by making proper use of the disruptive triad, it could be feasible to increase and sustain a participation in those markets.

It should be noted that, in both concepts, we talk about participation in international markets, which was more feasible for large, international and transnational companies in the past but now, thanks to technology, it is completely possible for entrepreneurships, as already it was explained.

But, competitiveness should not be seen only as part of some business related to international markets, as Bhawsar and Chattopadhyay (2015) explain, this concept applies to various levels, as nations, industries, enterprises, and entrepreneurships.

Once the above aspect is understood, the concept issued by the Organisation for Economic Co-operation and Development—better known by the acronyms OECD—in 1992, also cited by Suñol (2006), is more related to ventures, in an implicit way. For this organization competitiveness is seen as:

> *(…) the result of the successful management of the companies, [taking] into account the strength and efficiency of the national productive structure, long-term trends in the rate and structure of investment, technical infrastructure and other determining factors of the externalities on which companies rely. (Suñol, 2006, p. 182).*

Now, Krugman (1994), cited by Castellanos and Ramírez (2013), warns that when speaking of competitiveness "it is necessary to consider various determinants (…) such as growth, employment and income distribution, since nations do not they compete on equal terms; it is more an internal matter of the nation than an external aspect". (p. 28).

And it is that to boost the growth of entrepreneurship requires an incentive that guides them to develop, explore and exploit new technologies and new markets, until they find an adequate and sustainable way to stay productive until the arrival or creation of a new change. In this sense, it is important to remember the words of Bejarano (1998), also cited by Castellanos and Ramírez (2013), when he assures that "competitiveness is not a short- or medium-term policy objective, but the search for a specific condition sustainable characterized by its permanence and directed towards the markets". (p. 28).

Rationale of the study

Disruption can be misinterpreted as the action of breaking schemes without—necessarily—implying the addition of value or the implementation of activities that differentiate an undertaking from its competitors.

Additionally, depending on the type of undertaking that is carried out, it can be assumed that more importance should be given to one type of disruption than to any other, thereby limiting the advantages that it can offer to the development and growth of the company in all its dimensions.

Offering a combined vision that positions disruption as a tool that, through three of its dimensions, can result in greater competitiveness to entrepreneurship, justifies from a theoretical and business point of view, the search for a unified model that facilitates study, understand and explain how and why using disruption is important when it is seeking to be more competitive and add value to the target market.

Therefore, the study is justified from the academic point of view because it offers a theoretical framework that supports the use of disruption as a tool in entrepreneurship.

Additionally, it is justified from a business perspective because it combines the necessary elements to positively impact the market, create value, guide processes and, at the same time, boost the competitiveness of the entrepreneurship.

Methodology

Aim

The main aim of this study is to relate three disruptive dimensions with the elements that could be associated with competitiveness in the entrepreneurial field and, at the same time, to offer a simplified and direct vision—through a theoretical model—of the importance of using disruption to add value and differentiate the undertaking from the competition.

Design and setting of the study

The methodology used to carry out this study is qualitative, with an emphasis on documentary research. This means that the study is mainly supported by data collected from books, articles, videos, journals, periodicals, and other sources that, in the opinion of the researchers, provide the content that they want to study, because they were related and/or linked to the purpose of the research, furthermore, from a qualitative methodology—with emphasis on documentary research—inferential and deductive reasoning have been used.

According to Boddez et al. (2016), the inferential reasoning can be defined "as a slow and effortful process that starts from premises and returns a conclusion" (p. 5). In the words of the researchers Boddez et al. (2016), quoted by Boddez et al. (2016), the inferential reasoning process "can be represented as a *modus tollens* argument" (p. 6).

For Ayalon and Even (2008), deductive reasoning is "unique in that it is the process of inferring conclusions from known information (premises) based on formal logic rules, where conclusions are necessarily derived from the given information and there is no need to validate them by experiments" (p. 235).

As it can be inferred, documentary research allows addressing, in a qualitative way, the concepts, statements, proposals, and different points of view that, duly documented, facilitate the establishment of a relationship between disruption expression (thinking, creativity, and innovation), and competitiveness. The aforementioned aspects allow answering the questions asked about what elements would allow relating disruption to competitiveness.

Likewise, through deductive thinking, expressions associated with disruption (thinking, innovation, and creativity) can be linked to concepts such as competitiveness, noting the aspects that each of them has in common and the importance of this interrelation; thereby, answering the question about the elements that make up the relationship between disruption and competitiveness.

Finally, making use of inferential reasoning, it is possible to relate the elements related to disruption and competitiveness to answer the question about how entrepreneurship would be involved in all the aforementioned aspects.

However, it is important to highlight that both inferential reasoning and deductive reasoning are part of the logical process for creating the disruptive triad model proposed in this study.

Description of all processes and methodologies employed

To build the theoretical model of the disruptive triad, based on the qualitative methodology explained, the following steps were followed:

1. Each of the aspects that make up the triad (disruptive thinking, disruptive innovation, and disruptive creativity) was investigated from a conceptual and theoretical perspective supported by several authors.
2. Previous research was sought that made combinations between the three elements that make up the proposed triad, without finding direct coincidences with the proposed model.
3. The impact that each element that makes up the triad has separately on the performance of the entrepreneurial exercise was studied and it was extrapolated—theoretically—what they could do together, making use of both inferential and deductive reasoning. And finally:
4. Disruptive expressions of thought, creativity, and innovation were combined in a single model, as well as the possible impact that each of them would have on any undertaking and was related to the theoretical elements, fully supported and demonstrated by other studies; linked to the competitiveness that entrepreneurship must develop and demonstrate.

Therefore, the above-mentioned methodological aspects were the basis to develop the disruptive triad theoretical model proposed in this study.

Limitations

The present study is limited to proposing a theoretical model, to be used later as the conceptual framework for empirical verification of this one.

Results and discussion

Results

Once the concepts associated with disruption have been explained, such as innovation, creativity, and disruptive thinking, as well as their relationship with the development of the competitive activity, aimed at markets, customers, and processes, to add value through a positive impact, it is possible, then, to consider that the result of this study is graphically represented in the theoretical model proposed of the disruptive triad that we have seen in Fig. 1.

Figure 1 illustrates the interrelationship between disruptive thinking, innovation and creativity, as the core of the entrepreneurial activity, combined with three elements that, without a doubt, could not be missing when making use of disruption, such as entrepreneurial vision, action and coherence, which, together, should lead and impact competitiveness.

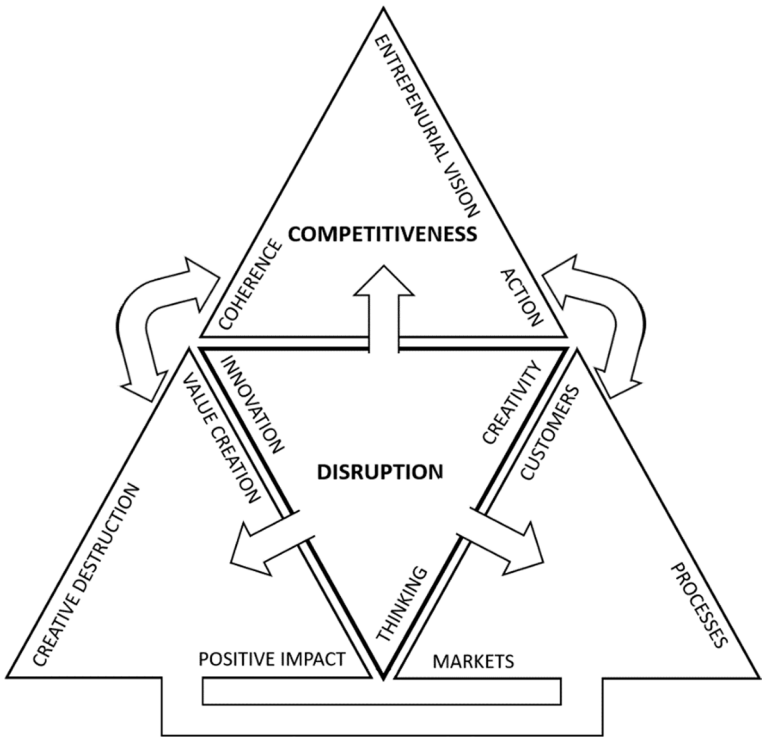

Fig. 1 Disruptive triad and its relationship with competitiveness (theoretical proposed model). Elaborated by Félix Socorro, May 2020

The proposed model suggests that the elements that make up the disruptive triad also impact the way customers, processes and markets are seen.

But none of the aforementioned elements should be observed and visualized separately, so the disruptive triad model proposed here presents them interrelated with each other.

Making use of the right entrepreneurial disruption:

- Customers will be treated and valued in a different way, offering comparative advantages to the entrepreneurship compared to its competitors or the market where it operates.
- Processes, based on new technology and innovation, will offer a significant experience to the purchase–sale relationship, thereby allowing customers' preference and making the business competitive.
- With the appropriate disruption, not only can the market where it operates be impacted, it can also generate significant changes, new trends, and even create new markets.

Disruption, within its three dimensions, will also have effects on the way in which the company will impact the environment where it operates, in the way in which the enterprise will make appropriate use of creative destruction aimed at creating value.

As OECD (2015) states "disruptive innovations can deliver important benefits to competition and consumers, in terms of new and better services, and can stimulate innovation and price competition from established providers" (p. 1).

Viewed in a broader way:

- Positive impact will be the outcome of a responsible and reflective disruption aimed at creating value and maintaining the balance between what is produced or offered and is space and the resources used for it, based on analytical, critical and social thinking.
- Creative destruction will promote the overcoming of existing paradigms, discarding what prevents its improvement and preserving what allows it to evolve and, finally,
- The creation of value that will guarantee that disruption is aimed at significantly improving both production and service processes for the benefit of customers and with a positive impact on the markets.

Now, although it may seem obvious, the lack of an entrepreneurial vision, oriented to disruption, prevents the execution of disruptive thinking and, therefore, the resulting action would tend to envision, direct or manage in the way that is traditionally done.

Discussion

Competitiveness and disruptive currents have been studied separately, offering a vision of the impact that a particular disruptive expression can have to turn a region, company, or sector into a more competitive entity.

For example, the Organisation for Economic Co-operation and Development, known as OECD, had published several documents about how disruption, more exactly the disruptive innovation, can impact other fields. Some of those publications have been: Disruptive innovation in land-transport (2016); Disruptive innovation in legal services (2016); Disruptive innovation in financial markets (2015), and Disruptive innovation in competition law enforcement (2015).

And researchers such as Chang et al. (2014) have spoken about how disruptive innovation can be seen as an entrepreneurial opportunity, in the same way that other studies have noted the use of disruptive thinking and disruptive creativity in business environments independently, as already mentioned.

Now, the disruptive triad model proposed in this study requires a disruptive entrepreneurial vision, which observes, scrutinizes, and detects opportunities for improvement, the possibility of reformulating paradigms, and the inclusion or creation of new techniques or technologies. Only then will the orientation, performance, and actions associated with that vision be coherent with disruption and will lead to the breaking of the market's own schemes where the entrepreneurship is located, as it can be inferred from what is explained by Feder (2017); prompting it to observe the margins, as suggested by Barker (1989), and to become a leader and not a follower.

Regarding the word "action", as one of the elements associated with the disruptive triad model proposed, it is observed that it may be linked to the way Socorro (2017) defines innovation by fragmenting the word and associating the three resulting parts

with words typical of the English and Portuguese languages. In doing so, he manages to form the phrase: "in a new action" (p. 59), as can be seen in Fig. 2.

Thus, after making use of a disruptive entrepreneurial vision, the immediate step is none other than converting the vision into an action, but this cannot and should not be the same as that which has been carried out, it must be new and be in accordance with the rupture that has generated it.

It seems appropriate to note that according to Kuratko et al. (2019) to be "sustainable, innovative thinking must be integrated into the mission, goals, strategies, structure, processes, and values of the organization" (p. 4), without forgetting the way that the vision of the undertaking should be described and visualized.

Although the disruptive triad model here proposed does not include sustainability, it is important to note that Diaz and Brandes (2010) have recognized that sustainability and competitiveness go hand in hand as key components for companies, especially in the strategic field.

Hence, if an entrepreneur acts in accordance with the disruptive entrepreneurial vision, there will be coherence, the third element associated with the disruptive triad model proposed.

As there is coherence between disruptive thinking, innovation and creativity, based on the respective vision and action, the limits associated with traditional execution, moderate performance and restrictive production should give way to the ingredients of competitiveness, developing and expanding the market where the company is located.

The foregoing is inferred by making use of deductive logical thinking and practical thinking since, if the disruption does not lead to a significant improvement of processes, goods or services, to radical changes and does not generate an impact on the markets or create new markets and does not add value to customers, it cannot be said that there has been disruption.

Disruption must drive those who make proper use of it and, therefore, a logical consequence would be none other than increased productivity, scope, penetration and exploration of new markets, sustainability and, consequently, greater competitiveness.

Regarding the aforementioned aspects, it is important to point out that a study carried out for Teneo et al. (2020) proved that competitiveness can be increased by developing innovation based on creative destruction and that creative destruction, a product of this innovation, is achieved through greater competition.

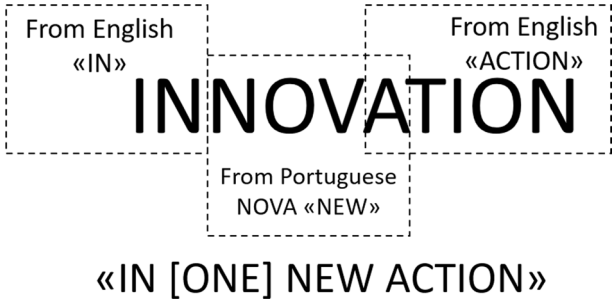

Fig. 2 Innovation (composed meaning). Proposed by Socorro (2017) in his book: Let's talk about SMEs

It could be said, then, that the disruptive triad is the logical consequence of an entrepreneurial vision and a coherent action of the use of disruption in innovation and creativity, through a thought dedicated to breaking traditional schemes in constant search of increasing the competitiveness, whose execution directly impacts processes, customers and markets and is leveraged on positive impact, creative destruction and value creation.

Therefore, the main contributions—as part of the added values of this study—are related to (i) deepening the conceptual aspects regarding disruptive thinking, disruptive innovation, and disruptive creativity; (ii) establish vital links among these three aspects concerning the competitiveness that entrepreneurship needs to develop; and (iii) characteristics of the operational synergy among these three components aimed at competitiveness and value addition of the entrepreneurship.

It is important to mention that, in their study, Burggräf et al. (2013) talk about the four conditions that companies must have to add value (value creation strategy, external view of the value network, internal view of technological alternatives, and external view of risk for market development), noting their link of those conditions with competitiveness, innovation and disruption, hence these aspects can be understood as part of the entrepreneurship requirements as it has been integrated into the disruptive triad model here proposed.

Finally, if the disruptive triad model is considered as a tool—like some other proposals designed to improve creativity and innovation, at the same time, to strengthen and/or increase competitiveness—it would coincide with what Chang et al. (2014) state when saying that these "tools for scouting out potential disruptive innovations point to the entrepreneurial process involved in opportunity discovery strategies and in opportunity creation strategies" (p. 10).

Conclusions

Traditional management influenced the way of seeing and understanding entrepreneurship in almost the entire twentieth century. But, now in the twenty-first century, the emergence of disruptive thinking, coupled with the contemporary conceptualization of innovation, creativity, and other forms of economy—such as the creative economy—are demanding that any-size-companies, immersed in a competitive, and increasingly changing world constantly explore new and disruptive ways of doing things to be more competitive.

By delving into the literature on the aforementioned aspects, it was possible to answer the research questions.

First, disruption can be related to competitiveness through the use of disruptive tools such as innovation, creativity, and disruptive thinking, especially when the three of them are combined.

Second, the elements that make up the relationship between disruption and competitiveness can be listed in three combined groups. The first one contains coherence, entrepreneurial vision, and action. The second one is composed of customers, processes, and markets, and the third one included creative destruction, value creation, and positive impact.

Third and last, entrepreneurship is involved in it all the aspects aforementioned because it needs to use disruption tools and vision to develop a competitiveness activity.

If disruptive thinking, disruptive innovation, and disruptive creativity are studied separately, it will be found that these tools can help drive change but will not necessarily end up transforming the way a business is conceived, how it responds to the needs of clients, how the processes are improved or how markets are impacted. That is why the proposal developed here arises. This one is pursuing to see the aforementioned issues as a composed triad, which intertwines and also relates their usefulness, importance, and consequences, instead of observing all those elements as isolated concepts.

The use of technology, understood as the "study of technique" and not as the use of equipment, technological components and different types of software; opens the doors to a broader vision of the concepts associated with creativity and disruptive innovation—including disruptive thinking—so that the entrepreneur can guide his/her efforts to transform the traditional processes carried out by making use of new techniques or improved or the invention and implementation of these issues, thereby promoting the competitiveness of his/her business.

The aforementioned aspects must be associated, interconnected, and planned so that from them it is obtained, as a product, what those three disruptive elements (thinking, innovation, and creativity) such as competitiveness, added value, and positive impact on customers services or final products, elaboration processes and attention to the market's requirements.

The theoretical model of the disruptive triad is a proposal that offers a vision of the use of disruption to generate changes in processes, satisfy customers, and impact markets, especially if it is aimed at strengthening, developing, and accompanying undertakings and heighten competitiveness.

Finally, given its characteristics of the disruptive triad model—proposed here—it could also be used when planning or devising negotiation and decision-making strategies, among other organizational or institutional processes, the execution of which can make entrepreneurship more competitive through the use of a disruptive vision.

Managerial implications

Entrepreneurship often differs from business practice, thanks to its emphasis on innovation, creativity, and, in some cases, disruption.

Small and medium enterprises (SMEs) are not necessarily innovative, so the process of distinguishing themselves and being competitive is aimed at highlighting the quality of their products or services.

Based on the aforementioned, it can be said that the disruptive triad offers entrepreneurs a tool that allows them to focus their efforts to create their products based on creative destruction, value creation, and positive impact.

To achieve the aforementioned aspects, a management line oriented towards customers, processes, and the market is required. This line must be consistent and respond to the vision that the entrepreneur has established.

Therefore, the managerial implications—of the proposed disruptive triad—can be observed in the guidance it offers to those who will direct and guarantee the start-up of the enterprise, to make it, in addition to being profitable and sustainable, more competitive.

Abbreviations
AI: Artificial intelligence; AR/VR: Augmented and virtual reality; CEPAL: Economic Commission for Latin America and the Caribbean or ECLAC by its acronym in Spanish; MIT: Massachusetts Institute of Technology; n.d.: No data; No.: Number; OECD: Organisation for Economic Co-operation and Development; p.: Page; PNUD: United Nations Development Program; SMEs: Small and medium enterprises.

Acknowledgements
Not applicable

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Authors' contributions
Each author has made substantial contributions to the conception of the proposed model; however, the model itself has been devised, created and designed by Dr. Félix O. Socorro Márquez. Both authors read and approved the final manuscript.

Funding
No funding should be reported.

Availability of data and materials
Not applicable.

Declarations

Competing interests
The authors declare that they have no competing interests.

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Received: 5 March 2021 Accepted: 15 September 2021
Published online: 03 November 2021

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